THE FIELD MUSEUM

2012 ANNUAL REPORT TO THE

# **BOARD OF TRUSTEES**

# **COLLECTIONS AND RESEARCH**

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- This Report Printed on Recycled Paper -

We wanted to commandeer a page of this report to thank Lance Grande for his years of service and leadership as Senior Vice President and Head of Collections & Research. Lance has served in this capacity for more than eight years, through some very trying financial times, and has done so with ingenuity and good humor. In spite of his heavy administrative duties, Lance maintained high scientific productivity and an ongoing commitment to education. In 2009 he co-authored Gems and Gemstones: Timeless Natural Beauty of the Mineral World, a gorgeous, popular-market companion volume to the renovated Grainger Hall of Gems. The next year he published a massive volume resulting from untold years of research, An Empirical Synthetic Pattern Study of Gars (Lepisosteiformes) and Closely Related Species, Based Mostly on Skeletal Anatomy: The Resurrection of Holostei. This study, together with his earlier volume on the Amiid fishes, recalibrates the morphological base data for evolutionary studies of the ray-finned fishes, and serves as a model for future evolutionary research. At present, he is putting the finishing touches on another popular-oriented book, this one on the Fossil Butte Member of the Green River Formation in Wyoming, which boasts an amazing array of beautifully preserved plants and animals -- "snapshots in stone" of a 52-million-year-old tropical lake community. Lance has worked the quarries of Fossil Butte for almost three decades, and for the past eight summers the locality has also been the site of his course, "Stones and Bones," a paleontology field school for advanced placement high school students, from the University of Chicago's Graham School. We expect that he will be returning to Fossil Butte for many more years to come (and with a mind unburdened by administration).

Lance's long track record of research has made him among the most prominent of U.S. paleontologists. Last year his scientific productivity earned him a prestigious award from his peers: the American Society of Ichthyologists and Herpetologists recently recognized him with the Robert H. Gibbs Jr. Memorial Award for Excellence in Systematic Ichthyology, which is awarded for "an outstanding body of published work in systematic ichthyology." And in recognition of his service to The Field Museum, Museum President Richard Lariviere and the Board of Trustees appointed Lance to the position of Distinguished Service Curator. We congratulate Lance on this honor, and again extend our deepest thanks for his service and collegiality over the many years.

The Collections & Research Staff

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### **COLLECTIONS AND RESEARCH – 2012 ANNUAL REPORT**

Collections-based research has been the core scientific mission of The Field Museum since its founding in 1893, and "Collections & Research" has been the name of the division housing the core scientific departments dedicated to that mission since 1983—the year I started here as a curator, in fact (with a shift to "Academic Affairs" for a few years). Before that the research arm of the Museum was called "Science & Education," and was grouped with the Exhibits and Education Departments. In 2013, the name will change again—to, interestingly enough, "Science & Education" —in conjunction with a fundamental restructuring within the Museum. But **research**, grounded in **collections**, will continue to be one of the most important strengths of this institution.

Looking back over 25 years I am struck by the continuity between the scientific work then and now, but also by the amazing increase in productivity. In the late 1970s and earlier '80s it was typical to see at most 100 publications per year from the curators and scientific staff. In 2012 our scientists (including a markedly smaller curatorial faculty) produced nearly 270 scientific publications, ranging in subject from CT scanning of Egyptian bird mummies, to DNA barcoding of fungi, to the beer-consumption practices of the ancient Wari culture of Peru, to the sharing of host plants by competing ant species. And of course many of these papers identified new species: a theropod dinosaur, a few shrew-mice, a myrtle tree, a dozen-odd rove beetles, several bats and snakes, and over 100 lichens. C&R scientists described 149 species and other taxa new to science in 2012, putting the number published in the past 22 years over 1,300.

Most of our studies would seem familiar to our colleagues of a quarter century ago, although methods like DNA barcoding would surely intrigue them. Molecular-based research into evolution and populations has been going on at the Field since the late 1970s, but the pace and scope of that work, thanks to automated sequencing, has increased by incredible leaps. Likewise, the chemical investigations carried out in Anthropology's Elemental Analysis Lab have unlocked previously inaccessible information about how artifacts were created and where they came from, and CT-scanning technology has enabled "virtual dissection" of cultural objects that would have amazed our predecessors. New technologies solve old mysteries, breed new questions, fuel innovative work, and increase the productivity of our scientists.

But while new technologies and methods account for some of this increase in productivity, I think the deep passion and commitment of our scientists account for a great deal of it as well. Their commitment is obvious by their publications, their broad involvement in their fields, and by their dogged pursuit of grants. The scientists of C&R have not only generated, but also *funded*, much of the original scientific research produced at the Museum. Grants are the engine that drives this research. Scientists in C&R received more than \$3.7 million in new awards in 2012 from the National Science Foundation, Institute of Museum and Library Service, Marie Curie Foundation, National Geographic Society, Negaunee Foundation, and other sources. With these awards, the active grant projects being spearheaded by this group number more than 80. New awards combined with existing grants total more than \$17.7 million. Tracing C&R grantsmanship back to the mid-1980s would no doubt total in the neighborhood of \$100 million raised for research and collections maintenance.

Our researchers are also more deeply involved than ever in educating future generations of professional scientists. It is perhaps a cliché to compare the "3<sup>rd</sup> floor" of the Museum to a mini-university, but it is apt. We continue to have strong connections, through teaching appointments and graduate student advising, to Chicagoland universities. Our closest and most formal ties are with the University of Chicago, the University of Illinois at Chicago, and Northwestern University. We are the scientific home base to over 50 resident graduate students from these three schools, and more, and our curators serve on dozens of dissertation committees. Some students enroll at these schools specifically to work with certain Field Museum curators.

Our training efforts reach far beyond Chicago. Field Museum scientists are deeply engaged in building the expertise of conservation specialists and museum professionals internationally. The scientists in Zoology and Botany in particular lead conservation and capacity-building efforts across the globe, including Madagascar, Kenya, the Democratic Republic of the Congo, Thailand, China, Tibet, the Philippines, Peru, Costa Rica, and Brazil. FM-trained students now occupy influential conservation positions in universities, museums, and NGOs worldwide. As the map on the inside cover of this report shows, this research and training takes Field Museum scientists around the world. We routinely conduct fieldwork in more than 30 countries (plus the Antarctic and the North Pacific Ocean), and research collaborations take us to another 20 or more locales.

But ultimately it all comes back to the rows and rows of shelves and cabinets on the 3<sup>rd</sup> floor, and in the Collections Resource Center, that house our 24.7 million specimens. The Field Museum's reference collections constitute a vast lending library for the international scientific community. Our collections are in constant use by Field Museum scientists as well as visiting researchers from other institutions. Last year more than 700 visiting scientists and dozens of graduate students conducted research in the collections. We also hosted dozens of college classes, and numerous back-of-the house tours for VIPs, donors, and groups with specialized interest in the collections—ecology classes, artists, gardening enthusiasts, Native American tribal leaders, and more. In addition, we loan tens of thousands of specimens each year to researchers around the world. The Field Museum collections are really the "go-to" place for a broad array of disciplines, and form a crucial part of the global knowledge base in the biological and social sciences.

Numbers alone cannot capture the unique character and scientific importance of the numerous objects accessioned by the collections staff each year. Whether through field collecting by Museum curators, purchase, donation, or salvage (e.g., road kill) literally every day the Museum gains new specimens that significantly enhance the quality, depth, and breadth of our collections, and most important of all, expand their usefulness as a "library" of the natural and cultural world—a world-class resource for research. It is incumbent upon us to maintain this resource, grow it, and make it available to the world scientific community, so that they can fuel current research, and help future scientists address questions we can't even envision.

As we move into 2013 the Collections & Research division will cease to exist under that name. All the scientific departments will be merged together under the title "Science & Education," and a restructuring of the various efforts and function is underway. These changes will require a great deal of effort on the part of the scientists and staff involved, but ultimately we hope these changes will yield new efficiencies, and new synergies. But the core science carried out at the Field will not change. It is our brand. The scope and impact of collections-based research is grounded in its dedication to documenting the natural world, the patterns of biological evolution, and the development of human societies. We are also committed to leveraging that knowledge to understand and conserve biodiversity, enhance our understanding of ourselves as humans, and increase scientific literacy in an age of declining expertise in the sciences. Division names may change, but this mission will not.

Fance Brande

Lance Grande Senior Vice President and Head Collections and Research

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(\* indicates staff who left their posts in the course of 2012)

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# PUBLICATIONS 2012

(Excluding abstracts)

### DEPARTMENT OF ANTHROPOLOGY

#### Sirma Alexandrova

**Alexandrova, S.** (2012). Typology and Chronology of the Hand-made Pottery of the Roman and Early Byzantine Period (1<sup>st</sup>-6<sup>th</sup> c.) on the Territory of Bulgaria. *Archaeologica Bulgarica* 17(1): 33–46.

#### **Douglas Bolender**

**Bolender, D.** (2012). Dividing Land and Creating Class: the Development of a Landlord-Tenant Political Economy in Medieval Iceland. In *The Anthropological Study of Class and Consciousness*, edited by E. Paul Durrenberger, pp. 65–84. Boulder: University of Colorado Press.

Damiata, B. N., J. M. Steinberg, **D. J. Bolender**, and G. Zoëga. (2012). Imaging Skeletal Remains with Ground-Penetrating Radar: Comparative Results over Two Graves from Viking Age Churchyards on the Stóra-Seyla Farm, Northern Iceland. *Journal of Archaeological Science*: http://dx.doi.org/10.1016/j.jas.2012.06.031.

#### J. P. Brown

Pelizzari, C. A., C. R. Haney, R. Balleul-LeSeur, **J. P. Brown**, C. Weitholt. (2012). Challenges in CT Scanning of Avian Mummies. In Between Heaven and Earth: Birds in Ancient Egypt edited by Rozenn Balleul-LeSeur, pp. 109–118, Oriental Institute Museum Publications 35. Oriental Institute of the University of Chicago, Chicago. https://oi.uchicago.edu/pdf/oimp35.pdf.

Yao, L., J. P. Brown, M. Stampanoni, F. Marone, K. Isler, R. D. Martin. (2012). Evolutionary Change in the Brain Size of Bats, *Brain Behavior & Evolution* 80: 15–25.

#### Laure Dussubieux

**Dussubieux, L.**, C. M. Kusimba. (2012). Glass vessels in Sub-Saharan Africa: compositional study of some samples from Kenya. In *Obsidian and Ancient Manufactured Glasses*, edited by I. Liritzis and C. Stevenson, pp. 143–156. Albuquerque: University of New Mexico Press.

**Dussubieux, L.**, J. Lankton, B. Bellina-Pryce, and B. Chaisuwan. (2012). Early Glass Trade in South and Southeast Asia: New insights from two coastal sites, Phu Khao Thong in Thailand and Arikamedu in South India. In *Crossing Borders in Southeast Asian Archaeology. Selected papers from the 13th International Conference of the European Association of Southeast Asian Archaeologists, Berlin, 2010.*, Vol. 2., edited by D. Bonatz, A. Reinecke, and M. L. Tjoa-Bonatz, pp. 307–328. Singapore: NUS Press.

**Dussubieux, L.**, and B. Gratuze. (2012). Chemical composition of 16<sup>th–</sup>18<sup>th</sup> century glass beads excavated in Paris. *Beads* 24: 26–38.

Arnold, D., B. F. Bohor, H. Neff, G. M. Feinman, P. R. Williams, **L. Dussubieux**, R. Bishop. (2012). The First Direct Evidence of Pre-Columbian Sources of Palygorskite for Maya Blue. *Journal of Archaeological Science* 39(7): 2252–2260.

Williams, P. R., **L. Dussubieux**, and D. J. Nash. (2012). Provenance of Peruvian Wari Obsidian: Comparing INAA, LA-ICP-MS, and portable XRF. In *Obsidian and Ancient Manufactured Glasses*, edited by I. Liritzis and C. Stevenson, pp. 75–85. Albuquerque: University of New Mexico Press. Wood, M., **L. Dussubieux**, and P. Robertshaw. (2012). Glass finds from Chibuene, a 6<sup>th</sup> to 17<sup>th</sup> century AD port in southern Mozambique. *South African Archaeological Bulletin* 67 (195): 59–74.

### **Gary Feinman**

Arnold, D., B. Bohor, H. Neff, **G. M. Feinman**, P. R. Williams, Laure Dussubieux, and R. Bishop. (2012). The First Direct Evidence of Pre-Columbian Sources of Palygorskite for Maya Blue. *Journal of Archaeological Science* 39: 2252–2260.

Carballo, D. M., P. Roscoe, and **G. M. Feinman.** (2012). Cooperation and Collective Action in the Cultural Evolution of Complex Societies. *Journal of Archaeological Method and Theory* 14: online.

Carpenter, L. B., **G. M. Feinman**, and L. M. Nicholas. (2012). Spindle Whorls from El Palmillo: Economic Implications. *Latin American Antiquity* 23(4): 381–400.

Drennan, R., T. Earle, **G. M. Feinman**, R. Fletcher, M. Kolb, P. Peregrine, C. Peterson, C. Sinopoli, M. E. Smith, M. L. Smith, B. Stark, and M. Stark. (2012). Comparative Archaeology: A Commitment to Understanding Variation. In *The Comparative Archaeology of Complex Societies*, edited by M. E. Smith, pp. 1–3. Cambridge: Cambridge University Press.

Fang, H., A. Underhill, **G. M. Feinman**, L. M. Nicholas, F. Luan, H. Yu, and F. Cai. (2012). *Archaeological Report on Regional Systematic Survey in the Coastal Area of Southeastern Shandong, China* (in Chinese), 2 volumes. Beijing: Cultural Relics Press.

**Feinman, G. M.** (2012). Mesoamerican States and Empires. In *The Oxford Handbook of Mesoamerican Archaeology*, edited by D. L. Nichols and C. A. Pool, pp. 726–740. New York: Oxford University Press.

**Feinman, G. M.** (2012). Comparative Frames for the Diachronic Analysis of Complex Societies: Next Steps. In *The Comparative Archaeology of Complex Societies*, edited by M. E. Smith, pp. 21–43. Cambridge: Cambridge University Press.

**Feinman, G. M.** (2012). Science and the Human Sciences: Prehispanic Maya Settlement and History. *Publishing Archaeology* March. http://publishingarchaeology.blogspot.com/.

**Feinman, G. M.** (2012). Oaxaca, Valley of. In *The Oxford Companion to Archaeology*, 2<sup>nd</sup> edition, edited by N. A. Silberman, A. A. Bauer, C. Holtorf, M. Díaz-Andreu, and E. Waterton, pp. 563–564. New York: Oxford University Press.

**Feinman, G. M.** (2012). Social Organization, Prehistoric. In *The Oxford Companion to Archaeology*, 2<sup>nd</sup> edition, edited by N. A. Silberman, A. A. Bauer, C. Holtorf, M. Díaz-Andreu, and E. Waterton, pp. 141–145. New York: Oxford University Press.

**Feinman, G. M.** (2012). Circumscription Theory and Political Change: From Determinism to Mechanisms and Parameters. *Social Evolution & History* 11(2): 44–47.

**Feinman, G. M**., K. Lightfoot, and S. Upham. (2012). Political Hierarchies and Organizational Strategies in the Puebloan Southwest. In *Readings in American Antiquity Archaeological Theory: Selections from* American Antiquity, *1962–2011*, compiled by C. S. VanPool and T. L. VanPool, pp. 87–108. Society for American Archaeology, Washington, DC (originally published in *American Antiquity* in 2000).

**Feinman, G. M.** and L. M. Nicholas. (2012). The Late Prehispanic Economy of the Valley of Oaxaca, Mexico: Weaving Threads from Data, Theory, and Subsequent History. In *Political Economy, Neoliberalism, and the Prehistoric Economies of Latin America*, edited by T. Matejowsky and D. Wood, pp. 225–258. Research in Economic Anthropology, Volume 32, Emerald, Bingley, UK. **Feinman, G. M.** and L. M. Nicholas. (2012). Compact versus Dispersed Settlement in Pre-Hispanic Mesoamerica: The Role of Neighborhood Organization and Collective Action. In *The Neighborhood as a Social and Spatial Unit in Mesoamerican Cities*, edited by M. C. Arnauld, L. R. Manzanilla, and M. E. Smith, pp. 132–155. Tucson: University of Arizona Press.

Fisher, C. and G. M. Feinman. (2012). Rhymes with the Past. AAA Anthropology News 53(1): 24.

Golitko, M., J. Meierhoff, **G. M. Feinman**, and P. R. Williams. (2012). Complexities of Collapse: The Evidence of Maya Obsidian as Revealed by Social Network Graphical Analysis. *Antiquity* 86: 507–523.

Meierhoff, J., M. Golitko, **G. M. Feinman**, and P. R. Williams. (2012). Chemical Characterisation of Obsidian from the Maya Site of San José, Belize. *Antiquity* 86: online supplement.

Price, T. D. and **G. M. Feinman.** (2012). *Images of the Past.* 7<sup>th</sup> edition. Boston: MacGraw-Hill.

Price, T. D. and **G. M. Feinman**, editors. (2012). *Pathways to Power*. New York: Springer. First soft cover edition.

Smith, M. E., **G. M. Feinman**, R. Drennan, T. Earle, and I. Morris. (2012). Archaeology as a Social Science. *Proceedings of the National Academy of Sciences* 109(20): 7617–7621.

### Mark Golitko

**Golitko, M.**, M. Schauer, and J. E. Terrell. (2012). Identification of Fergusson Island obsidian on the Sepik coast of northern Papua New Guinea. *Archaeology in Oceania* 47: 151–156.

**Golitko, M.** and J. E. Terrell. (2012). Mapping Prehistoric Social Fields on the Sepik coast of Papua New Guinea: Ceramic Compositional Analysis using Laser Ablation-Inductively Coupled Plasma-Mass Spectrometry. *Journal of Archaeological Science* 39(12): 3568–3580.

**Golitko, M.**, J. Meierhoff, G. M. Feinman, and P. R. Williams. (2012). Complexities of Collapse: the evidence of Maya obsidian as revealed by network graphical analysis. *Antiquity* 86(332): 507–523.

**Golitko, M.**, J. V. Dudgeon, H. Neff, and J. E. Terrell. (2012). Identification of Post-Depositional Chemical Alteration of Ceramics from the North Coast of New Guinea (Sandaun Province) by Time of Flight-Laser-Ablation-Inductively Coupled Plasma-Mass Spectrometry (TOF-LA-ICP-MS). *Archaeometry* 54(1): 80–100.

Bosquet, D. and **M. Golitko.** (2012). Highlighting and characterizing the pioneer phase of the Hesbayen LBK (Liège Province, Belgium). In *Siedlungsstruktur und Kulturwandel in der Bandkeramik. Beiträge der internationalen Tagung "Neue Fragen zur Bandkeramik oder alles beim Alten?!," Leipzig, 23. bis 24. September 2010*, edited by S. Wolfram and H. Stäuble, pp. 87–102. Landesamt für Archäologie Freistaat Sachsen, Dresden.

Janusek, J., P. R. Williams, **M. Golitko**, and C. Lemuz. (2012). Building Taypikala: Telluric Transformations in the Lithic Production of Tiwanaku. In *Mining and Quarrying in the Ancient Andes*, edited by K. Vaughn and N. Tripcevich, pp. 65–98. Springer, New York.

Meierhoff, J., **M. Golitko**, G. M. Feinman, and P. R. Williams. (2012). Chemical Characterization of Obsidian from the Maya site of San José, Belize. *Antiquity* 86 (332): 1–7.

Meierhoff, J., **M. Golitko**, and J. Morris. (2012). Obsidian Acquisition, Trade, and Regional Interaction at the Ancient Maya Farming Village of Chan, Belize. In *Chan: An Ancient Maya Farming Community in Belize*, edited by C. Robin, pp. 271–288. Gainesville: University of Florida Press.

#### Haas, Jonathan

**Haas**, J. (2012). Review of *Andean Archaeology: A Tribute to Michael E. Moseley*, edited by Joyce Marcus and Ryan Patrick Williams. *Journal of Field Archaeology* 36(1): 65–66.

**Haas, J.** and W. Creamer. (2012). Why do People Build Monuments. In *Early New World Monumentality,* edited by Richard Burger and Robert Rosenswig, pp. 288–312. Gainesville: University of Florida Press.

**Haas, J.**, P. Loubere, and W. Creamer. (2012). Evolution of the El Nino-Southern Oscillation in the Late Holocene and Isolation Driven Change in the Tropical Annual SST Cycle. *Global and Planetary Change:* 100: 129–144.

#### Dilyana Ivanova

Ivanova, D., and C. Kusimba. (2012). Социални трансформации и обществени форми на забавление: изследване на баловете в България и Чехия. (Social transformations and public entertainment: A Study of Bulgarian and Czech Republic Balls) – In: Известия на Регионален исторически музей – Русе, том XVI: 32–45.

#### Chapurukha M. Kusimba

Ivanova, D., and **C. M. Kusimba.** (2012). Социални трансформации и обществени форми на забавление: изследване на баловете в България и Чехия. (Social transformations and public entertainment: A Study of Bulgarian and Czech Republic Balls) – In: Известия на Регионален исторически музей – Русе, том XVI:32–45.

**C. M. Kusimba.** (2012). African Perspectives. In *Oman and Overseas: Proceedings of the International Conference 'The Ibadism of Oman – Its Overseas Development and its Perception Overseas' held at Tübingen University*, edited by Michaela Hoffmann-Ruf and Abdulrahman Al Salimi. Georg Olms Verlag, Hildesheim.

**Kusimba, C. M**. (2012). Review of *Slavery in Africa: Archaeology and Memory,* edited Paul J. Lane and Kevin C. MacDonald. *Journal of African Archaeology* 10(2): 6.

### Robert D. Martin

Martin, R. D. (2012). Primer: Primates. Current Biology 22: R785-R790.

Martin, R. D. (2012). Reproductive characteristics of New World monkeys. *International Zoo Yearbook* 46: 95–108.

Martin, R. D. (2012). Foreword. In *Primate Sexuality: Comparative Studies of the Prosimians, Monkeys, Apes, and Humans*, by Alan F. Dixson, pp. vii–ix. Oxford: Oxford University Press.

Yao, L., J. P. Brown, M. Stampanoni, F. Marone, K. Isler, and **R. D. Martin.** (2012). Evolutionary change in brain size of bats. *Brain, Behavior & Evolution* 80: 15–25.

### Linda Nicholas

Carpenter, L. B., G. M. Feinman, and **L. M. Nicholas.** (2012). Spindle Whorls from El Palmillo: Economic Implications. *Latin American Antiquity* 23(4): 381–400.

Fang, H., A. Underhill, G. M. Feinman, **L. M. Nicholas**, F. Luan, H. Yu, and F. Cai. (2012). *Archaeological Report on Regional Systematic Survey in the Coastal Area of Southeastern Shandong, China* (in Chinese), 2 volumes. Beijing: Cultural Relics Press.

Feinman, G. M., and **L. M. Nicholas.** (2012). The Late Prehispanic Economy of the Valley of Oaxaca, Mexico: Weaving Threads from Data, Theory, and Subsequent History. In *Political Economy*,

*Neoliberalism, and the Prehistoric Economies of Latin America*, edited by T. Matejowsky and D. Wood, pp. 225–258. Research in Economic Anthropology, Volume 32, Emerald, Bingley, UK.

Feinman, G. M., and **L. M. Nicholas.** (2012). Compact versus Dispersed Settlement in Pre-Hispanic Mesoamerica: The Role of Neighborhood Organization and Collective Action. In *The Neighborhood as a Social and Spatial Unit in Mesoamerican Cities*, edited by M. C. Arnauld, L. R. Manzanilla, and M. E. Smith, pp. 132–155. Tucson: University of Arizona Press.

#### William A. Parkinson

**Parkinson, W. A.** and A. Gyucha. (2012). Long-Term Social Dynamics and the Emergence of Hereditary Inequality: A Prehistoric Example from the Carpathian Basin. In *Beyond Elites: Alternatives to Hierarchical Systems in Modeling Social Formations*, The Proceedings of an International Conference at the Ruhr-Universität Bochum, Germany, October 22–24, 2009, edited by Tobias Keinlin. Ruhr-Universität, Bochum, Germany.

**Parkinson, W. A.** and A. Gyucha. (2012). Tells in Perspective: Long-Term Patterns of Settlement Nucleation and Dispersal in Central and Southeast Europe. In *Tells: Social and Environmental Space,* edited by R. Hoffman, F.-K. Moetz and J. Müller. Proceedings of the International Workshop "Socio-Environmental Dynamics over the last 12,000 Years: The Creation of Landscapes II, March 14–18, 2011, Kiel. Volume 3, pp. 105–116. Verlag Dr. Rudolf Habelt GmbH, Bonn, Germany.

### Matthew Piscitelli

**Piscitelli, M**. (2012). Connecticut (consumption, waste collection and disposal). In *Encyclopedia of Consumption and Waste: The Social Science of Garbage*, edited by Carl A. Zimring (consulting editor, William Rathje), pp. 145–147. Thousand Oaks: SAGE Publications.

#### John Edward Terrell

**Terrell, J. E**. (2012). Polynesians and the Seductive Power of Common Sense. *Papers from the 2010 Hven Conference*, edited by Eric Clark and Godfrey Baldacchino. *Cultural Geographies*, published online 31 May, 2012.

**Terrell, J. E**. (2012). Lapita. In *The Oxford Companion to Archaeology, 2<sup>nd</sup> Edition*, edited by N. A. Silberman. New York: Oxford University Press.

Golitko, M., J. V. Dudgeon, H. Neff, and **J. E. Terrell**. (2012). Identification of post-depositional chemical alteration of ceramics from the north coast of Papua New Guinea (Sanduan Province) by time-of-flight–laser ablation–inductively coupled plasma–mass spectrometry (Tof–La–Icp–Ms). *Archaeometry* 54: 80–100.

Golitko, M., and **J. E. Terrell**. (2012). Mapping Prehistoric Social Fields on the Sepik coast of Papua New Guinea: Ceramic Compositional Analysis using Laser ablation - Inductively Coupled Plasma - Mass Spectrometry. *Journal of Archaeological Science* 39: 3568–3580.

Golitko, M., M. Schauer, and **J. E. Terrell**. (2012). Identification of Fergusson Island obsidian on the Sepik coast of northern Papua New Guinea. *Archaeology in Oceania* 47: 51–156.

#### Alaka Wali

**Wali, A.** (2012). The Arc of Justice: Indigenous Activism and Anthropological Intersections. *Tipití: Journal of the Society for the Anthropology of Lowland South America*: 9(2): 15–52.

**Wali, A.** (2012). Review of *Conducting Research in Conservation. A Social Science Perspective,* by Helen Newing. In *Environment And Society: Advances in Research* 3: 141–142.

Pitman, N., M. Johnston, J. Markel, E. Ruelas I., R. Stallard, C. Vriesendorp, **A. Wali**, and V. Zapata. (2012). Regional Panorama and Sites Visited. In *Perú: Cerros de Kampankis. Rapid Biological and Social Inventories Report 24*, edited by Pitman, N., E. Ruelas I., D. Alvira, C. Vriesendorp, D. K. Moskovits, Á. del Campo, T. Wachter, D. F. Stotz, S. Noningo S., E. Tuesta C., and R. C. Smith, pp. 157–165. Chicago: The Field Museum.

**Wali, A**., R. Cabrera, and J. Anderson. (2012). Museum Anthropology. In *Oxford Bibliographies On-Line*, edited by J. Jackson. www.oxfordbibliographies.com/obo/page/anthropology.

Alvira, D., J. Hinojosa C., M. Pariona, G. Petsain, F. Rogalski, K. Świerk, A. Treneman, R. Tsamarain A., E. Tuesta, and **A. Wali**. (2012). Communities Visited: Social And Cultural Assets. In *Perú: Cerros de Kampankis. Rapid Biological and Social Inventories Report 24*, edited by Pitman, N., E. Ruelas I., D. Alvira, C. Vriesendorp, D. K. Moskovits, Á. del Campo, T. Wachter, D. F. Stotz, S. Noningo S., E. Tuesta C., and R. C. Smith, pp. 287–308. Chicago: The Field Museum.

Świerk, K., F. Rogalski, **A. Wali**, D. Alvira, M. Pariona, E. Tuesta, and A. Treneman. (2012). Resource Use and Traditional Ecological Knowledge. In *Perú: Cerros de Kampankis. Rapid Biological and Social Inventories Report 24*, edited by Pitman, N., E. Ruelas I., D. Alvira, C. Vriesendorp, D. K. Moskovits, Á. del Campo, T. Wachter, D. F. Stotz, S. Noningo S., E. Tuesta C. and R. C. Smith, pp. 157–165. Chicago: The Field Museum.

Johnston, B. R., E. Colson, D. Falk, G. St. John, J. Bodley, B. McCay, **A. Wali**, C. Nordstrom, and S. Slyomovics. (2012). Vital Topics Forum: On Happiness. *American Anthropologist* 114(1): 6–18.

Odland, C., N. Feldman, and **A. Wali.** (2012). *Shipibo: The Movie of our Memories.* Alexander Street Press, Ethnography On-Line series. URL: alexanderstreet.com.

#### Patrick Ryan Williams

**Williams, P. R.**, L. Dussubieux, and D. J. Nash. (2012). Provenance of Peruvian Wari Obsidian: Comparing INAA, LA-ICP-MS, and portable XRF. In *Obsidian and Ancient Manufactured Glasses*, edited by I. Liritzis and C. Stevenson, pp. 75–85. Albuquerque: University of New Mexico Press.

McEwan, G. and **P. R. Williams**. (2012). The Wari Built Environment: Landscape and Architecture of Empire. In *Wari: Lords of the Ancient Andes*, edited by S. Bergh, pp. 67–79. Cleveland: Cleveland Museum of Art.

D. E. Arnold, B. F. Bohor, H. Neff, G. M. Feinman, **P. R. Williams**, L. Dussubieux, and R. Bishop. (2012). The First Direct Evidence of Pre-Columbian Sources of Palygorskite for Maya Blue. *Journal of Archaeological Science* 39: 2252–2260.

Golitko, M., J. Meierhoff, G. Feinman, and **P. R. Williams**. (2012). Complexities of Collapse: the evidence of Maya obsidian as revealed by Network Graphical Analysis. *Antiquity* 86: 507–523.

Meierhoff, J., M. Golitko, G. M. Feinman, and **P. R. Williams**. (2012). Chemical characterization of obsidian from the Maya site of San José, Belize. *Antiquity* 86 (332): 1–7.

Janusek, J., **P. R. Williams**, M. Golitko, and C. Lemuz. (2012). Building Taypikala: Telluric Transformations in the Lithic Production of Tiwanaku. In *Mining and Quarrying in the Ancient Andes*, edited by K. Vaughn and N. Tripcevich, pp. 65–98. New York: Springer.

Sayre, M., D. Goldstein, W. Whitehead, and **P. R. Williams**. (2012). A Marked Preference: Chicha de Molle and Wari State Consumption Practices. *Ñawpa Pacha* 32(2): 231–258.

Sharratt, N., **P. R. Williams**, M. C. Lozada, and J. Starbird. (2012). Late Tiwanaku Mortuary Patterns in the Moquegua Drainage, Peru: Excavations at the Tumilaca la Chimba Cemetary. In *Advances in Titicaca Basin Archaeology 3*, edited by A. Vranich, pp. 193–202.

# DEPARTMENT OF BOTANY

#### John J. Engel

**Engel, J. J.**, J. Bardat, and L. Thouvenot. (2012). Studies on Lophocoleaceae XXI. *Otoscyphus* J.J. Engel, Bardat et Thouvenot, a new liverwort genus from New Caledonia with an unusual morphology. *Cryptogamie, Bryologie* 33: 279-289, f. 1–29.

**Engel**, J. J. and D. Glenny. (2012). Austral Hepaticae 48. *Goebelobryum* Grolle (Acrobolbaceae). *Nova Hedwigia* 95: 319–336, f. 1–4.

**Vana**, **J.** and J. J. Engel. (2012). The liverworts and hornworts of the Tristan da Cunha Group of Islands in the South Atlantic Ocean. *Memoirs of the New York Bot. Garden* 105: i-x, 1–138, figs. 1–11.

#### Anders Hagborg

von Konrat, M., L. Söderström, and **A. Hagborg.** (2012). Notes on Early Land Plants Today 7. Transfer of *Jubulopsis novae-zelandiae* to *Lepidolaena*. *Phytotaxa* 65: 51.

Söderström, L., **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 9. Validation of *Riccia gangetica* Ahmad. *Phytotaxa* 65: 57.

Söderström, L., **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 6. The correct name for *Cephaloziella divaricata* var. *asperifolia*. *Phytotaxa* 65: 49–50.

Söderström, L., **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 5. Validation of two *Drepanolejeunea* species. *Phytotaxa* 65: 47–48.

Söderström, L., **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today. 1. A new name for *Cryptothallus hirsutus*. *Phytotaxa* 65: 43.

Söderström, L., **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today. *Phytotaxa* 65: 41–42.

Brown, E., L. Söderström, **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 10. A new combination in *Acromastigum*. *Phytotaxa* 65: 58.

Cargill, D.C., L. Söderström, **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 3. *Fossombronia ruminata* Cargill, a new name for *Fossombronia maritima* G.A.M.Scott et D.C. Pike ex Cargill, *nom. illeg. Phytotaxa* 65: 45.

Söderström, L., **A. Hagborg**, M. R. Crosby, and M. von Konrat. (2012). Early Land Plants Today: Index of Liverworts & Hornworts 2009–2010. *Phytotaxa* 63: 21–68.

Thiers, B. M., L. Söderström, **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 11. *Microlejeunea bischlerae* (B.M.Thiers) *comb. nov. Phytotaxa* 65: 59.

Váňa, J., L. Söderström, **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 12. *Pseudomarsupidium borneensis* (Grolle) *comb. nov. Phytotaxa* 65: 60.

Váňa, J., L. Söderström, **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today 8. New combinations and some lectotypifications in *Mesoptychia. Phytotaxa* 65: 52–56.

Váňa, J., L. Söderström, **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today. 4. *Aponardia* gen. et stat nov. *Phytotaxa* 65: 46.

Váňa, J., L. Söderström, **A. Hagborg**, and M. von Konrat. (2012). Notes on Early Land Plants Today. 2. Two new combinations in *Solenostoma. Phytotaxa* 65: 44.

### Sabine Huhndorf

Schoch, C. L., K. A. Seifert, S. Huhndorf, V. Robert, J. L. Spouge, C. A. Levesque, W. Chen, E. Bolchacova, K. Voigt, P. W. Crous, A. N. Miller, M. J. Wingfield, M. C. Aime, K.-D. An, F.-Y. Bai, R. W. Barreto, D. Begerow, M.-J. Bergeron, M. Blackwell, T. Boekhout, M. Bogale, N. Boonyuen, A. R. Burgaz, B. Buyck, L. Cai, Q. Cai, G. Cardinali, P. Chaverri, B. J. Coppins, A. Crespo, P. Cubas, C. Cummings, U. Damm, Z. W. de Beer, G. S. de Hoog, R. Del-Prado, B. Dentinger, J. Dieguez-Uribeondo, P. K. Divakar, B. Douglas, M. Duenas, T. A. Duong, U. Eberhardt, J. E. Edwards, M. S. Elshahed, K. Fliegerova, M. Furtado, M. A. Garcia, Z.-W. Ge, G.W. Griffith, K. Griffiths, J. Z. Groenewald, M. Groenewald, M. Grube, M. Gryzenhout, L.-D. Guo, F. Hagen, S. Hambleton, R. C. Hamelin, K. Hansen, P. Harrold, G. Heller, C. Herrera, K. Hirayama, Y. Hirooka, H.-M. Ho, K. Hoffmann, V. Hofstetter, F. Hognabba, P. M. Hollingsworth, S.-B. Hong, K. Hosaka, J. Houbraken, K. Hughes, S. Huhtinen, K. D. Hyde, T. James, E. M. Johnson, J. E. Johnson, P. R. Johnston, E. B. G. Jones, L.J. Kelly, P.M. Kirk, D.G. Knapp, U. Koljalg, G. M. Kovacs, C. P. Kurtzman, S. Landvik, S. D. Leavitt, A. S. Liggenstoffer, K. Liimatainen, L. Lombard, J. J. Luangsa-Ard, H. T. Lumbsch, H. Maganti, S. S. N. Maharachchikumbura, M. P. Martin, T. W. May, A.R. McTaggart, A. S. Methven, W. Meyer, J.-M. Moncalvo, S. Mongkolsamrit, L.G. Nagy, R. H. Nilsson, T. Niskanen, I. Nyilasi, G. Okada, I. Okane, I. Olariaga, J. Otte, T. Papp, D. Park, T. Petkovits, R. Pino-Bodas, W. Quaedvlieg, H.A. Raja, D. Redecker, T. L. Rintoul, C. Ruibal, J. M. Sarmiento-Ramirez, I. Schmitt, A. Schussler, C. Shearer, K. Sotome, F.O.P. Stefani, S. Stenroos, B. Stielow, H. Stockinger, S. Suetrong, S.-O. Suh, G.-H. Sung, M. Suzuki, K. Tanaka, L. Tedersoo, M. T. Telleria, E. Tretter, W. A. Untereiner, H. Urbina, C. Vagvolgyi, A. Vialle, T.D. Vu, G. Walther, Q.-M. Wang, Y. Wang, B.S. Weir, M. Weiss, M. M. White, J. Xu, R. Yahr, Z. L. Yang, A. Yurkov, J.-C. Zamora, N. Z. Zhang, and D. Wen-Ying. (2012). Nuclear ribosomal internal transcribed spacer (ITS) region as a universal DNA barcode marker for Fungi. Proc. Natl Acad. Sci. USA 109: 6241-6246.

### Maria Lucia Kawasaki

Kawasaki, M. L. and A. J. Pérez. (2012). A new species of *Plinia* (Myrtaceae) from Ecuador with notes from a large forest plot. *Harvard Pap. Bot.* 17: 21–23.

### Juan Larraín

Sandoval, P., J. L. Henríquez, L. Faundez, and **J. Larraín**. (2012). First records of Eocronartium muscicola (Basidiomycota, Eocronartiaceae) in Chile on two new hosts. *Gayana Botánica* 69(1): 100–104.

### **Steven Leavitt**

Divakar P. K., R. Del-Prado, H. T. Lumbsch, M. Wedin, T. L. Esslinger, **S. D. Leavitt**, and A. Crespo. (2012). Diversification of the newly recognized lichen-forming fungal lineage montanelia (Parmeliaceae, Ascomycota) and its relation to key geological and climatic events. *Am. J. Botany* 99, 2014–2026.

Thell, A., A. Crespo, P. K. Divakar, I. Kärnefelt, **S. D. Leavitt**, H. T. Lumbsch, and M. R. D. Seaward. (2012). A review of the lichen family Parmeliaceae—history, phylogeny and current taxonomy. *Nordic Journal of Botany* 30: 641–664

**Leavitt, S. D.**, M. P Nelsen, and L. L. St. Clair. (2012). Treading in murky waters: Making sense of diversity in *Xanthoparmelia* in the Western United States. *Bulletin of the California Lichen Society* 19(2): 1–13.

**Leavitt, S. D.**, P. K. Divakar, T. L. Esslinger, and H. T. Lumbsch. (2012). Miocene divergence, phenotypically cryptic lineages, and contrasting distribution patterns in common camouflage lichen fungi (Parmeliaceae, Ascomycota). *Biological Journal of the Linnaean Society* 107: 920–937.

**Leavitt, S. D.**, T. L. Esslinger, and H. T. Lumbsch. (2012). Neogene-dominated diversification in neotropical montane lichens: dating divergence events in the lichen-forming fungal genus *Oropogon* (Parmeliaceae). *American Journal of Botany* 99(11): 1764–1777.

Thell, A., A. Crespo, H. T. Lumbsch, P. K. Divakar, **S. D. Leavitt**, and I. Kärnefelt. (2012). A review of the lichen family Parmeliaceae—phylogeny and current taxonomy. *Nordic Journal of Botany* 30: 1–24.

**Leavitt, S. D.**, T. L. Esslinger, T. Spribille, P. K. Divakar, and H. T. Lumbsch. (2012). Multilocus phylogeny of the lichen-forming fungal genus *Melanohalea* (Parmeliaceae, Ascomycota): Insights on diversity, distributions, and a comparison of species tree and concatenated topologies. *Mol. Phyl. Evol.* 66: 138–152.

Orock, E. A., **S. D. Leavitt**, B. A. Fonge, L. L. St. Clair, and H. T. Lumbsch. (2012). DNA-based species identification of lichen-forming fungi from Mt. Cameroon (west Africa) demonstrates low identification success rate. *The Lichenologist* 44(6): 833–839.

**Leavitt, S. D.**, T. L. Esslinger, P. K. Divakar, and H. T. Lumbsch. (2012). Miocene and Pliocene dominated diversification of the lichen-forming fungal genus *Melanohalea* and Pleistocene population expansions. *BMC Evolutionary Biology* 12: 106.

Shresthra, G., **S. D. Leavitt**, M. Proulx, L. A. Glacy, C. Call, J. Hendrickson, and L. L. St. Clair. (2012). Lichens of the Beaver Dam Slope, Washington County, Utah, USA. *North American Fungi* 7(5): 1–7.

Schoch, C. L., K. A. Seifert, S. Huhndorf, V. Robert, J. L. Spouge, C. A. Levesque, W. Chen, E. Bolchacova, K. Voigt, P. W. Crous, A. N. Miller, M. J. Wingfield, M. C. Aime, K.-D. An, F.-Y. Bai, R. W. Barreto, D. Begerow, M.-J. Bergeron, M. Blackwell, T. Boekhout, M. Bogale, N. Boonyuen, A. R. Burgaz, B. Buyck, L. Cai, Q. Cai, G. Cardinali, P. Chaverri, B. J. Coppins, A. Crespo, P. Cubas, C. Cummings, U. Damm, Z. W. de Beer, G. S. de Hoog, R. Del-Prado, B. Dentinger, J. Dieguez-Uribeondo, P. K. Divakar, B. Douglas, M. Duenas, T. A. Duong, U. Eberhardt, J. E. Edwards, M. S. Elshahed, K. Fliegerova, M. Furtado, M. A. Garcia, Z.-W. Ge, G.W. Griffith, K. Griffiths, J. Z. Groenewald, M. Groenewald, M. Grube, M. Gryzenhout, L.-D. Guo, F. Hagen, S. Hambleton, R. C. Hamelin, K. Hansen, P. Harrold, G. Heller, C. Herrera, K. Hirayama, Y. Hirooka, H.-M. Ho, K. Hoffmann, V. Hofstetter, F. Hognabba, P. M. Hollingsworth, S.-B. Hong, K. Hosaka, J. Houbraken, K. Hughes, S. Huhtinen, K. D. Hyde, T. James, E. M. Johnson, J. E. Johnson, P. R. Johnston, E. B. G. Jones, L. J. Kelly, P. M. Kirk, D. G. Knapp, U. Koljalg, G. M. Kovacs, C. P. Kurtzman, S. Landvik, S. D. Leavitt, A. S. Liggenstoffer, K. Liimatainen, L. Lombard, J. J. Luangsa-Ard, H. T. Lumbsch, H. Maganti, S. S. N. Maharachchikumbura, M. P. Martin, T. W. May, A.R. McTaggart, A. S. Methven, W. Meyer, J.-M. Moncalvo, S. Mongkolsamrit, L.G. Nagv, R. H. Nilsson, T. Niskanen, I. Nyilasi, G. Okada, I. Okane, I. Olariaga, J. Otte, T. Papp, D. Park, T. Petkovits, R. Pino-Bodas, W. Quaedvlieg, H.A. Raja, D. Redecker, T. L. Rintoul, C. Ruibal, J. M. Sarmiento-Ramirez, I. Schmitt, A. Schussler, C. Shearer, K. Sotome, F.O.P. Stefani, S. Stenroos, B. Stielow, H. Stockinger, S. Suetrong, S.-O. Suh, G.-H. Sung, M. Suzuki, K. Tanaka, L. Tedersoo, M. T. Telleria, E. Tretter, W. A. Untereiner, H. Urbina, C. Vagvolgyi, A. Vialle, T.D. Vu, G. Walther, Q.-M. Wang, Y. Wang, B.S. Weir, M. Weiss, M. M. White, J. Xu, R. Yahr, Z. L. Yang, A. Yurkov, J.-C. Zamora, N. Z. Zhang, and D. Wen-Ying. (2012). Nuclear ribosomal internal transcribed spacer (ITS) region as a universal DNA barcode marker for Fungi. Proc. Natl Acad. Sci. USA 109: 6241-6246.

Esslinger, T. L., C. A. Morse, and **S. D. Leavitt.** (2012). A new North American species in the lichen genus *Hyperphyscia. The Bryologist* 115(1): 31–41.

### Robert Lücking

Cáceres, M. E. S., E. Rivas Plata, and **R. Lücking.** (2012). *Malmographina*, a new genus for *Graphina malmei* (Ascomycota: Ostropales: Graphidaceae). *The Lichenologist* 44: 115–120.

Cáceres, M. E. S., T. Santos Viera, L. Santos De Jesus, and **R. Lücking.** (2012). New and interesting lichens from the Caxiuanã National Forest in the Brazilian Amazon. *The Lichenologist* 44: 807–812.

Gaya, E., F. Högnabba, A. Holguin, K. Molnar, S. Fernandez-Brime, S. Stenroos, U. Arup, U. Søchting, P. Van den Boom, **R. Lücking**, H. J. M. Sipman, and F. Lutzoni. (2012). Implementing a cumulative supermatrix approach for a comprehensive phylogenetic study of the Teloschistales (Pezizomycotina, Ascomycota). *Molecular Phylogeny and Evolution* 63: 374–387.

Lücking, R. (2012). Predicting species richness in tropical lichenized fungi with 'modular' combinations of character states. *Biodiversity and Conservation* 21: 2341–2360.

Lücking, R. and B. McCune. (2012). *Graphis pergracilis* new to North America, and a new name for *Graphis britannica* sensu Staiger auct. *Evansia* 29: 77–84.

**Lücking, R.**, J. E. Hernández M., K. Kalb, and E. Rivas Plata. (2012). Tres nuevas especies de Graphidaceae de Venezuela. *Glalia* 4(2): 1–7.

Lücking, R., S. Parnmen, and H. T. Lumbsch. (2012). *Mangoldia*, a new lichen genus in the family Graphidaceae (Ascomycota: Ostropales). *Phytotaxa* 69: 1–5.

**Lücking, R.**, J. Sutjaritturakan, and K. Kalb. (2012). Validation of three species names and description of a new species in the genus *Graphis* (Ascomycota: Ostropales: Graphidaceae). *The Lichenologist* 44: 391–394.

Moncada, B., **R. Lücking,** and A. Suárez. (2012). Décimo Encuentro del Grupo Latinoamericano de Liquenólogos (GLAL X): Libro de Resúmenes. *Glalia* 4(4): 1–134.

Nelsen, M.P., **R. Lücking**, C. J. Andrew, E. Rivas Plata, J. L. Chaves, M. E. S. Cáceres, and N. Ventura. (2012). Dismantling *Herpothallon: Herpothallon antillarum* (Arthoniomycetes: Arthoniaceae) is a member of the genus *Diorygma* (Lecanoromycetes: Graphidaceae). *The Bryologist* 115: 313–321.

Parnmen, S., **R. Lücking**, and H. T. Lumbsch. (2012). Phylogenetic classification at generic level in the absence of distinct phylogenetic patterns of phenotypical variation: a case study in Graphidaceae (Ascomycota). *PLoS ONE* 7(12) e51392. http://dx.doi.org/10.1371/journal.pone.0051392.

Rincón-Espitia, A. and **R. Lücking**. (2012). New records of the genus *Graphis* (Graphidaceae) in Colombia. *Tropical Bryology* 33: 54–62.

Rivas Plata, E. and **R. Lücking**. (2012). High diversity of Graphidaceae (Ascomycota: Ostropales) in Amazonian Peru. *Fungal Diversity* [online first] http://dx.doi.org/10.1007/s13225-012-0172-y.

Rivas Plata, E., H. T. Lumbsch, and **R. Lücking**. (2012). A new classification for the lichen family Graphidaceae s.lat. (Ascomycota: Lecanoromycetes: Ostropales). *Fungal Diversity* 52: 107–121.

Rivas Plata, E., R. Mason-Gamer, M. Ashley, **R. Lücking,** and H. T. Lumbsch. (2012). Molecular phylogeny and systematics of the *Ocellularia*-clade (Ascomycota: Ostropales: Graphidaceae). *Taxon* 61: 1161–1179.

Schmitt, I., J. Otte, S. Parnmen, A. D. Sadowska-Deś, **R. Lücking,** and H. T. Lumbsch. (2012). A new circumscription of the genus *Varicellaria* (Pertusariales, Ascomycota). *MycoKeys* 4: 23–36.

Sipman, H. J. M., **R. Lücking**, A. Aptroot, J. L. Chaves, K. Kalb, and L. Umaña Tenorio. (2012). A first assessment of the Ticolichen biodiversity inventory in Costa Rica and adjacent areas: the thelotremoid Graphidaceae (Ascomycota: Ostropales). *Phytotaxa* 55: 1–214.

Soto-Medina, E., **R. Lücking**, and A. Bolaños Rojas. (2012). Especificidad de forófito y preferencias microambientales de los líquenes cortícolas en el bosque premontano de la finca Zíngara, Cali, Colombia. *Revista de Biología Tropical* 60: 843–856.

Sulzbacher, M. A., I. G. Baseia, **R. Lücking**, S. Parnmen, and B. Moncada. (2012). Unexpected discovery of a novel basidiolichen in the threatened Caatinga biome of northeastern Brazil. *The Bryologist* 115, 601–609.

Sweetwood, G., **R. Lücking**, M. P. Nelsen, and A. Aptroot. (2012). Ascospore ontogeny and discharge in megalosporous Trypetheliaceae and Graphidaceae (Ascomycota: Dothideomycetes and Lecanoro-mycetes) suggest phylogenetic relationships and ecological constraints. *The Lichenologist* 44: 277–296.

Weerakoon, G., E. Rivas Plata, H. T. Lumbsch, and **R. Lücking**. (2012). Three new species of *Chapsa* (lichenized Ascomycota: Ostropales: Graphidaceae) from tropical Asia. *The Lichenologist* 44: 373–379.

Weerakoon, G., S. C. Wijeyaratne, P. A. Wolseley, E. Rivas Plata, **R. Lücking**, and H. T. Lumbsch. (2012). Six new species of Graphidaceae from Sri Lanka. *The Bryologist* 115: 74–83.

Wijeyaratne, S. C., **R. Lücking**, and H. T. Lumbsch. (2012). Three new crustose lichen species from Sri Lanka. *Nova Hedwigia* 94: 367–372.

Yánez, A., M. Dal-Forno, F. Bungartz, **R. Lücking**, and J. D. Lawrey. (2012). A first assessment of Galápagos basidiolichens. *Fungal Diversity* 52: 225–244.

Moncada, B. and **R. Lücking**. (2012). Ten new species of *Sticta* and counting: Colombia as a hot spot for unrecognized diversification in a conspicuous macrolichen genus. *Phytotaxa* 74: 1–29

**Lücking, R.** and Breuss, O. (2012) A new species of Thelotrema, a new combination, Leucodecton isidioides, and a key to thelotremoid lichens of Macaronesia (lichenised Ascomycota: Graphidaceae). Österreichische Zeitschrift für Pilzkunde 21: 127–133

#### Thorsten Lumbsch

Amo, G., A. Crespo, P. Cubas, J. A. Elix, and **H. T. Lumbsch**. (2012). Transoceanic dispersal and subsequent diversification on separate continents shaped diversity of the *Xanthoparmelia pulla* group (Ascomycota). *PLoS ONE* 7(6).e39683.

Thell, A., A. Crespo, P. K. Divakar, I. Kärnefelt, S. D. Leavitt, **H. T. Lumbsch**, and M. R. D. Seaward. (2012). A review of the lichen family Parmeliaceae – history, phylogeny and current taxonomy. *Nordic Journal of Botany* 30: 641–664.

Boekhout, T., F. Hagen, B. Theelen, A. Kolecka, K. Khayhan, C. Klaassen, J. Meis, P. Sriburee, **H. T. Lumbsch**, and M. Kostzrewa. (2012). Identification of new species in the *Cryptococcus neoformans* -*Cryptococcus gattii* species complex. *Mycoses* 55, Suppl. 4: 48–48.

Divakar P. K., R. Del-Prado, **H. T. Lumbsch**, M. Wedin, T. L. Esslinger, S. D. Leavitt, and A. Crespo. (2012). Diversification of the newly recognized lichen-forming fungal lineage montanelia (Parmeliaceae, Ascomycota) and its relation to key geological and climatic events. *Am. J. Botany* 99, 2014–2026.

Kantvilas, G. and **H. T. Lumbsch**. (2012). Reappraisal of the genera of Megalosporaceae. *Aust. Syst. Bot.* 25: 210–216.

Lumbsch, H. T., G. Kantvilas, and S. Parnmen. (2012). Molecular data support placement of *Cameronia* in Ostropomycetidae (Lecanoromycetes, Ascomycota). *MycoKeys* 5: 31–44.

Kirika, P., G. Mugambi, R. Lücking, and **H. T. Lumbsch**. (2012). New records of lichen-forming fungi from Kenya. *J. East African Nat. Hist.* 101: 73–98.

Kirika, P., S. Parnmen and **H. T. Lumbsch**. (2012). Two new species of *Lecanora* sensu stricto (Lecanoraceae, Ascomycota) from East Africa. *MycoKeys* 3: 37–47.

Leavitt, S. D., T. L. Esslinger, P. K. Divakar, and **H. T. Lumbsch**. (2012). Miocene and Pliocene dominated diversification of the lichen-forming fungal genus *Melanohalea* (Parmeliaceae, Ascomycota) and Pleistocene population expansions. *BMC Evol. Biol.* 12: 176.

Leavitt, S. D., P. K. Divakar, T. L. Esslinger, and **H. T. Lumbsch**. (2012). Miocene divergence, phenotypically cryptic lineages, and contrasting distribution patterns in common camouflage lichen fungi (Parmeliaceae, Ascomycota). *Biological Journal of the Linnaean Society* 107: 920–937.

Leavitt, S. D., T. L. Esslinger, and **H. T. Lumbsch**. (2012). Neogene-dominated diversification in neotropical montane lichens: dating divergence events in the lichen-forming fungal genus *Oropogon* (Parmeliaceae). *Am. J. Bot.* 99: 1764–1777.

Leavitt, S. D., T. L. Esslinger, T. Spribille, P. K. Divakar, and **H. T. Lumbsch**. (2012). Multilocus phylogeny of the lichen-forming fungal genus *Melanohalea* (Parmeliaceae, Ascomycota): Insights on diversity, distributions, and a comparison of species tree and concatenated topologies. *Mol. Phyl. Evol.* 66: 138–152.

Lücking, R., C. Niezgoda, S. Huhtinen, J. McCaffrey, and **H. T. Lumbsch**. (2012). *Coccocarpia melloniorum* (Ascomycota: Peltigerales), a new lichen species discovered through the Global Plant Initiative project. *Bryologist* 114: 702–707.

Lücking, R., S. Parnmen, and **H. T. Lumbsch**. (2012). *Mangoldia*, a new lichen genus in the family Graphidaceae (Ascomycota: Ostropales). *Phytotaxa* 69: 1–5.

Lumbsch, H. T. and H. Döring. (2012). A tribute to Aino Marjatta Henssen (1925–2011). *Lichenologist* 44: 1–4.

Orock, E. A., S. D. Leavitt, B. Fonge Ambo, L. L. St. Clair, and **H. T. Lumbsch**. (2012). DNA-based identification of lichen-forming fungi: can publicly available sequence databases aid in lichen diversity inventories of Mount Cameroon (West Africa)? *Lichenologist* 44: 833–839.

Papong, K., S. Nayaka, and **H. T. Lumbsch**. (2012). Two new species and a new record of *Lecanora* sensu stricto (Lecanoraceae, Ascomycota) from India. *Phytotaxa* 68: 24–28.

Parnmen, S. and **H. T. Lumbsch**. (2012). New combinations in the genus *Cladia. Lichenologist* 44: 297–298.

Parnmen, S., R. Lücking and **H. T. Lumbsch**. (2012). Phylogenetic classification at generic level in the absence of distinct phylogenetic patterns of phenotypical variation: a case study in Graphidaceae (Ascomycota). *PLoS ONE* 7(12) e51392. http://dx.doi.org/10.1371/journal.pone.0051392.

Parnmen, S., A. Rangsiruji, P. Mongulsuk, K. Boonpragob, A. Nutakki, and **H. T. Lumbsch**. (2012). Using phylogenetic and coalescent methods to understand the species diversity in the *Cladia aggregata* complex (Ascomycota, Lecanorales). *PLoS ONE* 7(12): e52245.

Pino-Bodas, R. A. R. Burgaz, M. P. Martin, and **H. T. Lumbsch**. (2012). Species delimitations in the *Cladonia cariosa* group (Cladoniaceae, Ascomycota). *Lichenologist* 44: 121–135.

Printzen, C., R. Cezanne, M. Eichler, and **H. T. Lumbsch**. (2012). The genera *Aphanopsis* and *Steinia* represent basal lineages within Leotiomyceta. *Bibl. Lich.* 108: 175–184.

Rivas Plata, E., R. Lücking, and **H. T. Lumbsch**. (2012). A new classification for the family Graphidaceae (Ascomycota: Lecanoromycetes: Ostropales). *Fung. Div.* 52: 107–121.

Rivas Plata, E., R. Mason-Gamer, M. Ashley, R. Lücking, and **H. T. Lumbsch**. (2012). Molecular phylogeny and systematics of the *Ocellularia*-clade (Ascomycota: Ostropales: Graphidaceae). *Taxon* 61: 1161–1179.

Ruprecht, U., **H. T. Lumbsch**, G. Brunauer, T. G. A. Green, and R. Türk. (2012). Insights into the diversity of Lecanoraceae (Lecanorales, Ascomycota) in continental Antarctica (Ross Sea region). *Nova Hedwigia* 94: 287–306.

Schmitt, I., J. Otte, S. Parnmen, R. Lücking and **H. T. Lumbsch**. (2012). A new circumscription of the genus *Varicellaria* (Pertusariales, Lecanoromycetes). *MycoKeys* 4: 23–36.

Schoch, C. L., K. A. Seifert, S. Huhndorf, V. Robert, J. L. Spouge, C. A. Levesque, W. Chen, E. Bolchacova, K. Voigt, P. W. Crous, A. N. Miller, M. J. Wingfield, M. C. Aime, K.-D. An, F.-Y. Bai, R. W. Barreto, D. Begerow, M.-J. Bergeron, M. Blackwell, T. Boekhout, M. Bogale, N. Boonyuen, A. R. Burgaz, B. Buyck, L. Cai, Q. Cai, G. Cardinali, P. Chaverri, B. J. Coppins, A. Crespo, P. Cubas, C. Cummings, U. Damm, Z. W. de Beer, G. S. de Hoog, R. Del-Prado, B. Dentinger, J. Dieguez-Uribeondo, P. K. Divakar, B. Douglas, M. Duenas, T. A. Duong, U. Eberhardt, J. E. Edwards, M. S. Elshahed, K. Fliegerova, M. Furtado, M. A. Garcia, Z.-W. Ge, G.W. Griffith, K. Griffiths, J. Z. Groenewald, M. Groenewald, M. Grube, M. Gryzenhout, L.-D. Guo, F. Hagen, S. Hambleton, R. C. Hamelin, K. Hansen, P. Harrold, G. Heller, C. Herrera, K. Hirayama, Y. Hirooka, H.-M. Ho, K. Hoffmann, V. Hofstetter, F. Hognabba, P. M. Hollingsworth, S.-B. Hong, K. Hosaka, J. Houbraken, K. Hughes, S. Huhtinen, K. D. Hyde, T. James, E. M. Johnson, J. E. Johnson, P. R. Johnston, E. B. G. Jones, L. J. Kelly, P. M. Kirk, D. G. Knapp, U. Koljalg, G. M. Kovacs, C. P. Kurtzman, S. Landvik, S. D. Leavitt, A. S. Liggenstoffer, K. Liimatainen, L. Lombard, J. J. Luangsa-Ard, H. T. Lumbsch, H. Maganti, S. S. N. Maharachchikumbura, M. P. Martin, T. W. May, A.R. McTaggart, A. S. Methven, W. Meyer, J.-M. Moncalvo, S. Mongkolsamrit, L.G. Nagv, R. H. Nilsson, T. Niskanen, I. Nyilasi, G. Okada, I. Okane, I. Olariaga, J. Otte, T. Papp, D. Park, T. Petkovits, R. Pino-Bodas, W. Quaedvlieg, H.A. Raja, D. Redecker, T. L. Rintoul, C. Ruibal, J. M. Sarmiento-Ramirez, I. Schmitt, A. Schussler, C. Shearer, K. Sotome, F.O.P. Stefani, S. Stenroos, B. Stielow, H. Stockinger, S. Suetrong, S.-O. Suh, G.-H. Sung, M. Suzuki, K. Tanaka, L. Tedersoo, M. T. Telleria, E. Tretter, W. A. Untereiner, H. Urbina, C. Vagvolgyi, A. Vialle, T.D. Vu, G. Walther, Q.-M. Wang, Y. Wang, B.S. Weir, M. Weiss, M. M. White, J. Xu, R. Yahr, Z. L. Yang, A. Yurkov, J.-C. Zamora, N. Z. Zhang, and D. Wen-Ying. (2012). Nuclear ribosomal internal transcribed spacer (ITS) region as a universal DNA barcode marker for Fungi. Proc. Natl Acad. Sci. USA 109: 6241-6246.

Weerakon, G., A. Aptroot, **H. T. Lumbsch**, P. Wolseley, C. Wijeyaratne, and C. Gueidan. (2012). New molecular data on Pyrenulaceae from Sri Lanka reveal two well-supported groups within this family. *Lichenologist* 44: 639–647.

Weerakon, G., E. Rivas Plata, **H. T. Lumbsch**, and R. Lücking. (2012). Three new species of *Chapsa* (lichenized Ascomycota: Ostropales: Graphidaceae) from tropical Asia. *Lichenologist* 44: 373–379.

Weerakon, G., S. C. Wijeyaratne, P. A. Wolseley, E. Rivas Plata, R. Lücking, and **H. T. Lumbsch**. (2012). Six new species of Graphidaceae from Sri Lanka. *Bryologist* 115: 74–83.

Wirtz, N., C. Printzen, and **H. T. Lumbsch**. (2012). Using haplotype networks, estimation of gene flow and phenotypic characters to understand species delimitation in fungi of a predominantly Antarctic *Usnea* group (Ascomycota, Parmeliaceae). *Org. Div. Evol.* 12:17–37.

Wijeyaratne, S. C., R. Lücking, and **H. T. Lumbsch**. (2012). Three new crustose lichen species from Sri Lanka. *Nova Hedwigia* 94: 367–372.

#### Sittiporn Parnmen

**Parnmen, S.**, A. Rangsiruji, P. Mongulsuk, K. Boonpragob, A. Nutakki, and H. T. Lumbsch. (2012). Using phylogenetic and coalescent methods to understand the species diversity in the *Cladia aggregata* complex (Ascomycota, Lecanorales). *PLoS ONE* 7(12): e52245.

**Parnmen, S.**, R. Lücking, and H. T. Lumbsch. (2012). Phylogenetic classification at generic level in the absence of distinct phylogenetic patterns of phenotypical variation: a case study in Graphidaceae (Ascomycota). *PLoS ONE* e51392. http://dx.doi.org/10.1371/journal.pone.0051392.

**Parnmen, S.** and H. T. Lumbsch. (2012). Short Communication - New combinations in the genus *Cladia*. *The lichenologist* 44 (2): 1–2.

Lücking, R., **S. Parnmen,** and H. T. Lumbsch. (2012). *Mangoldia*, a new lichen genus in the family Graphidaceae (Ascomycota: Ostropales). *Phytotaxa* 69: 1–5.

Schmitt, I., J. Otte, **S. Parnmen**, A. D. Sadowska-Deś, R. Lücking, and H. T. Lumbsch. (2012). A new circumscription of the genus *Varicellaria* (Pertusariales, Ascomycota). *MycoKeys* 4: 23–36.

Kirika, P., **S. Parnmen**, and H. T. Lumbsch. (2012). Two new species of *Lecanora* sensu stricto (Lecanoraceae, Ascomycota) from east Africa. *MycoKeys* 3: 37–47.

#### **Richard H. Ree**

Rubin, B. E. R., **R. H. Ree**, and C. S. Moreau. (2012). Inferring phylogenies from RAD sequence Data. PLoS ONE 7(4): e33394.

Webb, C. O. and **R. H. Ree.** (2012). Historical biogeography inference in Malesia. Chapter 8, pp. 191–215 in: Biotic evolution and environmental change in Southeast Asia (Gower, D. J., K. G. Johnson, J. E. Richardson, B. R. Rosen, L. Ruber, and S. T. Williams, eds.). Cambridge University Press.

Eaton, D. A., C. B. Fenster, J. Hereford, S.-Q. Huang, and **R. H. Ree.** (2012). Floral diversity and community structure in *Pedicularis* (Orobanchaceae). Ecology 93: S182–S194.

Beaulieu, J. M., **R. H. Ree**, J. Cavender-Bares, G. D. Weiblen, and M. J. Donoghue. (2012). Synthesizing phylogenetic knowledge for ecological research. *Ecology* 93: S4–S13.

#### Matt von Konrat

**von Konrat, M.**, L. Söderström, and A. Hagborg. (2012). Notes on Early Land Plants Today 7. Transfer of *Jubulopsis novae-zelandiae* to *Lepidolaena*. *Phytotaxa* 65: 51.

**von Konrat M.**, P. de Lange, M. Greif, L. Strozier, J. Hentschel, and J. Heinrichs. (2012). *Frullania knightbridgei*, a new liverwort (Frullaniaceae, Marchantiophyta) species from the deep south of Aotearoa–New Zealand based on an integrated evidence-based approach. *PhytoKeys* 8: 13–36.

Heinrichs, J., **M. von Konrat**, H. Grabenhorst, and A. R. Schmidt. (2012). The sporophyte of the Paleogene liverwort *Frullania varians* Caspary. *Fossil Record* 15: 115–120.

Söderström, L., A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today 9. Validation of *Riccia gangetica* Ahmad. *Phytotaxa* 65: 57.

Söderström, L., A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today 6. The correct name for *Cephaloziella divaricata* var. *asperifolia*. *Phytotaxa* 65: 49–50.

Söderström, L., A. Hagborg and **M. von Konrat**. (2012). Notes on Early Land Plants Today 5. Validation of two *Drepanolejeunea* species. *Phytotaxa* 65: 47–48.

Söderström, L., A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today. 1. A new name for *Cryptothallus hirsutus*. *Phytotaxa* 65: 43.

Söderström, L., A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today. *Phytotaxa* 65: 41–42.

Brown, E., L. Söderström, A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today 10. A new combination in *Acromastigum*. *Phytotaxa* 65: 58.

Cargill, D. C., L. Söderström, A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today 3. *Fossombronia ruminata* Cargill, a new name for *Fossombronia maritima* G.A.M.Scott et D.C. Pike ex Cargill, *nom. illeg. Phytotaxa* 65: 45.

Heinrichs, J., M. E. Reiner-Drehwald, K. Feldberg, **M. von Konrat**, J. Hentschel, J. Vana, P. Nascimbene, D. Grimaldi, and A. R. Schmidt. (2012). The leafy liverwort *Frullania* in the Cretaceous amber forest of Myanmar. *Review of Palaeobotany and Palynology* 169: 21–28.

Söderström, L., A. Hagborg, M. R. Crosby, and **M. von Konrat.** (2012). Early Land Plants Today: Index of Liverworts & Hornworts 2009–2010. *Phytotaxa* 63: 21–68.

Thiers, B. M., L. Söderström, A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today 11. *Microlejeunea bischlerae* (B. M.Thiers) *comb. nov. Phytotaxa* 65: 59.

Váňa, J., L. Söderström, A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today 12. *Pseudomarsupidium borneensis* (Grolle) *comb. nov. Phytotaxa* 65: 60.

Váňa, J., L. Söderström, A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today 8. New combinations and some lectotypifications in *Mesoptychia*. *Phytotaxa* 65: 52–56.

Váňa, J., L. Söderström, A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today. 4. *Aponardia* gen. et stat nov. *Phytotaxa* 65: 46.

Váňa, J., L. Söderström, A. Hagborg, and **M. von Konrat**. (2012). Notes on Early Land Plants Today. 2. Two new combinations in *Solenostoma. Phytotaxa* 65: 44.

# **DEPARTMENT OF GEOLOGY**

#### Kenneth D. Angielczyk

Mitchell, J. S., P. D. Roopnarine, and **K. D. Angielczyk**. (2012). Late Cretaceous restructuring of terrestrial communities facilitated the end-Cretaceous mass extinction in North America. *Proceedings of the National Academy of Sciences*. http://dx.doi.org/10.1073/pnas.1202196109.

**Angielczyk, K. D.**, A. Aronowsky, B. Sanzenbacher, and K. Villanosa. (2012). Game of Bones: decisions and early feedback from a vertical slice. Pp. 63-68 in: Martin, C., A. Ochsner, and K. Squire (eds.), *Proceedings of the Games, Learning, and Society Conference* 8.0. Pittsburgh: ETC Press.

**Angielczyk**, **K. D.** and M. Ruta. (2012). The roots of amphibian morphospace: a geometric morphometric analysis of Paleozoic temnospondyls. *Fieldiana: Life and Earth Sciences* 5: 40–58.

Parham, J. F., P. C. J. Donoghue, C. J. Bell, T. D. Calway, J. J. Head, P. A. Holroyd, J. G. Inoue, R. B. Irmis, W. G. Joyce, D. T. Ksepka, J. S. L. Patané, N. D. Smith, J. E. Tarver, M. van Tuinen, Z. Yang, **K. D. Angielczyk**, J. M. Greenwood, C. A. Hipsley, L. Jacobs, P. J. Makovicky, J. Müller, K. T. Smith, J. M. Theodor, R. C. M. Warnock, and M. J. Benton. (2012). Best practices for justifying fossil calibrations. *Systematic Biology* 61: 346–359.

**Angielczyk, K. D**. and B. S. Rubidge. (2012). Skeletal morphology, phylogenetic relationships, and stratigraphic range of *Eosimops newtoni* Broom, 1921, a pylaecephalid dicynodont (Therapsida, Anomodontia) from the Middle Permian of South Africa. *Journal of Systematic Palaeontology*. http://dx.doi.org/10.1080/14772019.2011.623723.

### lan Glasspool

Brown, S. A. E., A. C. Scott, **I. J. Glasspool**, and M. E. Collinson. (2012). Cretaceous wildfires and their impact on the Earth system. *Cretaceous Research* 36: 162–190.

Fraser, W. T., A. C. Scott, A. E. S. Forbes, **I. J. Glasspool**, R. E. Plotnick, F. Kenig, and B. H. Lomax. (2012). Evolutionary stasis of sporopollenin biochemistry revealed by unaltered Pennsylvanian spores. *New Phytologist* 196: 397–401.

### Lance Grande

Sullvan, S. P., **L. Grande**, A. Gau, and C. McAllister. (2012). Taphonomy in North America's most productive freshwater fossil locality: Fossil Basin, Wyoming. *Fieldiana: Life and Earth Sciences* 5: 1–4.

#### Philipp R. Heck

Jenniskens P., M. D. Fries, Q.-Z Yin, M. Zolensky, A. N. Krot, S. A. Sandford, D. Sears, R. Beauford, D. S. Ebel, J. M. Friedrich, K. Nagashima, J. Wimpenny, A. Yamakawa, K. Nishiizumi, Y. Hamajima, M. W. Caffee, K. C. Welten, M. Laubenstein, A. M. Davis, S. B. Simon, **P. R. Heck**, E. D. Young, I. E. Kohl, M. Thiemens, M. H. Nunn, T. Mikouchi, K. Hagiya, K. Ohsumi, T. A. Cahill, J. A. Lawton, D. Barnes, A. Steele, P. Rochette, K. Verosub, J. Gattacceca, G. Cooper, D. P. Glavin, A. S. Burton, J. P. Dworkin, J. E. Elsila, S. Pizzarello, R. Ogliore, P. Schmitt-Kopplin, M. Harir, N. Hertkorn, A. Verchovsky, M. Grady, K. Nagao, R. Okazaki, H. Takechi, T. Hiroi, K. Smith, E. A. Silber, P. G. Brown, J. Albers, D. Klotz, M. Hankey, R. Matson, J. A. Fries, R. J. Walker, I. Puchtel, C. A. Lee, M. E. Erdman, G. R. Eppich, S. Roeske, Z. Gabelica, M. Lerche, M. Nuevo, B. Girten, and S. P. Worden. (2012). Radar Enabled Recovery of the Sutter's Mill Meteorite, a Carbonaceous Chondrite Regolith Breccia. *Science* 338: 1583–1587.

**Heck P. R.**, P. Hoppe, and J. Huth. (2012). Sulfur Four Isotope NanoSIMS Analysis of Comet-81P/Wild-2 Dust in Impact Craters on Aluminum Foil C2037N from NASA's Stardust Mission. *Meteoritics & Planetary Science*. 47: 649–659.

Huberty, J. M., H. Konishi, **P. R. Heck**, J. H. Fournelle, J. W. Valley, and H. Xu. (2012). Silician Magnetite from the Dales Gorge Member of the Brockman Iron Formation, Hamersley Group, Western Australia. *American Mineralogist.* http://dx.doi.org/10.2138.am.2012.3864

Meier M. M. M., **P. R. Heck**, S. Amari, H. Baur, and R. Wieler. (2012). Graphite grains in supernova ejecta —insights from a noble gas study of 91 individual KFC1 presolar graphite grains from the Murchison meteorite. *Geochimica et Cosmochimica Acta* 76: 147–160.

#### Scott Lidgard

Hopkins, M. and **S. Lidgard.** (2012). Evolutionary mode routinely varies among morphological traits within fossil species lineages. *Proceedings of the National Academy of Sciences* 109: 20520–20525.

**Lidgard, S.,** M. C. Carter, M. H. Dick, D. P. Gordon, and A. N. Ostrovsky. (2012). Division of labor and recurrent evolution of polymorphisms in a group of colonial animals. *Evolutionary Ecology* 26: 233–257.

#### Peter J. Makovicky

Parham, J. J., P. C. J. Donoghue, C. J. Bell, T. D. Calway, J. J. Head, P. A. Holroyd, J. G. Inoue, R. B. Irmis, W. G. Joyce, D. T. Ksepka, J. S. L. Patané, N. D. Smith, J. E. Tarver, M. van Tuinen, Z. Yang, K. D. Angielczyk, J. M. Greenwood, C. A. Hipsley, L. Jacobs, **P. J. Makovicky**, J. Müller, K. T. Smith, J. M. Theodor, R. C. M. Warnock, and M. J. Benton. (2012). Best practices for justifying fossil calibrations. *Systematic Biology* 61: 346–359.

Kilbourne, B. M. and **P. J. Makovicky**. (2012). Postnatal long bone growth in terrestrial placental mammals: Allometry, life history, and organismal traits. *Journal of Morphology*, available on-line in Early View.

**Makovicky, P. J.** (2012). Marginocephalia; pp. 527–550. In: *The Complete Dinosaur*, 2<sup>nd</sup> Edition, M. Brett-Surman, J. Farlow, and T. Holtz (Eds). Bloomington: Indiana University Press.

Turner, A. H., **P. J. Makovicky**, and M. A. Norell. (2012). A review of Dromaeosauridae systematics and paravian phylogeny. *Bulletin of the American Museum of Natural History* 748: 1–199.

**Makovicky**, **P. J.**, S. Apesteguía, and F. Gianechini. (2012). A new coelurosaurian theropod from the La Buitrera fossil locality of Rio Negro, Argentina. *Fieldiana, Life and Earth Sciences* 5: 77–89.

Zanno, L. E. and **P. J. Makovicky**. (2012). No evidence for directional evolution of body mass in herbivorous theropod dinosaurs. *Proceedings of the Royal Society B*. http://dx.doi.org/10.1098/rspb.2012.2526.

### **Olivier Rieppel**

Rieppel, O. (2012). Cool Fossils: Embryos in Deep Time. Evolution & Development 14: 395.

**Rieppel, O.** (2012). The evolution of the turtle shell, pp. 51–61. In: Brinkman, D. B., P. A. Holroyd, and J. D. Gardner (Eds.), *Morphology and Evolution of Turtles*. Dordrecht: Springer.

Rieppel, O. (2012). "Regressed" macrostomatan snakes. Fieldiana Life and Earth Sciences, 5: 99–103.

Conrad, J. L., **O. Rieppel**, J. A. Gauthier, and M. A. Norell. (2012). Osteology of Gobiderma pulchrum (Monstersauria, Lepidosauria, Reptilie). *Bulletin of the American Museum of Natural History*, 362: 1–88.

Scheyer, T. M., J. M. Neenan, S. Renesto, F. Saller, H. Hagdorn, H. Furrer, **O. Rieppel**, and A. Tintori. (2012). Revised paleoecology of placodonts—with a comment on "The shallow marine placodont Cyamodus of the central European Germanic Basin: its evolution, paleobiogeography and paleoecology" by C.G. Diedrich. *Historical Biology*, 24: 257–267.

Gauthier, A., M. Kearney, J. A. Maisano, **O. Rieppel**, and A. D. B. Behlke. (2012). Assembling the squamate tree of life. Perspectives from the phenotype and the fossil record. *Bulletin of the Peabody Museum of Natural History*, 53: 3–308.

Kelly, N. P., R. Motani, D.-Y. Jiang, **O. Rieppel**, and L. Schmitz. (2012). Selective extinction of Triassic marine reptiles during long-term sea-level changes illuminated by seawater strontium isotopes. *Paleogeography, Paleoclimatology, Paleoecology*, http://dx.doi.org/10.1016/j.palaeo.2012.07.026.

Tsuihiji, T., M. Kearney, and **O. Rieppel**. (2012). Finding the neck-trunk boundary in snakes: anteroposterior dissociation of mycological characteristics in snakes and its implications for their neck and trunk body regionalization. *Journal of Morphology*, 273: 992–1009.

**Rieppel, O.** (2012). Wilhelm Troll (1897–1978): idealistic morphology, physics, and phylogenetics. *History and Philosophy of Life Sciences*, 33: 321–342.

**Rieppel, O.** (2012). Adolf Naef (1883–1949), systematic morphology and phylogenetics. *Journal for Zoological Systematics and Evolutionary Research*, 50: 2–13.

**Rieppel, O.** (2012). Karl Beurlen (1901-1985), Nature Mysticism, and Aryan Paleontology. *Journal of the History of Biology*, 45: 253–299.

Rieppel, O. (2012). Dark side of the moon. *Cladistics*, 28: 1–3.

**Rieppel, O.** (2012). Hugo Dingler (1881–1954) and the philosophical foundation of the German Evolutionary Synthesis. *Biological Theory*, http://dx.doi.org/ 10.1007/s13752-012-0022-x.

**Rieppel, O.** (2012). Othenio Abel (1875–1946): the rise and decline of paleobiology in German paleontology. *Historical Biology*, http://dx.doi.org/ 10.1080/08912963.2012.697899.

**Rieppel, O.** (2012). Othenio Abel (1875–1946) and the "phylogeny of the parts" *Cladistics*, http://dx.doi.org/ 10.1111/j.1096-0031.2012.00428.x.

**Rieppel, O.** (2012). Styles of scientific reasoning: Adolf Remane (1898–1976) and the German evolutionary synthesis. *Journal of Zoological Systematics and Evolutionary Research*, http://dx.doi.org/ 10.1111/jzs.12003.

**Rieppel, O.**, D. M. Williams, and M. C. Ebach. (2012). Adolf Naef (1883–1949): On foundational concepts and principles of systematic morphology. *Journal of the History of Biology*, http://dx.doi.org/ 10.1007/s10739-012-9338-4.

### Paul P. Sipiera

**Sipiera, P. P.** (2012). Planetology and Astrology, pp. 1480–1486. In *Applied Science*, D. R. Franceschetti (Ed.). Pasadenia: Salem Press, Inc.

### Nathan D. Smith

Budd, A. F., H. Fukami, **N. D. Smith**, and N. Knowlton. (2012). Taxonomic classification of the reef coral family Mussidae (Cnidaria: Anthozoa: Scleractinia). *Zoological Journal of the Linnean Society* 166: 465–529.

**Smith, N. D.** (2012). Body mass and foraging ecology predict evolutionary patterns of skeletal pneumaticity in the diverse 'waterbird' clade. *Evolution* 66(4): 1059–1078.

Parham, J. F., P. C. J. Donoghue, C. J. Bell, T. D. Calway, J. J. Head, P. A. Holroyd, J. G. Inoue, R. B. Irmis, W. G. Joyce, D. T. Ksepka, J. S. L. Patané, **N. D. Smith**, J. E. Tarver, M. van Tuinen, Z. Yang, K. D. Angielczyk, J. Greenwood, C. A. Hipsley, L. Jacobs, P. J. Makovicky, J. Müller, K. T. Smith, J. M. Theodor, R. C. M. Warnock, M. J. Benton. (2012). Best practices for justifying fossil calibrations. *Systematic Biology* 61(2): 346–359.

# DEPARTMENT OF ZOOLOGY

### John M. Bates

Yojanan Lobo-y-Henriques, J. C., **J. Bates**, and D. Willard. (2012). First record for the Black-and-white Tanager (*Conothraupis speculigera*) in Colombia. *Conservación Colombiana* 17: 45–51.

# Rüdiger Bieler

**Bieler, R.** and R. E. Petit. (2012). Molluscan taxa in the publications of the Museum Godeffroy of Hamburg, with a discussion of the Godeffroy Sales Catalogs (1864–1884), the *Journal des Museum Godeffroy* (1873–1910), and a history of the museum. *Zootaxa*, 3511: 1–80. Open access at http://www.mapress.com/zootaxa/2012/f/z03511p080f.pdf.

Carter, J., P. Harries, N. Malchus, A. Sartori, L. Anderson, **R. Bieler**, A. Bogan, E. Coan, J. Cope, S. Cragg, J. Garcia-March, J. Hylleberg, P. Kelly, K. Kleeman, J. Kříž, C. McRoberts, P. Mikkelsen, J. Pojeta, I. Tëmkin, T. Yancey, and A. Zierits. (2012). Illustrated Glossary of the Bivalvia. *Treatise on Invertebrate Paleontology*, *Treatise Online*, Part N, Revised, Mollusca 6, Bivalvia, Volume 1, Chapter 31: 1–209.

Sharma, P. P., V. L. Gonzalez, G. Y. Kawauchi, S. C. Andrade, A. Guzman, T. M. Collins, E. A. Glover, E. M. Harper, J. M. Healy, P. M. Mikkelsen, J. D. Taylor, **R. Bieler**, and G. Giribet. (2012). Phylogenetic analysis of four nuclear protein-encoding genes largely corroborates the traditional classification of Bivalvia (Mollusca). *Molecular Phylogenetics and Evolution*, 65(1): 64–74. http://www.sciencedirect.com/science/article/pii/S1055790312002035.

**Bieler, R**. and R. E. Petit. (2012). Comment on the proposed resolution of homonymy between Chilodontinae Eigenmann, 1910 (Pisces, Characiformes) and Chilodontinae Wenz, 1938 (Mollusca, Gastropoda). *Bulletin of Zoological Nomenclature*, 69(1): 59.

**Bieler, R**. (2012). Bivalve Seashells of Tropical West America – Marine Bivalve Mollusks from Baja California to Northern Perú [review]. *The Festivus*, 44(7): 94–95.

**Bieler, R**. (2012). Family Architectonicidae. World Register of Marine Species at http://www.marinespecies.org.

**Bieler, R**. (2012). Family Vermetidae. World Register of Marine Species at http://www.marinespecies.org.

# Gracen Brilmyer

Bergsten, J., **G. Brilmyer**, A. N. Crampton-Platt, and N. Anders. (2012). Sympatry and colour variation disguised well-differentiated sister species: *Suphrodytes* revised with integrative taxonomy including 5 kbp of housekeeping genes (Coleoptera: Dytiscidae), DNA Barcodes. Volume 1, Pages 1–18, ISSN (Online) 2299-1077, http://dx.doi.org/ 10.2478/dna-2012-000.

# Matthew P. Davis

McMahan, C. D., **M. P. Davis,** O. Dominguez-Dominguez, F. Garcia de Leon, I. Doadrio, and K. R. Piller. (2012). From the Mountains to the Sea: Phylogeography and Cryptic Species Diversity within the Mountain Mullet, *Agonostomus monticola* (Teleostei: Mugilidae). *Journal of Biogeography* HTTP://DX.DOI.ORG/10.1111/jbi.12036.

Near, T.J., R. I. Eytan, A. Dornburg, K. L. Kuhn, J. A. Moore, **M. P. Davis**, P. C. Wainwright, M. Friedman, and W. L. Smith. (2012). Resolution of ray-finned fish phylogeny and timing of diversification. *Proceedings of the National Academy of Sciences* 109(34): 13698–703.

P. Chakrabarty, **M. P. Davis**, and J. S. Sparks. (2012). The first record of a trans-oceanic sister-group relationship between obligate vertebrate troglobites. *PLoS ONE* 7(8): e44083.

### Steven M. Goodman

Samonds, K. E., L. R. Godfrey, J. A. Ali, **S. M. Goodman**, M. Vences, M. R. Sutherland, M. T. Irwin, and D. W. Krause. (2012). Spatial and temporal arrival patterns of Madagascar's vertebrate fauna explained by distance, ocean currents, and ancestor type. *Proceedings of the National Academy of Sciences, USA*. www.pnas.org/cgi/doi/10.1073/pnas.1113993109.

Lamb, J. M., T. Naidoo, P. J. Taylor, M. Napier, F. Ratrimomanarivo, and **S. M. Goodman.** (2012). Genetically and geographically isolated lineages of a tropical bat (Chiroptera, Molossidae) show demographic stability over the late Pleistocene. *Biological Journal of the Linnean Society* 106: 18–40.

**Goodman, S. M.,** P. J. Taylor, F. Ratrimomanarivo, and S. Hoofer. (2012). The genus *Neoromicia* (Family Vespertilionidae) in Madagascar, with the description of a new species. *Zootaxa* 3250: 1–25.

Goodman, S. M. (2012). Les Carnivora de Madagascar. Association Vahatra, Antananarivo.

Tortosa, P., H. Pascalis, V. Guernier, E. Cardinale, M. Le Corre, **S. M. Goodman**, and K. Dellagi. (2012). Deciphering arboviral emergence within insular ecosystems. *Infection, Genetics and Evolution* http://dx.doi.org/10.1016/j.meegid.2012.03.024.

Olive, M.-M., **S. M. Goodman**, and J.-M. Reynes. (2012). The role of the wild mammals in the maintenance of Rift Valley Fever Virus. *Journal of Wildlife Diseases* 48: 241–266.

Ruedi, M., N. Friedli-Weyeneth, E. C. Teeling, S. J. Puechmaille, and **S. M. Goodman**. (2012). Biogeography of Old World emballonurine bats (Chiroptera: Emballonuridae) inferred with mitochondrial and nuclear DNA. *Molecular Phylogeny and Evolution* 64: 204–211.

Richards, L. R., P. J. Taylor, M. C. Schoeman, **S. M. Goodman**, P. Van Daele, and J. M. Lamb. (2012). Cranial size and shape variation in Afrotropical *Otomops* (Mammalia: Chiroptera: Molossidae): testing species limits using a morphometric approach. *Biological Journal of the Linnean Society* 106: 910–925.

Dammhahn, M., V. Soarimalala, and **S. M. Goodman**. (2012). Trophic niche differentiation and microhabitat utilization in a species-rich montane forest small mammal community of eastern Madagascar. *Biotropica* (Melanie Dammhahn, Voahangy Soarimalala, SMG).

Godfrey, L. R., K. E. Samonds, J. R. Ali, **S. M. Goodman**, M. Vences, M.n B. Sutherland, M. T. Irwin, and D. W. Krause. (2012). Reconstructing Madagascar's vertebrate colonization history: a journey through time. *American Journal of Physical Anthropology* 147: 152.

Laurence, W. F. and **S. M. Goodman** (amongst 200 authors). (2012). Averting biodiversity collapse in tropical forest protected areas. *Nature* 489: 290–294.

Taylor, P. J., **S. M. Goodman**, F. H. Ratimomanarivo, J. Lamb, and M. C. Schoeman. (2012). Wing loading correlates negatively with genetic structuring of eight Afro-Malagasy bat species (Molossidae). *Acta Chiropterologica* 14: 53–62.

Lagadec., E., Y. Gomard, V. Guernier, M. Dietrich, H. Pascalis, S. Temmam, B. Ramasindrazana, **S. M. Goodman**, P. Tortosa, and K. Dellagi. (2012). Pathogenic *Leptospira* spp. in bats, Madagascar and Union of the Comoros. *Emerging Infectious Diseases* 18: 1696–1698.

**Goodman, S. M**., S. J. Puechmaille, N. Friedli-Weyeneth, J. Gerlach, M. Ruedi, M. C. Schoeman, W. T. Stanley, and E. C. Teeling. (2012). Phylogeny of the Emballonurini (Emballonuridae) with descriptions of a new genus and species from Madagascar. *Journal of Mammalogy*.

Cardiff, S. G., F. Ratrimomanarivo, and **S. M**. **Goodman**. (2012). The effect of tourist visits on behavior of *Rousettus madagascariensis* (Chiroptera: Pteropodidae) in the caves of Ankarana, northern Madagascar. *Acta Chiropterologica*.

Rakotoarisoa, J.-E., M. Raheriarisena, and **S. M. Goodman**. (2012). Evidence for a role of historical factors on the evolution of the endemic rodent *Eliurus carletoni* (Rodentia: Nesomyinae) in an ecological transition zone of northern Madagascar. *Journal of Heredity*, http://dx.doi.org/10.1093/jhered/ess083.

Wilkinson, D. A., S. Temmam, C. Lebarbenchon, E. Lagadec, J. Chotte, J. Guillebaud, B. Ramasindrazana, J. –M. Héraud, X. de Lamballerie, **S. M. Goodman**, K. Dellagi, and H. Pascalis. (2012). Identification of novel paramyxoviruses in insectivorous bats of the southwest Indian Ocean. *Virus Research*, http://dx.doi.org/10.1016/j.virusres.2012.08.022.

### Shannon J. Hackett

Reddy, S., A. Driskell, D. L. Rabosky, **S. J. Hackett**, and T. S. Schulenberg. (2012). Diversification and adaptive radiation of the vangas of Madagascar. *Proceedings of the Royal Society B* 279: 2062–2071.

#### Lawrence R. Heaney

**Heaney, L. R.** and D. S. Balete. (2012). Discovering diversity: newly discovered mammals highlight areas of unique biodiversity in Luzon. *Wildernews*, 1:4–9.

Esselstyn, J. A., J. L. Sedlock, F. A. Anwarali Khan, B. J. Evans, and **L. R. Heaney**. (2012). Single-locus species delimitation: A test of the mixed Yule-coalescent model, with an empirical application to Philippine round-eared bats. *Proceedings of the Royal Society B*, 279: 3678–3686.

Balete, D. S., E. A. Rickart, **L. R. Heaney**, P. A. Alviola, M. R. M. Duya, M. V. Duya, T. Sosa, and S. A. Jansa. (2012). *Archboldomys* (Muridae: Murinae) reconsidered: A new genus and three new species of shrew mouse from Luzon Island, Philippines. *American Museum Novitates*, 3754: 1–60.

Heaney, L. R. (2012). Shrinking giants. In the Field, 83: 12.

### Mary Hennen

Pond, J., S. Thompson, **M. Hennen**, J. Pauley, and K. Gamble. (2012). Effects of Ultracentrifugation on Plasma Biochemical Values of Prefledged Wild Peregrine Falcons (*Falco peregrinus*) in Northeastern Illinois. *Journal of Avian Medicine and Surgery* 26(3): 140–143.

#### Corrie S. Moreau

Kautz S., D. J Ballhorn, J. Kroiss, S. U. Pauls, **C. S. Moreau**, S. Eilmus, E. Strohm, and M. Heil. (2012). Host plant use by competing acacia-ants: Mutualists monopolize while parasites share hosts. *PLoS ONE* 7(5): e37691.

Rubin, B. E. R., R. H. Ree, and **C. S. Moreau.** (2012). Inferring phylogeny from RAD sequence data. *PLoS ONE* 7(4): e33394.

Anderson, K. E., J. A. Russell, **C. S. Moreau**, S. Kautz, K. Sullam, Y. Hu, U. Basinger, B. M. Mott, N. Buck, and D. E. Wheeler. (2012). Highly similar microbial communities are shared among related and trophically similar ant species. *Molecular Ecology* 21: 2282–2296.

### Alfred F. Newton

Cai, Chenyang, D. Huang, M. K. Thayer, and **A. F. Newton**. (2012). Glypholomatine rove beetles (Coleoptera, Staphylinidae): a southern hemisphere Recent group recorded from the Middle Jurassic of China. *Journal of the Kansas Entomological Society* 85 (3): 239–244.

Caron, E., C. S. Ribeiro-Costa, and **A. F. Newton**. (2012). Cladistic analysis and revision of *Piestus* Gravenhorst with remarks on related genera (Coleoptera: Staphylinidae: Piestinae). *Invertebrate Systematics* 25 (6): 490–585.

Fikáček, M., R. A. B. Leschen, **A. F. Newton**, and N. Gunter. (2012). *Horelophus walkeri* rediscovered: adult morphology and notes on biology (Coleoptera: Hydrophilidae). *Acta Entomologica Musei Nationalis Pragae* 52 (1): 129–146.

Thayer, M. K., **A. F. Newton**, and S. Chatzimanolis. (2012). *Prosolierius*, a new mid-Cretaceous genus of Solieriinae (Coleoptera: Staphylinidae) with three new species from Burmese amber. *Cretaceous Research* 34: 124–134.

**Newton, A. F.** (2012). *Phylogenie und Systematik*, pp. 1–4. In: Assing, V. and M. Schülke (eds.). Die Käfer Mitteleuropas. Band 4. Staphylinidae (exklusive Aleocharinae, Pselaphinae und Scydmaeninae). 2. Auflage. Spektrum Akademischer Verlag, Heidelberg. xii + 560 pp.

Grebennikov, V. V., and **A. F. Newton**. (2012). Detecting the basal dichotomies in the monophylum of carrion and rove beetles (Coleoptera: Silphidae and Staphylinidae) with emphasis on the Oxyteline group of subfamilies. *Arthropod Systematics & Phylogeny* 70 (3): 133–165.

### Bruce D. Patterson

Jiménez, F. A., and **B. D. Patterson**. (2012). A new species of *Pterygodermatites* (Nematoda: Rictulariidae) from the Incan shrew opossum, *Lestoros inca. Journal of Parasitology* 98: 604–607.

Morse, S. F., K. J. Olival, M. Kosoy, S. Billeter, **B. D. Patterson**, C. W. Dick, and K. Dittmar. (2012). Global distribution and genetic diversity of *Bartonella* in bat flies (Hippoboscoidea, Streblidae, Nycteribiidae). *Infection, Genetics and Evolution* 12: 1717–1723.

Morse, S. F., C. W. Dick, **B. D. Patterson**, and K. Dittmar. (2012). Some like it hot—Evolution and ecology of novel endosymbionts in bat flies of cave-roosting bats (Hippoboscoidea, Nycterophiliinae). *Applied and Environmental Microbiology* 78: 8639–8649.

**Patterson, B. D.** (2012). The man-eating lions of Tsavo and the science behind the killings. *Open Skies* Apr 2012: 84–93.

Patterson, B. D. (2012). Su-Lin, America's first panda. In the Field 83(1): 12.

**Patterson, B. D.** and L. P. Costa (eds.). (2012). *Bones, Clones, and Biomes: The history and geography of Recent Neotropical mammals.* 419 pp. Chicago: University of Chicago Press.

**Patterson, B. D.** and L. P. Costa. (2012). Introduction. Pp. 1–5 in *Bones, Clones, and Biomes: The history and geography of Recent Neotropical mammals* (B.D. Patterson & L.P. Costa, eds.). Chicago: University of Chicago Press.

**Patterson**, **B. D.**, and P. W. Webala. (2012). Keys to the bats (Mammalia: Chiroptera) of East Africa. *Fieldiana: Life and Earth Sciences* 6: 1–63.

**Patterson, B. D.**, S. Solari, and P. M. Velazco. (2012). The role of the Andes in the diversification and biogeography of Neotropical mammals. Pp. 351–378 in *Bones, Clones, and Biomes: The history and geography of Recent Neotropical mammals* (B.D. Patterson & L.P. Costa, eds.). Chicago: University of Chicago Press.

Pilosof, S., C. W. Dick, C. Korine, **B. D. Patterson**, and B. R. Krasnov. (2012). Effects of anthropogenic disturbance and climate on patterns of bat fly parasitism. *PLoS ONE* 7(7): e41487.

Presley, S. J., L. M.Cisneros, **B. D. Patterson**, and M. R. Willig. (2012). Vertebrate meta-community structure along an extensive elevational gradient in the tropics: a comparison of bats, rodents, and birds. *Global Ecology and Biogeography* 21: 968–976.

Solari, S., P. M. Velazco, and **B. D. Patterson**. (2012). Hierarchical organization of Neotropical mammal diversity and its historical basis. Pp. 145–156 in *Bones, Clones, and Biomes: The history and geography of Recent Neotropical mammals* (B.D. Patterson & L.P. Costa, eds.). Chicago: University of Chicago Press.

Upham, N. S. and **B. D. Patterson**. (2012). Diversification and biogeography of the Neotropical caviomorph lineage Octodontoidea (Rodentia: Hystricognathi). *Molecular Phylogenetics and Evolution* 63: 417–429.

### **Petra Sierwald**

Brewer M. S., **P. Sierwald**, and J. E. Bond. (2012). Millipede Taxonomy after 250 Years: Classification and Taxonomic Practices in a Mega-Diverse yet Understudied Arthropod Group. *PLoS ONE* 7(5): e37240. http://dx.doi.org/10.1371/journal.pone.0037240.

Wongthamwanich, N., S. Panha, **P. Sierwald**, T. Wesener and Thirakhupt, K. (2012). A new species of the giant pill-millipede genus *Sphaerobelum* Verhoff, 1924 from northern Thailand with an extensive description of molecular characters (Diplopoda: Sphaerotheriida: Zephroniidae). Zootaxa, 3220:29–43. Open access at: http://www.mapress.com/zootaxa/2012/f/zt03220p043.pdf.

Platnick, N. I., N. Abrahim, F. Álvarez-Padilla, D. Andriamalala, B. C. Baehr, L. Baert, A. B. Bonaldo, A. D. Brescovit, N. Chousou-Polydouri, N. Duprérrée, B. Eichenberger, W. Fannes, E. Gaublomme, R.G. Gillespie, C. J. Grismado, C. E. Griswold, M. S. Harvey, A. Henrard, G. Hormiga, M. A. Izquierdo, R. Jocqué, Y. Kranz-Baltensperger, C. Kropf, R. Ott, M. J. Ramírez, R. J. Raven, C. A. Rheims, G. S. Ruiz, A. J. Santos, A. Saucedo, P. Sierwald, T. Szüts, D. Ubick. and X.-P. Wang. (2012). Tarsal Organ Morphology and the Phylogeny of Goblin Spiders (Araneae, Oonopidae), With Notes on Basal Genera. American Museum Novitates, 3736: 53pp. Open access at: http://hdl.handle.net/2246/6160.

**Sierwald, P.** (2012). *Education LifeDesk Taxon Pages Instructor Manual*, at: http://www.edulifedesks.org/help/getting-started.

# W. Leo Smith

Miller, J., T. Dikow, D. Agosti, G. Sautter, T. Catapano, L. Peney, Z. Q. Zhang, D. Pentcheff, R. Pyle, S. D. Blum, C. Parr, C. Freeland, T. Garnett, L. S. Ford, B. Muller, **W. L. Smith**, G. Strader, T. Georgiev, and L. Bénichou. (2012). From taxonomic literature to cybertaxonomic content. *BMC Biology* 10: 87.

Wainwright, P. C., **W. L. Smith**, S. A. Price, K. L. Tang, J. S. Sparks, L. A. Ferry, K. L. Kuhn, R. I. Eytan, and T. J. Near. (2012). The evolution of pharyngognathy: A phylogenetic and functional appraisal of the pharyngeal jaw key innovation in labroid fishes and beyond. *Systematic Biology* 61: 1001–1027.

Near, T. J., R. I., Eytan, A. Dornburg, K. L. Kuhn, J. A. Moore, M. P. Davis, P. C. Wainwright, M. Friedman, and **W. L. Smith**. (2012). Resolution of ray-finned fish phylogeny and timing of diversification. *Proceedings of the National Academy of Sciences* 109: 13698–13703.

Near, T. J., M. Sandel, K. L. Kuhn, P. J. Unmack, P. C. Wainwright, and **W. L. Smith**. (2012). Nuclear gene-inferred phylogenies resolve the relationships of the enigmatic Pygmy Sunfishes, *Elassoma* (Teleostei: Percomorpha). *Molecular Phylogenetics and Evolution* 63: 388–395.

# William T. Stanley

Carleton, M. D. and **W. T. Stanley**. (2012). Species limits within the *Praomys delectorum* group (Rodentia: Muridae: Murinae) of East Africa: A morphometric reassessment and biogeographic implications. *Zoological Journal of the Linnean Society* 165: 420–469.

# Margaret K. Thayer

**Thayer, M. K.**, A. F. Newton, and S. Chatzimanolis. (2012). *Prosolierius*, a new mid-Cretaceous genus of Solieriinae (Coleoptera: Staphylinidae) with three new species from Burmese amber. *Cretaceous Research* 34: 124–134. http://dx.doi.org/10.1016/j.cretres.2011.10.010.

Cai, Chen-yang, Di-ying Huang, **M. K. Thayer**, and A. F. Newton. (2012). Glypholomatine rove beetles (Coleoptera, Staphylinidae): a Southern Hemisphere Recent group newly recorded from the Middle Jurassic of China. *Journal of the Kansas Entomological Society* 85(3): 239–244.

### Janet R. Voight

Voight, J. R., R. W. Lee, A. J. Reft, and A. E. Bates. (2012). Scientific gear as a vector for alien species in the deep sea. *Conservation Biology* 26: 938–942. http://dx.doi.org/10.1111/j.1523-1739.2012.01864.x.

**Voight**, **J. R.** and M. Segonzac. (2012). At the bottom of the deep blue sea: A new wood-boring bivalve (Mollusca: Pholadidae: *Xylophaga*) from the Cape Verde Abyssal Plain (Subtropical Atlantic). *Zoosystema* 34: 171–180.

**Voight, J. R**. (2012). Meristic variation in males of the hydrothermal vent octopus, *Muusoctopus hydrothermalis* (Cephalopoda: Octopodidae). *Journal of the Marine Biological Association of the United Kingdom* 92: 361–366.

### Harold K. Voris

**Voris, H. K**. and J. C. Murphy. (2012). Methods of sampling marine and estuarial reptiles, pp. 167–196. In: *Reptile Biodiversity, Standard Methods for Inventory and Monitoring,* eds. Foster, M., and R. W. McDiarmid. University of California Press, Berkeley and Los Angeles. Pp. 1–424. **Voris, H. K**., J. C. Murphy, D. R. Karns, E. Kremer, and K. O'Connell. (2012). Differences among populations of the Mekong Mud Snake (*Enhydrissubtaeniata*: Serpentes: Homalopsidae) in Indochina. *Tropical Natural History* 12(2): 175–188.

Murphy, J. C., **H. K. Voris**, B. H. C. K. Murthy, J. Traub, and C. Cumberbatch. (2012). The masked water snakes of the genus *Homalopsis* Kuhl& van Hasselt, 1822 (Squamata, Serpentes, Homalopsidae), with the description of a new species. *Zootaxa* 3208: 1–26.

Murphy, J. C., **H. K. Voris**, and D. R. Karns. (2012). The dog-faced water snakes, a revision of the genus *Cerberus* Cuvier, (Squamata, Serpentes, Homalopsidae) with the description of a new species. *Zootaxa* 3484: 1–34.

#### Jason D. Weckstein

Seeholzer, G. F., B. M. Winger, M. G. Harvey, D. Caceres A., and **J. D. Weckstein**. (2012). A new species of barbet (Capitoninae: *Capito*) from the Cerros del Sira, Ucayali, Peru. *Auk* 129:551–559.

Valim, M. P. and **J. D. Weckstein**. (2012). A new genus and species of Philopteridae (Phthiraptera, Ischnocera) from the trumpeters (Aves, Gruiformes, Psophiidae). *Journal of Parasitology* 98: 728–734.

Valim, M. P. and **J. D. Weckstein**. (2012). Two new species of the genus *Cotingacola* Carriker, 1956 (Phthiraptera, Ischnocera, Philopteridae) from Amazonian Brazil, with comments on host-specificity. *Systematic Parasitology* 81: 159–167.

#### Mark W. Westneat

Drew, J. A., C. L. Buxman, D. D. Holmes, J. L. Mandecki, A. J. Mungkaje, A. C. Richardson, and **M. W. Westneat**. (2012). Biodiversity and conservation of the marine fishes of Bootless Bay, Papua New Guinea. *BMC Ecology* 12 (15).

Daly, M., P. S. Herendeen, R. P. Guralnick, **M. W. Westneat**, and L. McDade. (2012). Systematics Agenda 2020: The Mission Evolves. *Systematic Biology* 61: 549–552.

### **BIODIVERSITY SYNTHESIS CENTER**

#### Audrey Aronowsky

**Aronowsky, A.**, B. Sanzenbacher, J. Thompson, K. Villanosa, and J. Drew. (2012). When simple is not best: issues that arose using WhyReef in the Conservation Connection digital learning program. In Martin, C., A. Ochsner, and K. Squire. (Eds.) *Proceedings of the Games, Learning, and Society Conference: Vol. 2.* Pittsburgh: ETC Press.

Angielczyk, K. D., **A. Aronowsky**, B. Sanzenbacher, J. Thompson, and K. Villanosa. (2012). Game of Bones: design decisions and early feedback from a prototype. In Martin, C., Ochsner, A., & Squire, K. (Eds.) *Proceedings of the Games, Learning, and Society Conference: Vol. 2.* Pittsburgh: ETC Press.

**Aronowsky, A.**, B. Sanzenbacher, J. Thompson, and K. Villanosa. (2012). Fusing virtual, digital, and real world experiences for science learning and empowerment. In Jerry, P., Masters, Y. and Tavares-Jones, N. (Eds.) *Utopia and a Garden Party: Experiential Learning in Virtual Worlds*. Interdisciplinary Press.

### Torsten Dikow

**Dikow, T.** (2012). Review of *Namibimydas* Hesse, 1972 and *Nothomydas* Hesse, 1969 with the description of new species. *African Invertebrates* 53(1): 79–111.

#### Joshua Drew

**Drew, J. A.**, C. L. Buxman, D. D. Holmes, J. L. Mandecki, A. J. Mungkaje, A. C. Richardson and M. W. Westneat. (2012). Biodiversity Inventories and Conservation of the Marine Fishes of Bootless Bay, Papua New Guinea. *BMC Ecology* 12: 15.

Aronowsky, A., B. Sanzenbacher, J. Thompson, K. Villanosa, and **J. Drew.** (2012). When simple is not best: issues that arose using WhyReef in the Conservation Connection digital learning program. In Martin, C., Ochsner, A., & Squire, K. (Eds.) *Proceedings of the Games, Learning, and Society Conference: Vol. 2.* Pittsburgh: ETC Press.

#### Beth Sanzenbacher

Aronowsky, A., **B. Sanzenbacher**, J. Thompson, K. Villanosa, and J. Drew. (2012). When simple is not best: issues that arose using WhyReef in the Conservation Connection digital learning program. In Martin, C., Ochsner, A., & Squire, K. (Eds.) *Proceedings of the Games, Learning, and Society Conference: Vol. 2.* Pittsburgh: ETC Press.

Angielczyk, K. D., A. Aronowsky, **B. Sanzenbacher**, J. Thompson, K. Villanosa, and J. Drew. (2012). Game of Bones: design decisions and early feedback from a prototype. In Martin, C., Ochsner, A., & Squire, K. (Eds.) *Proceedings of the Games, Learning, and Society Conference: Vol. 2.* Pittsburgh: ETC Press.

Aronowsky, A., **B. Sanzenbacher**, J. Thompson, and K. Villanosa. (2012). Fusing virtual, digital, and real world experiences for science learning and empowerment. In Jerry, P., Masters, Y. and Tavares-Jones, N. (Eds.) *Utopia and a Garden Party: Experiential Learning in Virtual Worlds.* Interdisciplinary Press.

### Mark W. Westneat

Daly, M., P. S. Herendeen, R. P. Guralnick, **M. W. Westneat**, and L. McDade. (2012). Systematics Agenda 2020: The Mission Evolves *Syst Biol* 61(4): 549–552.

### PRITZKER LABORATORY FOR MOLECULAR SYSTEMATICS AND EVOLUTION

### Kevin A. Feldheim

Ribeiro, Â. M., P. Lloyd, **K. A. Feldheim**, and R. C. K. Bowie. (2012). Microgeographic socio-genetic structure of an African cooperative breeding passerine revealed: integrating behavioural and genetic data. *Molecular Ecology* 21: 662–672. http://dx.doi.org/10.1111/j.1365-294X.2011.05236.x.

DiBattista, J. D., L. A. Rocha, M. T. Craig, **K. A. Feldheim**, and B.W. Bowen. (2012). Phylogeography of Two Closely Related Indo-Pacific Butterflyfishes Reveals Divergent Evolutionary Histories and Discordant Results from mtDNA and Microsatellites. *Journal of Heredity* http://dx.doi.org/ 10.1093/jhered/ess056.

Dunton, K. J., D. Chapman, A. Jordaan, **K. A. Feldheim**, S. J. O'Leary, K. A. McKnown, and M. G. Frisk. (2012). Genetic mixed-stock analysis of Atlantic sturgeon *Acipenser oxyrinchus oxyrinchus* in a heavily exploited marine habitat indicates the need for routine genetic monitoring. *Journal of Fish Biology* 80: 207–217. http://dx.doi.org/10.1111/j.1095-8649.2011.03151.x.

Hauber, M.E., B.M Strausberger, **K.A. Feldheim**, J. Lock, and P. Cassey. (2012). Indirect estimates of breeding and natal philopatry in an obligate avian brood parasite. *Journal of Ornithology* 153: 467–475. http://dx.doi.org/10.1007/s10336-011-0762-6.

**Feldheim, K. A**., J. M. da Silva, and K. A Tolley. (2012). Isolation of novel microsatellite loci in dwarf chameleons from KwaZulu-Natal province, South Africa and their cross-amplification in other *Bradypodion* species. *Conservation Genetics Resources* 4: 205–211. http://dx.doi.org/10.1007/s12686-011-9472-x.

Theissinger, K., M. Bálint, **K. A. Feldheim**, P. Haase, J. Johannesen, I. Laube, S. U. Pauls. (2012). Glacial survival and post-glacial recolonization of an arctic–alpine freshwater insect (*Arcynopteryx dichroa*, Plecoptera, Perlodidae) in Europe. *Journal of Biogeography* http://dx.doi.org/10.1111/j.1365-2699.2012.02793.x.

Bowie, R. C. K., **K. A. Feldheim**, L. M. Caro, and C.D. Cadena. (2012). Novel tetranucleotide microsatellite DNA markers for members of the *Henicorhina* Wood-wren species complex (Aves, Troglodytidae). *Conservation Genetics Resources* 2: 419–421. http://dx.doi.org/10.1007/s12686-011-9564-7.

Bernard, A. M., **K. A. Feldheim**, M. S. Shivji. (2012). Development and characterization of 11 novel microsatellite loci for the roundscale spearfish *Tetrapturus georgii* and their cross-species amplification among other istiophorid species. *Journal of Fish Biology* 8: 1781–1786. http://dx.doi.org/10.1111/j.1095-8649.2012.03442.x.

Harrison, H. B., D. H. Williamson, R. D. Evans, G. R. Almany, S. R. Thorrold, G. R. Russ, **K. A. Feldheim**, L. van Herwerden, S. Planes, M. Srinivasan, M. L. Berumen, and G. P. Jones. (2012). Larval export from marine reserves and the recruitment benefit for fish and fisheries. *Current Biology* 22: 1023–1028. http://dx.doi.org/10.1016/j.cub.2012.04.008.

Murdoch, K. C., J. D. Keyyu, E. D. Karimuribo, **K. A Feldheim**, and N. J. Cordeiro. (2012). Isolation and development of 15 new, polymorphic loci for an unusual, endemic African earwig (*Hemimerus vosseleri*). *Conservation Genetics Resources* 4: 677–679. http://dx.doi.org/10.1007/s12686-012-9621-x.

Bernard, A. M., **K. A. Feldheim**, V. P. Richards, R. S. Nemeth, and M. S. Shijvi. (2012). Development ad characterization of fifteen novel microsatellite loci for the Nassau grouper (*Epinephelus striatus*) and their utility for cross-amplification on a suite of closely related species. *Conservation Genetics Resources* 4: 983–986. http://dx.doi.org/10.1007/s12686-012-9688-4.

Murdoch, K. C., H. J. Ndangalasi, M. K. LeCaptain, W. L. Clement, **K. A. Feldheim**, and N. J. Cordeiro. (2012). Isolation and development of 13 new, polymorphic microsatellite loci for a threatened, understory tree, *Mesogyne insignis*, (Moraceae) from the Eastern Arc Mountains. *Conservation Genetics Resources* http://dx.doi.org/10.1007/s12686-012-9786-3.

# ACTIVE GRANTS \$17,744,164

# DEPARTMENT OF ANTHROPOLOGY

#### **Douglas Bolender**

Co-PI: none Agency: National Science Foundation Project: RAPID: Testing Geophysical Prospection and Mapping Methods for Early Christian Cemeteries in Iceland Period: Aug 12–Jul 13 Amount: \$28,680

# L. Antonio Curet

Co-PI: none Agency: National Science Foundation Project: Household and Social Change in Ancient Puerto Rico Period: Jun 09–May 13 Amount: \$158,898

## Laure Dubussieux

Co-PI: Ryan Williams Agency: National Science Foundation Project: Development of adaptable cell LA-ICP-MS and support for external collaborations in the elemental analysis facility at The Field Museum Period: Sep 08–Aug 13 Amount: \$177,268

Co-PI: Ryan Williams Agency: National Science Foundation Project: Basalt sourcing in the Andean Altiplano: An REU supplement to BCS-0818401 Period: Jul 09–Aug 13 Amount: \$4,000

Co-PI: Ryan Williams Agency: National Science Foundation Project: Supplement to: Development of adaptable cell LA-ICP-MS and support for external collaborations in the elemental analysis facility at The Field Museum Period: Jun 10–Aug 13 Amount: \$4,000

Co-PI: Ryan Williams Agency: National Science Foundation Project: REU supplement to: Development of adaptable cell LA-ICP-MS and support for external collaborations in the elemental analysis facility at The Field Museum Period: Sep 12–Aug 13 Amount: \$4,688

#### Mark Golitko

Co-PI: John Edward Terrell Agency: National Science Foundation Project: Archaeological and Environmental Investigations along the mid-Holocene shoreline near Aitape, northern Papua New Guinea Period: May 12–Apr 13 Amount: \$102,330

### Chapurukha M. Kusimba

Co-PIs: Janet Monge, Ryan Raum, Sloan Williams Agency: National Science Foundation Project: Collaborative Research: Decoding the Swahili: An archaeological and genetic study of the Swahili of East Africa Period: Sep 10–Aug 13 Amount: \$124,128

# **Ruth Norton**

Co-PI: none Agency: Institute of Museum and Library Services Project: Southern Andean archaeological ceramics desalination project Period: Jun 12–May 14 Amount: \$150,000

# William A. Parkinson

Co-PI: none Agency: America for Bulgaria Foundation Project: Advancing archaeological and anthropological research in southeastern Europe Period: May 09–May 12 Amount: \$159,500

Co-PI: none Agency: National Science Foundation Project: Early Village Social Dynamics: Prehistoric Settlement Nucleation on the Great Hungarian Plain Period: Sep 09–Aug 13 Amount: \$231,312

Co-PI: none Agency: National Science Foundation Project: Supplement to: Early Village Social Dynamics: Prehistoric Settlement Nucleation on the Great Hungarian Plain Period: Sep 09–Aug 13 Amount: \$7,666

Co-PI: none Agency: National Science Foundation Project: REU supplement to: Early Village Social Dynamics: Prehistoric Settlement Nucleation on the Great Hungarian Plain Period: Jan 10–Aug 13 Amount: \$6,516

Co-PI: none Agency: National Science Foundation Project: IRES: Collaboration and mentorship between US, Hungarian, and Greek researchers in the origins and development of prehistoric European villages Period: Oct 10–Sep 13 Amount: \$149,991 Co-PI: none Agency: America for Bulgaria Foundation Project: Advancing archaeological and anthropological research in southeastern Europe through awarding postdoctoral fellowships with The Field Museum Period: Jun 11–Dec 12 Amount: \$106,540

Co-PI: Apostolos Sarris Agency: Wenner Gren Foundation Project: Early Village Social Dynamics: Prehistoric Settlement Nucleation on the Great Hungarian Plain Period: Jun 11–May 13 Amount: \$34,215

Co-PI: none Agency: Institute for Aegean Prehistory Project: The Diros project 2012 Period: Jun 12–May 13 Amount: \$18,000

Co-PI: Paul Duffy Agency: National Science Foundation Project: Heterogeneity and Complexity in Bronze Age Europe: divergence of social trajectories on the Great Hungarian Plain Period: Sep 12–Aug 14 Amount: \$91,614

# **Helen Robbins**

Co-PI: none Agency: National Park Service; NAGPRA Project: Consultation with the central council of Tlingit and Haida indian tribes of Alaska Period: Jun 10–Jun 12 Amount: \$23,081

Co-PI: none Agency: National Park Service; NAGPRA Project: Consultation with the Hopi tribe Period: Jun 10–Jun 12 Amount: \$80,545

### Nicola Sharratt

Co-PI: Ryan Williams Agency: The Curtiss T. Brennan & Mary G. Brennan Foundation Project: Living through collapse: Household archaeology of the breakdown of the Tiwanaku Period: Jun 12–May 13 Amount: \$4,920

### John Edward Terrell

Co-PI: Mark Golitko Agency: National Science Foundation Project: Archaeological and Environmental Investigations along the mid-Holocene shoreline near Aitape, northern Papua New Guinea Period: May 12–Apr 13 Amount: \$102,330

# Alaka Wali

Co-PI: none Agency: National Science Foundation Project: CNH: Collaborative Research: Coupled natural human systems in the Chicago wilderness: Evaluating the biodiversity and social outcomes of different models of restoration planning Period: Sep 09–Aug 13 Amount: \$495,399

### Patrick Ryan Williams

Co-PI: Laure Dubussieux Agency: National Science Foundation Project: Development of adaptable cell LA-ICP-MS and support for external collaborations in the elemental analysis facility at The Field Museum Period: Sep 08–Aug 13 Amount: \$177,268

Co-PI: Laure Dubussieux Agency: National Science Foundation Project: Basalt sourcing in the Andean Altiplano: An REU supplement to BCS-0818401 Period: Jul 09–Aug 13 Amount: \$4,000

Co-PI: Sofia Chacaltana Agency: National Science Foundation Project: DDIG: Mechanics of Empire and Integration—the role of small-scale Inca installations in the Colesuyo region Period: Feb 10–Jan 12 Amount: \$19,990

Co-PI: Laure Dubussieux Agency: National Science Foundation Project: Supplement to: Development of adaptable cell LA-ICP-MS and support for external collaborations in the elemental analysis facility at The Field Museum Period: Jun 10–Aug 13 Amount: \$4,000

Co-PI: Nicola Sharratt Agency: Brennan Foundation Project: Living through collapse: Household archaeology of the breakdown of the Tiwanaku Period: Jun 12–May 13 Amount: \$4,920

Co-PI: Laure Dubussieux Agency: National Science Foundation Project: REU supplement to: Development of adaptable cell LA-ICP-MS and support for external collaborations in the elemental analysis facility at The Field Museum Period: Sep 12–Aug 13 Amount: \$4,688

Co-PI: none Agency: Negaunee Foundation Project: Support for an FMNH/UIC Teaching Fellow Period: Jan 13–Dec 13 Amount: \$30,000

# **DEPARTMENT OF BOTANY**

John J. Engel

Co-PI: Matt von Konrat Agency: National Science Foundation Project: Collaborative research on the Marchantiophyta, Anthocerophyta and Bryophyta of the cape horn archipelago: Floristics and implications for conservation Period: May 10–Apr 14 Amount: \$196,676

Co-PI: Matt von Konrat Agency: National Science Foundation Project: The complete conversion and digitization of the Field Museum's Bryophyte collection: Working towards a networking hub of bryophyte specimen and taxonomic data Period: Apr 11–Mar 14 Amount: \$349,886

### **Robert Lücking**

Co-PI: none Agency: National Science Foundation Project: NEOTROPICAL EPIPHYTIC MICROLICHENS—An innovative inventory of a highly diverse yet little known group of symbiotic organisms Period: Oct 07–Aug 12 Amount: \$448,873

Co-PI: Thorsten Lumbsch Agency: National Science Foundation Project: ATM - Assembling a taxonomic monograph: The lichen family Graphidaceae Period: Aug 10–Jul 13 Amount: \$466,110

Co-PI: Matt von Konrat Agency: National Science Foundation Project: Digitization TCN Collaborative Research: North American Lichens and Bryophytes: Sensitive Indicators of Environmental Quality and Change Period: Jul 11–Jun 15 Amount: \$143,252

### H. Thorsten Lumbsch

Co-PI: Theodore Esslinger Agency: National Science Foundation Project: Hidden diversity in parmelioid lichens (Ascomycota, Lecanorales) Period: Mar 10–Feb 13 Amount: \$280,880

Co-PI: Robert Lücking Agency: National Science Foundation Project: ATM - Assembling a taxonomic monograph: The lichen family Graphidaceae Period: Aug 10–Jul 13 Amount: \$466,110 Co-PI: Christine Niezgoda, Matt von Konrat Agency: Andrew W. Mellon Foundation Project: Latin American Plants Period: Jun 10–Dec 13 Amount: \$136,000

Co-PI: none Agency: Negaunee Foundation Project: Next-generation DNA sequencing of lichens Period: Jan 13–Dec 13 Amount: \$18,000

### **Christine Niezgoda**

Co-PI: Thorsten Lumbsch, Matt von Konrat Agency: Andrew W. Mellon Foundation Project: Latin American Plants Period: Jun 10–Dec 13 Amount: \$136,000

#### **Richard H. Ree**

Co-PI: Patrick Kuss Agency: National Science Foundation Project: Phylogeny, biogeography, and diversification in Pedicularis (Orobanchaceae) Period: Apr 11–Mar 14 Amount: \$399,424

Co-PI: none Agency: National Science Foundation Project: Collaborative Research: Automated and community-driven synthesis of the tree of life Period: Apr 11–Mar 14 Amount: \$399,424

Co-PI: none Agency: Negaunee Foundation Project: Chicago Plant Symposium Period: Jan 13–Dec 13 Amount: \$6,000

### Matt von Konrat

Co-PIs: John Engel Agency: National Science Foundation Project: Collaborative research on the Marchantiophyta, Anthocerophyta and Bryophyta of the cape horn archipelago: Floristics and implications for conservation Period: May 10–Apr 14 Amount: \$196,676

Co-PI: Thorsten Lumbsch, Matt von Konrat Agency: Andrew W. Mellon Foundation Project: Latin American Plants Period: Jun 10–Dec 13 Amount: \$136,000

Co-PI: John Engel

Agency: National Science Foundation Project: The complete conversion and digitization of the Field Museum's Bryophyte collection: Working towards a networking hub of bryophyte specimen and taxonomic data Period: Apr 11–Mar 14 Amount: \$349,886

Co-PI: Robert Lücking Agency: National Science Foundation Project: Digitization TCN Collaborative Research: North American Lichens and Bryophytes: Sensitive Indicators of Environmental Quality and Change Period: Jul 11–Jun 15 Amount: \$143,252

Co-PI: none Agency: Negaunee Foundation Project: Field trip to Polynesia Period: Jan 12–Dec 12 Amount: \$25,000

Co-PI: Matt Greif Agency: National Science Foundation Project: ARTS: Collaborative Research: A model systematic treatment of a hyper-diverse lineage descended from early land plants (Frullania, Frullaniaceae, Marchantiophyta) Period: Apr 12–Mar 15 Amount: \$310,309

### DEPARTMENT OF GEOLOGY

### Kenneth D. Angielczyk

Co-PI: none Agency: National Science Foundation Project: Natural History Collections: Equipment for The Field Museum's Fossil Mammal Collection Range for the Accommodation of Nonmammalian Synapsids and the Turnbull Collection Period: Jun 12–May 15 Amount: \$499,998

PI: Petra Sierwald Agency: National Science Foundation Project: REU Site: Access to Global Biodiversity Studies for Undergraduates Period: Jun 09–May 12 Amount: \$286,234

#### lan Glasspool

Co-PI: none Agency: Negaunee Foundation Project: Acquisition of Pennsylvanian Age Peats Collection Period: Jan 13–Dec 13 Amount: \$20,000

### Lance Grande

Co-PI: none Agency: Negaunee Foundation Project: Evolution of Sturgeons Period: Jan 13–Dec 13 Amount: \$54,000

#### Philipp R. Heck

Co-PI: none Agency: Tawani Foundation Project: 2012 Tawani International Antarctic Expedition Period: Jul 12–Jun 13 Amount: \$250,000

Co-PI: none Agency: NASA Project: The origin of meteoritic nanodiamonds, interstellar residence times and isotopic anomalies of presolar grains and subgrains. Period: Mar 11–Mar 14 Amount: \$176,000

Co-PI: James Holstein Agency: Negaunee Foundation Project: Data migration for meteorite and physical geology collections Period: Jan 12–Dec 12 Amount: \$26,160

#### **James Holstein**

Co-PI: Philipp Heck Agency: Negaunee Foundation Project: Data migration for meteorite and physical geology collections Period: Jan 12–Dec 12 Amount: \$26,160

#### Scott Lidgard

Co-PI: none Agency: Negaunee Foundation Project: *E pluribus unum*: How biology understands colonies, individuals & the structure of life Period: Jan 12–Dec 12 Amount: \$25,000

Co-PI: Melanie Hopkins Agency: National Science Foundation Project: Collaborative Workshop: An Internet Resource for Integrating Plate Tectonic and Paleogeographic Mapping with On-line Earth Science Databases Period: Jul 11–Jun 13 Amount: \$20,047

Co-PI: Beckett Sterner Agency: National Science Foundation Project: STS Postdoctoral Fellowship: The impact of mathematics on inferring classifications and phylogenies Period: Aug 12–Jul 14 Amount: \$120,000

Co-PI: Lynn K. Nyhart

Agency: Chemical Heritage Foundation Project: Cain Conference Fellowship—*E pluribus unum*: Bringing biological parts and wholes into historical and philosophical perspective Period: Jan 12–Dec 12 Amount: \$35,000

#### Peter J. Makovicky

Co-PI: Nathan D. Smith Agency: National Science Foundation Project: Collaborative research: New research on the Mesozoic vertebrate faunas of the Beardmore Glacier region, Antarctica Period: Sep 09–Aug 13 Amount: \$212,791

Co-PI: Petra Sierwald Agency: National Science Foundation Project: REU Site: Networked access to systematic resources for undergraduates in Chicagoland Period: Jun 09–May 12 Amount: \$258,464

Co-PI: Nathan D. Smith Agency: National Science Foundation Project: Collaborative Research: ARTS–Revisionary systematics of fossil and living Caribbean faviid and mussid reef corals (Cnidaria, Anthozoa, Scleractinia) Period: Jul 12–Jun 14 Amount: \$110,781

Co-PI: none Agency: Negaunee Foundation Project: CT scanning of dinosaur fossils Period: Jan 12–Dec 12 Amount: \$7,165

Co-PI: Nathan D. Smith Agency: National Science Foundation Project: Collaborative research: Continued Research on the Jurassic Vertebrate Fauna from the Beardmore Glacier Region of Antarctica Period: Jan 12–Dec 14 Amount: \$302,964

### **Paul Mayer**

Co-PI: Peter Sheehan (MPM), Patricia Coorough-Burke (MPM) Agency: Institute of Museum and Library Services Project: The Silurian Faunas of the Upper Midwest Database Project Period: Oct 12–Sep 15 Amount: \$146,382

### **Olivier Rieppel**

Co-PI: Thorsten Scheyer Agency: Swiss National Science Foundation Project: Phylogenetic relationships of placodont reptiles (Diapsida, Sauropterygia) as evidenced by 3D imaging, bone histology, and developmental data Period: Jan 10–Dec 13 Amount: SFr. 230,000

Co-Pls: J. Jiang, R. Motani, A. Tintori Agency: Chinese National Science Foundation Project: Radiation bio-event sequence of marine reptile faunas and global migratory-evolutionary pattern within the course from early recovery to radiated reconstruction of Early-Middle Triassic ecosystem after the end-Permian Mass Extinction Period: Jan 10–Dec 13 Amount: ¥1,400,000

Co-PIs: Jörg Fröbisch, Nadia Fröbisch, Martin Sander, Lars Schmitz Agency: National Geographic Society Project: The enigmatic *Omphalosaurus* and the diversification of marine reptiles Period: Jan 11–Dec 12 Amount: \$17,000

Co-PI: none Agency: Negaunee Foundation Project: Research on Hennig and Haeckel book Period: Jan 12–Dec 12 Amount: \$7,165

#### Nathan D. Smith

Co-PI: Peter J. Makovicky Agency: National Science Foundation Project: Collaborative Research: Continued research on the Jurassic vertebrate fauna from the Beardmore Glacier region of Antarctica Period: Jul 12–Jun 14 Amount: \$302,964

Co-PI: Peter J. Makovicky Agency: National Science Foundation Project: Collaborative Research: ARTS–Revisionary systematics of fossil and living Caribbean faviid and mussid reef corals (Cnidaria, Anthozoa, Scleractinia) Period: Jul 12–Jun 14 Amount: \$110,781

PI: Peter J. Makovicky Agency: National Science Foundation Project: Collaborative Research: New research on the Mesozoic vertebrate faunas of the Beardmore Glacier region, Antarctica Period: Sep 09–Aug 13 Amount: \$212,791

#### **Beckett Sterner**

Co-PI: Scott Lidgard Agency: National Science Foundation Project: STS Postdoctoral Fellowship: The impact of mathematics on inferring classifications and phylogenies Period: Aug 12–Jul 14 Amount: \$120,000

### DEPARTMENT OF ZOOLOGY

#### John M. Bates

Co-PI: Julian Kerbis Agency: John D. and Catherine T. MacArthur Foundation Project: Climate change in the Albertine Rift: Effects on genetic diversity of hosts and their diseasecarrying parasites Period: Jan 10–Dec 13 Amount: \$350,000

Co-PI: Jason Weckstein Agency: National Science Foundation Project: Collaborative Research: Southern Amazonian birds and their symbionts: Biodiversity and endemicity of parasites from the most diverse avifauna on Earth Period: Aug 11–Jul 14 Amount: \$537,000

Co-PI: none Agency: Negaunee Foundation Project: Genetics and biodiversity of Albertine Rift birds Period: Jan 12–Dec 12 Amount: \$44,000

Co-PI: none Agency: National Science Foundation Project: Dimensions US-BIOTA-Sao Paulo: Assembly and evolution of the Amazonian biota and its environment: an integrated approach Period: Sep 12–Aug 17 Amount: \$235,176

Co-PIs: Jake Esselstyn, Julian Kerbis, Bill Stanley Agency: National Science Foundation Project: Resolving issues of species, phylogeny, and radiation in a diverse group of Old World tropical mammals Period: Feb 12–Jan 15 Amount: \$500,006

Co-PI: none Agency: Negaunee Foundation Project: 2013 American Ornithologists' Union meeting Period: Jan 13–Dec 13 Amount: \$30,000

# **Rüdiger Bieler**

Co-PI: none Agency: National Science Foundation Project: Collaborative Research: AToL: Phylogeny on the half-shell—Assembling the Bivalve Tree of Life Period: Jan 08–Aug 13 Amount: \$1,345,017

Co-PI: none Agency: National Science Foundation Project: Collaborative Research: REVSYS: Worm snails revised (Mollusca: Gastropoda) Period: Mar 09–Feb 13 Amount: \$250,000

Co-PI: Paula Mikkelsen Agency: National Science Foundation Project: Collaborative Research: Bivalves in time and space: Testing the accuracy of methods to reconstruct ancestral morphology, dates, geography, and diversification patterns Period: Aug 09–Jul 13 Amount: \$332,425

Co-PI: Margaret Thayer Agency: National Science Foundation Project: Infrastructure improvements to support invertebrate research at The Field Museum Period: Aug 10–Jul 13 Amount: \$2,787,782

Co-PI: Andre Sartori Agency: EOL Fellows Program Project: Marine bivalves (Veneridae, Cardiidae, and Pholadomyoida) Period: Feb 11–Jan 12 Amount: \$20,000

Co-PI: none Agency: Negaunee Foundation Project: Field vehicle for Florida Keys station Period: Jan 12–Dec 12 Amount: \$28,350

#### Jake Esselstyn

Co-PIs: John Bates, Julian Kerbis, Bill Stanley Agency: National Science Foundation Project: Resolving issues of species, phylogeny, and radiation in a diverse group of Old World tropical mammals Period: Feb 12–Jan 15 Amount: \$500,006

# Steven M. Goodman

Co-PI: none Agency: The John D. and Catherine T. MacArthur Foundation Project: Climate Change on Madagascar Period: Nov 09–Oct 12 Amount: \$400,000

# Shannon J. Hackett

Co-PI: Elizabeth Babcock Agency: National Institutes of Health (Univ. of Chicago) Project: Subaward: Center for transcriptional network dynamics and evolution Period: Sep 08–Aug 12 Amount: \$202,747 Co-PI: none Agency: The Davee Foundation Project: Emerging Pathogens Period: Jan 09–Dec 13 Amount: \$950,000

Co-PI: none Agency: Dr. Ralph and Marian Falk Medical Research Trust Project: Emerging Pathogens Period: Jan 09–Dec 14 Amount: \$950,000

# Larry R. Heaney

Co-PI: William Stanley Agency: Center for Disease Control Project: Wildlife sampling to inform modeling studies in the Greater Congo Basin Period: Oct 11–Sep 12 Amount: \$158,000

Co-PI: none Agency: Negaunee Foundation Project: Mammals of Luzon Book Period: Jan 13–Dec 13 Amount: \$55,000

# Corrie S. Moreau

Co-PI: none Agency: National Science Foundation Project: Collaborative Research: Inferring bacterial roles in the evolution of trophic level across the ants Period: Mar 11–Feb 14 Amount: \$299,770

Co-PI: none Agency: Negaunee Foundation Project: Ant symbiosis in Costa Rica Period: Jan 12–Dec 12 Amount: \$29,000

Co-PI: none Agency: Negaunee Foundation Project: Databasing the FMNH Ant Collection Period: Jan 13–Dec 13 Amount: \$50,000

# **Bruce D. Patterson**

Co-PI: Nate Upham Agency: National Science Foundation Project: DISSERTATION RESEARCH Fossils and phylogeny: investigating the timing of diversification in a diverse lineage of Neotropical rodents (Caviomorpha: Octodontoidea) Period: Jul 11–Jun 13 Amount: \$15,000

# Andre F. Sartori

Co-PI: Rüdiger Bieler Agency: EOL Fellows Program Project: Marine bivalves (Veneridae, Cardiidae, and Pholadomyoida) Period: Feb 11–Jan 12 Amount: \$20,000

### **Petra Sierwald**

Co-PI: Jason Bond Agency: National Science Foundation Project: The Diplopoda: Systematics research, training and tools Period: Jan 06–Dec 12 Amount: \$748,955

Co-PI: Peter Makovicky Agency: National Science Foundation Project: REU Site: Networked Access to Systematic Resources for Undergraduates in Chicagoland Period: Jun 09–May 12 Amount: \$258,464

Co-PI: Peter Makovicky Agency: National Science Foundation Project: Supplement to: REU Site: Networked Access to Systematic Resources for Undergraduates in Chicagoland Period: Jan 10–May 12 Amount: \$1,000

Co-PI: Margaret Thayer Agency: Negaunee Foundation Project: Imaging small insects and invertebrates Period: Jan 12–Dec 12 Amount: \$9,899

Co-PI: Ken Angielczyk Agency: National Science Foundation Project: REU Site: Access to Global Biodiversity Studies for Undergraduates Period: Jun 09–May 12 Amount: \$286,234

### W. Leo Smith

Co-PI: none Agency: National Science Foundation Project: Collaborative Research: Assembling the Euteleost Tree of Life—Addressing the Major Unresolved Problem in Vertebrate Phylogeny Period: Oct 07–Sep 13 Amount: \$261,598

Co-PI: none Agency: National Science Foundation Project: Collaborative Research: Evolution of exceptional diversity in spiny-rayed fishes Period: Mar 11–Feb 13 Amount: \$288,056

Co-PI: none Agency: Negaunee Foundation Project: 3-D imaging of Abyssal fishes Period: Jan 12–Dec 12 Amount: \$32,000

# William T. Stanley

Co-PI: Larry Heaney Agency: Center for Disease Control Project: Wildlife sampling to inform modeling studies in the Greater Congo Basin Period: Oct 11–Sep 13 Amount: \$158,000

Co-PIs: John Bates, Jake Esselstyn, Julian Kerbis Agency: National Science Foundation Project: Resolving issues of species, phylogeny, and radiation in a diverse group of Old World tropical mammals Period: Feb 12–Jan 15 Amount: \$500,006

# **Margaret Thayer**

Co-PI: Rüdiger Bieler Agency: National Science Foundation Project: Infrastructure improvements to support invertebrate research at The Field Museum Period: Aug 10–Jul 13 Amount: \$2,787,782

Co-PI: Petra Sierwald Agency: Negaunee Foundation Project: Imaging small insects and invertebrates Period: Jan 12–Dec 12 Amount: \$9,899

# Jason D. Weckstein

Co-PI: John Bates Agency: National Science Foundation Project: Collaborative Research: Southern Amazonian birds and their symbionts: Biodiversity and endemicity of parasites from the most diverse avifauna on Earth Period: Aug 11–Jul 14 Amount: \$537,000

### Mark W. Westneat

Co-PI: none Agency: National Science Foundation Project: Phylogenetic relationships and the evolution of skull mechanisms in perciform coral reef fishes Period: Mar 09–Feb 13 Amount: \$400,000

# **BIODIVERSITY SYNTHESIS CENTER**

# **Torsten Dikow**

Co-PI: none Agency: National Science Foundation Project: REVSYS: Phylogeny, revisionary taxonomy & the fossil record of asiloid flies (Diptera: Apioceridae, Asilidae, Mydidae) Period: Aug 09–Jul 13 Amount: \$382,628 Mark W. Westneat Co-PI: none Agency: National Science Foundation Project: Supplement to: Phylogenetic relationships and the evolution of skull mechanisms in perciform coral reef fishes Period: Mar 09–Feb 13 Amount: \$11,950

Co-PI: none Agency: National Science Foundation Project: Collaborative Research: CSBR: Natural History Collections: Georeferencing U.S. Fish Collections: a community-based model for georeferencing natural history collections Period: Aug 12–Jul 15 Amount: \$137,069

#### LIBRARY

#### **Christine Giannoni**

Co-PI: none Agency: Negaunee Foundation Project: Library photo archives: Scanning archival negatives Period: Jan 12–Dec 12 Amount: \$13,100

Co-PI: none Agency: Negaunee Foundation Project: Library photo archives: Preserving Deterioriating Negatives Period: Jan 13–Dec 13 Amount: \$36,000

# OFFICE OF COLLECTIONS AND RESEARCH

#### Lance Grande

Co-PI: none Agency: Negaunee Foundation Project: Continued support for *expeditions@fieldmuseum.org* Period: Jan 12–Dec 12 Amount: \$50,000

Co-PI: none Agency: Negaunee Foundation Project: *Field Revealed* video series Period: Jan 12–Dec 12 Amount: \$70,000

Co-PI: none Agency: Negaunee Foundation Project: Enhancement and upgrades to Collections and Research web content Period: Jan 12–Dec 12 Amount: \$25,083 Co-PI: none Agency: Negaunee Foundation Project: Continued support for *expeditions@fieldmuseum.org* Period: Jan 13–Dec 13 Amount: \$51,000

# PRITZKER LABORATORY FOR MOLECULAR SYSTEMATICS AND EVOLUTION

Kevin A. Feldheim Co-PI: none Agency: Negaunee Foundation Project: Support for DNA-based research projects Period: Jan 13–Dec 13 Amount: \$50,000

# CONFERENCES, SYMPOSIA, WORKSHOPS AND INVITED LECTURES, 2012

# DEPARTMENT OF ANTHROPOLOGY

#### **Douglas Bolender**

Presenter, Annual Meeting of the Theoretical Archaeology Group, Buffalo, NY; Presenter, 77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN.

#### J.P. Brown

Presenter, Emergency Response Workshop, Chicago Cultural Center, Chicago, IL; Presenter, State Microscopical Society of Illinois Annual Meeting, Chicago, IL.

#### Laure Dussubieux

Rencontres de l'AFAV, France; Invited Lecturer, Ecole Française d'Extrême-Orient, Paris, France.

#### **Gary Feinman**

77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN; 113<sup>th</sup> Annual Meeting of the Archaeological Institute of America, Philadelphia, PA; "The Principles of Complexity: Life, Scale, and Civilization," Santa Fe Institute, Santa Fe, NM; Invited Lecturer, Archaeology Department, Shandong University, Jinan, China.

#### Mark Golitko

40<sup>th</sup> Annual Midwest Conference on Andean and Amazonian Archaeology and Ethnohistory, Chicago, IL; NEOMAP Conference "Inland Seas in Global Perspective," Leiden, the Netherlands; 77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN; Eastern Analytical Symposium and Exposition, Somerset, NJ; Annual Meeting of the American Anthropological Association, San Francisco, CA; Invited Lecturer, Ripon College, Ripon, WI.

### **Jonathan Haas**

77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN; Invited Lecturer, Museum Anthropology, University of Illinois at Urbana-Champaign, Urbana, IL.

### Dilyana Ivanova

Presenter, 9<sup>th</sup> Joint North American and Bulgarian Conference, Eugene, OR; Invited Lecturer, American Research Center, Sofia, Bulgaria.

#### Jamie Kelly

Presenter, Midwest Archaeological Conference, Michigan State University, East Lansing, MI.

#### Chapurukha M. Kusimba

Keynote Speaker, Ancient Chinese Trade Ceramics, Guanzhou, China; Institut National de Recherches Archéologiques Préventives, Paris, France; Presenter, Southern Illinois University, Carbondale, IL; Presenter, Sun Yat-Sen University, Guangzhou, China; Lecturer, Departments of Religion and Africana Studies, University of Tennessee, Knoxville, TN; Lecturer, Archaeological Institute of America – Knoxville Chapter, Knoxville, TN; Lecturer, Department of Humanities and Social Sciences, Pwani University College, Kilifi, Kenya; Lecturer, Departments of Anthropology and Classical Archaeology, Brown University, Providence, RI.

### Andrew Leith

3<sup>rd</sup> International Mountmakers' Forum, Chicago, IL.

# Gloria Levitt

Invited Speaker, Sociology and Anthropology Club, North Central College, Naperville, IL.

# Robert D. Martin

Guest Lecturer, University of Chicago, Chicago, IL; Area Undergraduate Research Symposium, Chicago, IL; Presenter, President's Leadership Council and Field Associates, University Club, Chicago, IL; Invited Lecturer, University Club, Chicago, IL; Keynote Speaker, Leakey Foundation Symposium, California Academy of Sciences, San Francisco, CA; Invited Lecturer, Earth Science Club of Northern Illinois, Glen Ellyn, IL; Invited Speaker, Midwest Primate Interest Group Annual Conference, Northern Illinois University, DeKalb, IL.

# **Shannon Martino**

American Schools of Oriental Research Annual Meeting, Chicago, IL.

# Linda Nicholas

77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN; Invited Lecturer, Archaeology Department, Shandong University, Jinan, China.

### Lisa Niziolek

Presenter, 77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN; Presenter, Social Network Analysis Seminar Series, The Field Museum, Chicago, IL; Presenter, Annual Meeting of the European Association of Southeast Asian Archaeologists, Dublin, Ireland.

# **Ruth Norton**

Presenter, 3<sup>rd</sup> International Mountmakers' Forum, Chicago, IL; Presenter, Vivekananda Memorial Program for Museum Excellence, Art Institute of Chicago and Government of India Ministry of Culture, Chicago, IL.

### William A. Parkinson

Presenter, 77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN; Presenter, Chronologies, Lithics, and Metals: Late Neolithic and Copper Age in the Eastern Part of the Carpathian Basin and in the Balkans (workshop), Eötvös Loránd Scientific University, Budapest, Hungary; Presenter, 113<sup>th</sup> Annual Meetings of the Archaeological Institute of America, Philadelphia, PA; Presenter, Early Farmers: The View from Archaeology and Science, Cardiff, Wales, United Kingdom; Presenter, Theory and Method in the Prehistoric Archaeology of Central Europe, Mikulov, Czech Republic.

# James L. Phillips

Presenter, UISPP Meeting on the Upper Paleolithic in the Mediterranean, Liege, Belgium; Invited Lecturer, Max Plank Institute, Leipzig, Germany; Presenter, Late Glacial Paleogeography and Archaeology of the Eastern Mediterranean and of the European Loess Belt, Aachen, Germany.

### Matthew Piscitelli

Presenter, Section Chair and Discussant, 77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN.

### John Edward Terrell

Invited Lecturer, Inland Seas in a Global Perspective: International Conference on the Archaeology, History, and Heritage Management of Coastal Landscapes, Leiden University, The Netherlands; Invited Lecturer, Conversations on Inequality: an Interdisciplinary Seminar, Pufendorf Institute for Advanced Studies, Lund University, Sweden.

# Alaka Wali

Annual Meeting of the American Anthropological Association, San Francisco, CA; Invited Guest Lecturer, Anthropology Department, University of Denver, Denver, CO; Annual Meetings of the Society for Applied Anthropology, Baltimore, MD; Invited Guest Lecturer, New York Hall of Science, Queens, NY.

# **Brittany Wheeler**

46<sup>th</sup> Native American Graves Protection and Repatriation Act Review Committee Meeting, Santa Fe, NM; Contributor, ARUC/CURA Tshine-Natuapahtetau-Kigibiwewidon: exploration of new alternatives on the return/re-appropriation of Aboriginal heritage, Mashteuiatsh First Nations Reserve, Quebec, Canada; 47<sup>th</sup> Native American Graves Protection and Repatriation Act Review Committee Meeting, Washington, D.C.; Various Symposia, DePaul University College of Law, Center for Art, Museum & Cultural Heritage Law, Chicago, IL.

# **Patrick Ryan Williams**

53<sup>nd</sup> Annual meeting of the Institute for Andean Studies, Berkeley, CA; Organizer and Presenter, 40<sup>th</sup> Midwest Meeting on Andean and Amazonian Archaeology and Ethnohistory, Chicago, IL; Presenter, 77<sup>th</sup> Annual Meeting of the Society for American Archaeology, Memphis, TN; Keynote Speaker, Archaeological Sciences in the Americas Symposium, Vanderbilt University, Nashville, TN; Presenter, Chilean Archaeology Congress, Arica, Chile; Presenter, Annual Meeting of the American Anthropological Association, San Francisco, CA.

# DEPARTMENT OF BOTANY

### **Chris Baron**

Phylotastic Hackathon, National Evolutionary Synthesis Center (NESCent), Durham, NC.

### Laura Briscoe

Connecting Biodiversity Research with Curriculum, Encyclopedia of Life Biodiversity Synthesis Center, The Field Museum, Chicago, IL; Working Towards a Model Systematic Treatment of a Hyper-Diverse Lineage Descended from Early Land Plants (Frullaniaceae, Marchantiophyta), Encyclopedia of Life Biodiversity Synthesis Center, The Field Museum, Chicago, IL; MOSS 2012 and 3<sup>rd</sup> International Symposium on Molecular Systematics of Bryophytes, New York Botanical Garden, NYC, NY.

### **Patrick Leacock**

Presenter, First North American Mycoflora Workshop, Yale University, CT; Presenter, Indiana Dunes National Lakeshore Science Conference, Indiana University Northwest, Gary, IN.

### Juan Larraín

Connecting Biodiversity Research with Curriculum, Encyclopedia of Life Biodiversity Synthesis Center, The Field Museum, Chicago, IL; Working Towards a Model Systematic Treatment of a Hyper-Diverse Lineage Descended from Early Land Plants (Frullaniaceae, Marchantiophyta), Encyclopedia of Life Biodiversity Synthesis Center, The Field Museum, Chicago, IL.

### Steven Leavitt

7<sup>th</sup> IAL Symposium (Bangkok, Thailand); Lecturer, Western Illinois University Department of Biology Seminar Series, Macomb, IL.

### Robert Lücking

7<sup>th</sup> IAL Symposium (IAL7), Bangkok, Thailand; 49<sup>th</sup> Annual Meeting of the Association for Tropical Biology and Conservation (ATBC 2012), Bonito, Mato Grosso do Sul, Brazil; 6<sup>th</sup> Encontro do Grupo Brasileiro de Liquenologos (VI EGBL), Universidade Estadual Paulista Júlio de Mesquita Filho, Botucatú, Brazil; NSF International Teloschistales Workshop, Copenhagen, Denmark; NSF Tropical Lichen Workshop, Universidad Distrital Francisco José de Caldas, Bogotá, Colombia; NSF Tropical Lichen Workshop, Universidade Federal de Sergipe, Itabaiana, Brazil; Lecturer, Department of Biology, University of Copenhagen, Denmark; Lecturer, George Mason University, Fairfax, Virginia; Lecturer; Licenciatura en Biología, Universidad Distrital Francisco José Caldas, Bogotá, Colombia.

# H. Thorsten Lumbsch

Bryologisch-lichenologische Arbeitsgemeinschaft Meeting, Lugano, Switzerland; Global Plant Initiative Meeting, Madrid, Spain; International Association for Lichenology Meeting, Bangkok, Thailand; International Union of Biological Sciences Meeting, Suzhou, China; Lecturer, Cornell University, Ithaca, NY; Lecturer, Ramkamhaeng University, Bangkok, Thailand; Universidad Complutense, Madrid, Spain.

# **Christine Niezgoda**

Society for the Preservation of Natural History Collections Meeting, Yale University; Global Plants Initiative Meeting, Madrid, Spain.

# Sittiporn Parnmen

Invited speaker, 7<sup>th</sup> International Association for Lichenology (IAL) symposium, Bangkok, Thailand.

# Richard H. Ree

Invited speaker, University of Hawaii at Manoa; speaker, University of Tennessee; speaker, University of Connecticut; speaker, Smithsonian Botanical Symposium, National Museum of Natural History; Association for Tropical Biology and Conservation, Bonito, Brazil; Society of the Study of Evolution, Ottawa, Canada.

### **Betty Strack**

Annual Meeting of Mycological Society of America, New Haven, CT; A. H. Smith Great Lakes Mycological Foray, Warsaw, IL.

### Matt von Konrat

Connecting Biodiversity Research with Curriculum, Encyclopedia of Life Biodiversity Synthesis Center, The Field Museum, Chicago, IL; Working Towards a Model Systematic Treatment of a Hyper-Diverse Lineage Descended from Early Land Plants (Frullaniaceae, Marchantiophyta), Encyclopedia of Life Biodiversity Synthesis Center, The Field Museum Chicago; MOSS 2012 and 3<sup>rd</sup> International Symposium on Molecular Systematics of Bryophytes, New York Botanical Garden, NYC, NY.

# DEPARTMENT OF GEOLOGY

### Kenneth D. Angielczyk

Society for Integrative and Comparative Biology, Charleston, SC; Palaeontological Society of Southern Africa, Cape Town, SA; 72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC; Paleontology Brown Bag, Department of Geological Sciences, University of Texas, Austin, TX; Zygon Center for Religion and Science, Lutheran School of Theology Hyde Park Campus, Chicago, IL; Department of the Geophysical Sciences, University of Chicago, Chicago, IL.

### Marlene Hill Donnelly

Presenter, Guild of Natural Science Illustrators Annual Conference, Savannah, GA.

### Ian Glasspool

EGU General Assembly 2012, Vienna, Austria.

## Lance Grande

Presenter, 72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC; Invited Keynote Lecturer, International Society of Ophthalmology, Chicago, IL.

# Philipp R. Heck

Presenter, 43<sup>rd</sup> Lunar and Planetary Science Conference, The Woodlands, TX; Presenter, Advanced Photon Source/Center for Nanoscale Materials/Electron Microscopy Center Users Meeting 2012, Argonne National Laboratory; Presolar Grains Workshop, St. Louis, MO; Lecturer, Department of Geography-Geology, Illinois State University, Normal, IL; Presenter, Argonne National Laboratory, Argonne, IL; Indian Scientific Expeditions to Antarctica, Indian Antarctic Station Maitri.

# James Holstein

43<sup>rd</sup> Lunar and Planetary Science Conference, The Woodlands, TX.

# Scott Lidgard

Symposia co-organizer and Lecturer, 2012 Gordon Cain Conference: "*E pluribus unum*: Bringing Biological Parts and Wholes into Historical and Philosophical Perspective," Chemical Heritage Foundation, Philadelphia, PA; Presenter, Wisconsin Institutes for Discovery Conference: "What is an individual? Where philosophy, history, and biology coincide," University of Wisconsin, Madison, WI; Presenter, Chemical Heritage Foundation, Philadelphia, PA; Geological Society of America Annual Meeting, Charlotte, N.C.

# Peter J. Makovicky

72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC.

# Paul Mayer

Presenter, 46<sup>th</sup> Annual Meeting of the Geological Society of America North-Central Section, Dayton, OH; Presenter, iDigBio Paleocollections Workshop, University of Florida, Gainesville, FL; Presenter, 27<sup>th</sup> Annual Meeting of the Society for the Preservation of Natural History Collections, Yale University, New Haven, CT.

# **Olivier Rieppel**

Workshop "*E pluribus unum*—What is a Biological Individual?" University of Wisconsin, Madison, WI; 72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC.

### Akiko Shinya

72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC.

### William Simpson

72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC; Archival Materials Workshop, SVP Annual Meeting, Raleigh, NC.

### Paul P. Sipiera

Lunar and Planetary Science Conference, Houston, TX; Annual Meeting of the Meteoritical Society, Cairns, Australia; Lizzadro Museum of Lapidary Art, Elmhurst, IL.

### Nathan D. Smith

72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC; Planning Workshop, USAP Steering Committee for Deep Field Camps, Indianapolis, IL; NESCent workshop, "Synthesizing and databasing fossil calibrations: divergence dating and beyond," Durham, NC; Department of Geoscience, University of Iowa, Iowa City, IA; Department of Biology, Howard University, Washington, DC; Department of Geology, Augustana College, Rock Island, IL; Department of Ecology and Evolutionary Biology, Cornell

University, Ithaca, NY; Friday Club, Casino Club, Chicago, IL; Field Museum of Natural History, Founders Council Meeting, Chicago, IL.

### **Beckett Sterner**

Philosophy of Science Association, San Diego, CA. "The Pragmatics of Prediction and Explanation."

#### **Constance Van Beek**

72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC: Fossil Preparation Workshops (4), Burpee Museum, Rockford, IL.

# DEPARTMENT OF ZOOLOGY

#### John M. Bates

Symposium speaker, Association for Tropical Biology; Presenter, North American Ornithological Conference (one poster).

### Rüdiger Bieler

Organizer, American Malacological Society Annual Meeting, Philadelphia, PA; Bivalves-in-Time-and-Space (BiTS) collaborators meeting, BioSynC, The Field Museum, Chicago, IL.

#### James H. Boone

Illinois Butterfly Monitoring Workshop, Chicago, IL.

#### Matthew P. Davis

American Society of Ichthyologists and Herpetologists, World Herpetology Congress, Vancouver, Canada; Evolution, Ottawa, Canada; Invited Lecturer, Scripps Institution of Oceanography, University of California, San Diego, CA; Illinois Wesleyan University, Bloomington, IL.

### Rebecca B. Dikow

Willi Hennig Society, Hennig XXXI, Riverside, CA.

### Joshua I. Engel

North American Ornithological Congress, Vancouver, Canada.

#### Steven M. Goodman

Invited Lecturer: CRVOI, La Réunion, France; l'Université de la Réunion, St. Clotide, La Réunion, France; The University of Stellenbosch, Stellenbosch, South Africa; CIRAD, Antananarivo, Madagascar; Peace Corps, Mantasoa, Madagascar; CNRS, l'Institut Ecologie et Environnement, Paris, France; African Small Mammals group, The University of Swaziland; Southern African Society for Systematic Biology, Grahamstown, South Africa.

#### Shannon J. Hackett

Career Day lecture, Whitney M. Young Magnet School, Prairie Middle School, Barrington, and Barrington High School, IL; public lecture on Birds, Denver Museum of Nature and Science, Denver, CO.

#### Lawrence R. Heaney

Presenter, American Society of Mammalogists, University of Nevada, Reno, NV.

#### Janeen Jones

North American KE Emu Users Group meeting, New Haven, CT.

### Corrie S. Moreau

Presenter, Annual Meeting of the Genomic Standards Consortium, BGI, Shenzhen, China; Invited Lecturer, Pennsylvania State University, University Park, PA; Invited Lecturer, University of California, Riverside, CA; Invited Lecture, Richmond, IN; Invited Lecturer, University of Central Florida, Orlando, FL; Invited Lecturer, University of California, Berkeley, CA; Invited Lecturer, New York, NY; Invited Lecturer, University of Kansas, Lawrence, KS; Invited Lecturer, University of Wisconsin, Madison, WI; Invited Lecturer, University of Michigan, Ann Arbor, MI.

### Alfred F. Newton

60<sup>th</sup> Annual Meeting of the Entomological Society of America, Knoxville, TN; Annual Meeting of the Entomological Collections Network, Knoxville, TN; Annual Meeting of the Coleopterists Society, Knoxville, TN.

#### Bruce D. Patterson

Workshop, African Lion Working Group, Okaukeujo, Namibia; Seminar, Department of Biological Sciences, University at Buffalo; Keynote Lecturer, Society for Cenozoic Research, Rockford IL; 93<sup>rd</sup> Annual Meeting, American Society of Mammalogists, Reno, NV; Presenter, 97<sup>th</sup> Annual Meeting of Ecological Society of America, Portland, OR; III Congreso de la Sociedad Peruana de Mastozoología, Piura, Peru; North American Society for Bat Research, San Juan, PR; Symposium lecture, II Congreso Latinoamericano de Mastozoología, Buenos Aires, Argentina.

#### Martin D. Pryzdia

Native Mussels of Wisconsin, an Amazing Resource Workshop, University of Wisconsin-Milwaukee Field Station, Saukville, WI.

#### Alan Resetar

2012 Indiana Dunes National Lakeshore Research Conference, Gary, IN; Annual Meeting, Indiana DNR Nongame Program Amphibian and Reptile Technical Advisory Committee, Indianapolis, IN.

#### W. Leo Smith

American Society of Ichthyologists and Herpetologists Annual Meeting, Vancouver, BC, Canada.

#### **Timothy Sosa**

American Society of Ichthyologists and Herpetologists Annual Meeting, Vancouver, BC, Canada.

#### William T. Stanley

Presenter, Trustee dinner, The Field Museum, Chicago, IL.

#### Margaret K. Thayer

Entomological Society of America, Knoxville TN; Entomological Collections Network, Knoxville TN; FMNH REU symposium, Chicago, IL; Invited Lecturer, Evolutionary Morphology series, University of Chicago, Chicago, IL.

#### Janet R. Voight

Invited keynote speaker Malacological Society of London, University of Portsmouth, U.K.; Invited Keynote Speaker University of Wisconsin, Madison, WI: Darwin Days, Madison WI; Invited presenter, "Magnitude of Molluscan Diversity Symposium," American Malacological Society-Conchologists of America Meeting, Cherry Hill, NJ; invited keynote speaker, Malcolm X College Science, Technology, Engineering, and Math Symposium, Chicago IL; Presenter, 13<sup>th</sup> International Deep-Sea Biology Symposium, Wellington, New Zealand.

### Harold K. Voris

Keynote speaker at New Frontiers from Marine Snakes to Marine Ecosystems, Society for Integrative and Comparative Biology (SICB) Annual Meeting, Charleston, SC; Workshop on Freshwater Invertebrates of Southeast Asia: Biodiversity and Origin, MahaSarakham, Thailand.

#### Stephanie Ware

Organizer, Undergraduate Research Symposium, Field Museum, Chicago, IL.

#### Jason D. Weckstein

Presenter, Association of Tropical Biology Meeting, Bonito, Brazil.

#### Mark W. Westneat

Society of Integrative and Comparative Biology, Charleston, SC.; PhyloTastic- Hackathons, Interoperability and Phylogenetics, NESCent, Duke University, Durham, NC; Encyclopedia of Life, Beijing China; Graduate University of the Chinese Academy of Sciences, Beijing, China; Monsanto Meeting, St. Louis, MO; Fish Megatree Meeting, Chicago, IL.

#### **BIODIVERSITY SYNTHESIS CENTER**

#### Audrey Aronowsky

Presenter, Experiential Learning in Virtual Worlds, Prague, Czech Republic; Presenter, Games, Learning, and Society conference, Madison, WI; Presenter, TaleBlazer workshop, Cambridge, MA; Organizer, Frullania Education meeting, Chicago, IL.

#### **Torsten Dikow**

Organizer and Presenter, Asiloidea synthesis meeting, Chicago, IL; Presenter, Willi Hennig Society, Riverside, CA.

#### **Beth Sanzenbacher**

Organizer and Presenter, Parmeliaceae Lichens 2, Bangkok, Thailand; Presenter, Experiential Learning in Virtual Worlds, Prague, Czech Republic; Presenter, National Synthesis Centers annual meeting, Knoxville, TN; Presenter, Games, Learning, and Society conference, Madison, WI; Organizer: Frullania Education meeting, Chicago, IL.

# LIBRARY

#### Diana Duncan

American Library Association Annual Conference, Anaheim, CA; Association of College & Research Libraries, Rare Books & Manuscript Section Preconference, San Diego, CA; Introducing RDA seminar, Burr Ridge, IL.

#### **Christine Giannoni**

Biodiversity Heritage Library Institutional Council Annual Meeting, Cambridge, MA.; Biodiversity Heritage Library Africa Organizational Meeting, Cape Town, South Africa.

# PRITZKER LABORATORY FOR MOLECULAR SYSTEMATICS AND EVOLUTION

#### **Kevin Feldheim**

Invited Lecturer, Population genetics of lemon sharks, Purdue University, West Lafayette, IN; The life of a lab manager, Stony Brook University, Stony Brook, NY; Science and the public at the Field Museum, Chicago Museum Exhibitors Group, Chicago, IL; Population genetics of lemon sharks, Nova University Conferences, Ft. Lauderdale, FL.

### Erica Zahnle

XGEN Congress and Expo, San Diego, CA.

# **MUSEUM AND PUBLIC SERVICE, 2012**

(Editorships, Committees, etc.)

# DEPARTMENT OF ANTHROPOLOGY

#### J. P. Brown

<u>Field Museum</u>: Member, Common Ground; Member, SEM Users Group; Member, Grainger Digital Initiative Committee; Lead User, Portable FTIR and Bruker pXRF; Lead Programmer, Image Processing and Barcoding Software.

### **Elana Carpinone**

External: Member, Registrars Committee of American Alliance of Museums.

### **Gary Feinman**

<u>Field Museum</u>: Member, Scientific Advisory Council; Associate Editor, *Fieldiana Anthropology*; Member, Anthropology Acquisitions Committee; Member, Anthropology Promotions/Search Committee; Member, Anthropology Space Committee; Member, Anthropology Fund Raising Committee. <u>External</u>: Member, Chancellor's Fellowship Committee, University of Illinois-Chicago; Editor, *Journal of Archaeological Research;* Series Editor, *Fundamental Issues in Archaeology*; Advisory Editor, *Foundations of Archaeology*; Advisory Editor, *Principles of Archaeology*; Advisory Editor, *Cross-Cultural Research;* Member, Publications Committee, Society for American Archaeology; Editorial Board, *Journal of Archaeology*; Editorial Board, *The Open Anthropology Journal*; Editorial Board, *Human Ecology*; External Director, Committee to oversee the Archaeology Research Center at Shandong University, Jinan, China; Member, Planning Committee, Mesas Redondas de Monte Albán, Mexico; Outside hiring/promotion reviews: University of California-San Diego, University of Florida; Ms./Book referee: *Current Anthropology, Human Ecology* (2), *Journal of Anthropological Archaeology* (2), *Journal of Archaeology, Latin American Antiquity, Science*; Springer; Grant/Fellowship referee: Austrian Science Fund, Fulbright, National Geographic Society (3), National Science Foundation (3).

### Mark Golitko

<u>Field Museum</u>: Interim Manager, Elemental Analysis Facility; Member, UIC Graduate Mentoring Award Selection Committee.

#### **Jonathan Haas**

<u>Field Museum</u>: Chair, Anthropology Acquisitions Committee; Chair, Anthropology Space Committee; Chair, North American Curatorial Team; Co-Associate Editor for Anthropology, *Fieldiana*; Member, Museum Repatriation Committee.

<u>External</u>: Member, Graduate Admissions Committee, University of Illinois at Chicago; Member, Editorial Board, *Anthropology and Culture*; Peer Reviewer, National Science Foundation; Peer Reviewer, National Geographic Society; Peer Reviewer, *Latin American Antiquity*; Peer Reviewer, *Journal of Anthropological Research*; Peer Reviewer, *American Anthropologist*.

#### Jamie Kelly

<u>Field Museum</u>: Coordinator, Anthropology Department Facilities; Member, EMu User Group; Member, Anthropology Information Management Committee; Member, Anthropology Space Committee; Member, Anthropology China Hall Committee.

<u>External</u>: Member, Illinois Archaeological Survey; Webmaster, Midwest Archaeological Conference, Inc.; Webmaster, Center for History, Wheaton, IL; Webmaster, Powell Archaeological Research Center.

### Chapurukha M. Kusimba

Field Museum: Chair, Anthropology Internship Committee.

<u>External</u>: Editorial Board, *African Archaeological Review*; Editorial Board, *Journal of Archaeological Research*; Editorial Board, *South African Archaeological Review*; Editorial Board, *Azania: Archaeological Research in Africa*; Editorial Board, Coetsen Institute of Archaeology Publication Series.

# Andrew Leith

External: Member, American Indian Center of Chicago Powwow Committee.

# Robert D. Martin

<u>Field Museum</u>: Substitute Chair, Department of Anthropology; Department Coordinator, Members' Nights; Member, Library Committee; Member, Repatriation Committee; Co-Organizer, Leakey Lecture Series. <u>External</u>: Member, External Scientific Advisory Committee, Duke University Lemur Center.

# Linda Nicholas

External: Editorial Assistant, *Journal of Archaeological* Research; Editorial Assistant, *Fundamental Issues in Archaeology* (Springer series).

# **Ruth Norton**

<u>Field Museum</u>: Member, Pest Committee; Member, Greener Field Committee; Member, Anthropology Internship Committee.

External: Member, Conservation and Collection Task Force, Chicago Cultural Alliance; Field Editor, Art and Archaeology Technical Abstracts Online (Getty); Peer Reviewer, Museum Anthropology.

# William A. Parkinson

<u>Field Museum</u>: Chair, Old World Curatorial Team; Chair, Information Technology Committee, Department of Anthropology; Member, Acquisitions Committee; Member, Information Technology, Collections and Research Committee; Member, President's Ad Hoc Mission Committee.

<u>External</u>: Program Coordinator, America for Bulgaria Foundation Archaeology Program; Chair, Archaeological Advisory Committee, America for Bulgaria Foundation Archaeology Program; Member, Archaeological Institute of America Program Committee.

### **Christopher J. Philipp**

<u>Field Museum</u>: Coordinator, Anthropology Department Tours; Member, Anthropology Internship Committee; Member, Anthropology Department Staff Search Committees.

### Matthew Piscitelli

External: Board Member, Society for American Archaeology Student Affairs Committee.

### John Edward Terrell

<u>Field Museum</u>: Anthropology Coordinator, A. Watson Armour Lecture Series; Member, C&R Scholarship Committee.

### Alaka Wali

<u>Field Museum</u>: Member, Repatriation Subcommittee of the Committee on Science; Member, ECCo Committee of the Board of Trustees; Member, ECCo Leadership Team.

<u>External</u>: Program Co-Chair, American Anthropological Association 2013 Annual Meeting; Editorial Board, *American Anthropologist*; Co-Editor, Public Anthropology Reviews Section of the *American Anthropologist*; Editorial Board, *Collaborative Anthropologies*; Reviewer, *Human Organization*, Journal of the Society for Applied Anthropology; Member, Board of Trustees, Chicago Cultural Alliance; Member, Cultural Vitality Index Task Force, Arts Alliance Illinois.

### Patrick Ryan Williams

<u>Field Museum</u>: Chair, Department of Anthropology; Director, Elemental Analysis Facility; Alternate Member, Information Technology, Collections and Research Committee.

<u>External</u>: Director, Academic Advisory Board Museo Contisuyo; Representative, AAUP Illinois State Council; Member, NASA Space Archaeology Program Review Panel.

# DEPARTMENT OF BOTANY

# Mark Alvey

Field Museum: Botany representative, Science/Public Education Committee.

# William Burger

Other: Secretary, Nature Camera Club of Chicago.

### Michael O. Dillon

Field Museum: Head of Phanerogams.

External: Editorial Board, *Arnaldoa*, Peru; Editorial Board, *Flora of Ecuador*, The Netherlands; Editorial Committee, *Flora Neotropica*; Editor, *Chloris Chilensis*, Chile; Fellow, Center for Advanced Studies in Ecology and Biodiversity; Pontificia Universidad Católica de Chile; Visiting Professor, Biological Sciences Faculty, Universidad Ricardo Palma, Lima, Peru; Honorary Professor, Universidad Nacional de Cajamarca, Cajamarca, Peru; Visiting Professor, Universidad Antenor Orrego, Trujillo, Peru; Honorary Professor, Universidad Nacional de San Agustin, Arequipa, Peru; Socio Honorario, Colegio de Biológos del Perú; Manuscript Reviewer, *Journal of Vegetation Science, Journal of Biogeography, Journal of Arid Plant Environments, Novon, Plant Ecology and Diversity, Phytotaxa, Smithsonian Institution Publications, Taxon.* 

### Sabine Huhndorf

<u>Field Museum</u>: Scholarship Committee; SAC alternate. <u>External</u>: Editor, *Mycologia*, Mycological Society of America; Editor, MYCONET.

### Maria Lucia Kawasaki

External: Manuscript reviewer, *Phytotaxa, Novon*; Member, Organization for Flora Neotropica Commission.

### Patrick Leacock

<u>External</u>: Scientific Advisor, Illinois Mycological Association; Contact person for mushroom cases, Illinois Poison Center; Chair, Voucher Collection Committee, North American Mycological Association.

### **Robert Lücking**

<u>Field Museum</u>: Botany Representative, Common Ground User Group; Botany Representative, SEM Committee; Botany Representative, Visiting Scholarship Committee; Botany Representative, Science Advisory Council.

External: Editorial Board: *Glalia, Mycosphere, The Lichenologist*; Reviewer: *Acta Botanica Brasilica, African Journal of Microbiology Research, American Journal of Botany, Biodiversity and Conservation, Biotropica, Bryologist, Canotia, Ecological Indicators, Ecological Research, Ernstia, Evolution, Feddes Repetorium, Fungal Biology, Fungal Diversity, Glalia, Herzogia, International Journal of Biodiversity and Conservation, Journal of the Torrey Botanical Society, Lichenologist, Lichenology, Micron, Molecular Phylogenetics and Evolution, Mycokeys, Mycologia, Mycological Progress, Mycological Research, Mycosphere, Mycotaxon, Nova Hedwigia, Opuscula Philolichenum, Phytotaxa, Taxon*; Grant Reviewer: National Geographic, National Science Foundation.

### H. Thorsten Lumbsch

<u>Field Museum</u>: Chair, Department of Botany; Member, Management Committee, Pritzker Laboratory for Molecular Systematics; Participant, C&R Committee; Participant, Board of Trustees' Orientation for New Trustees.

<u>External</u>: President, International Association for Lichenology (IAL); Editor: *Mycokeys, Nova Hedwigia*; Associate Editor/Editorial Board: *Australian Systematic Botany, Fieldiana - Life and Earth Sciences, Fungal Biology, Fungal Diversity, Mycology, Phytotaxa, Systematic Biology, Taxon, Willdenowia*; Ad hoc reviewer: more than 25 international journals; Panelist/proposal reviewer: European Commission, National Science Foundation, Czech Research Council, Deutsche Forschungsgemeinschaft.

# **Christine Niezgoda**

Field Museum: Member: Pest Committee, Library Committee.

# Sittiporn Parnmen

External: Manuscript reviewer, The Lichenologist.

# **Richard H. Ree**

<u>Field Museum</u>: Member: Science Advisory Council, Pritzker Lab Management Group, Board IT Committee, C&R/IT Committee, SEM Committee.

<u>External</u>: Peer reviewer: *Methods in Ecology and Evolution, Evolution, Molecular Phylogenetics and Evolution, Taxon, Systematic Biology, Conservation Biology;* Editorial Board Member, *International Journal of Plant Science*; Advisory Board Chair, National Evolutionary Synthesis Center.

### Matt von Konrat

<u>Field Museum</u>: Committee member: The Field Museum Research Seminar Series, Grainger Digital Initiative.

External: Member of the Committee for Bryophyta, International Association for Plant Taxonomy; Member of the IUCN SSC Bryophyte Specialist Group; Member of Executive Council for the International Association of Bryologists; Member of the International Advisory Panel for the New Zealand Journal of Botany; Peer-reviewer of manuscripts for six scientific journals; Editor, Bryophytes for the journal *Phytotaxa* and for the journal *PhytoKeys*.

# DEPARTMENT OF GEOLOGY

### Kenneth D. Angielczyk

<u>Field Museum</u>: Parker-Gentry Award Committee; Science and Public Education Committee; A. Watson Armour Seminar Committee; Steering Council, The Field Museum/IDP Foundation, Inc. African Training Fund.

External: Journal Editorial Board Member: Bulletin of American Paleontology, Palaeontologia Americana, Palaeontology; Journal Peer Reviewer: Journal of Morphology, Journal of Vertebrate Paleontology, Palaeogeography, Palaeoclimatology, Palaeoecology, Paleobiology, Proceedings B; Grant Peer Reviewer: National Geographic Society Committee on Exploration and Research, National Research Foundation of South Africa, NSF Phylogenetic Systematics Program, NSF Integrative Organismal Systems: Processes, Structures and Integrity Program NSF Earth Sciences Postdoctoral Fellowship, Deutsche Forschungsgemeinshcaft, Natural Sciences and Engineering Research Council of Canada; Harrel L. Strimple Award Committee (Paleontological Society); Romer Prize Committee (Society of Vertebrate Paleontology); Best Student Paper Award Committee (Society of Vertebrate Paleontology); Judge (Best Student Presentation, Division of Ecology and Evolution and Division of Vertebrate Morphology, 2012 Annual Meeting of the Society for Integrative and Comparative Biology); Student Advisory Committee (Committee on Evolutionary Biology, University of Chicago).

### **Marlene Hill Donnelly**

External: Membership Secretary, Guild of Natural Science Illustrators.

### Ian Glasspool

<u>Field Museum</u>: Staff Representative, C&R Professional Staff; Science Advisory Council; Collections and Research/Information Technology Committee; IT Database Subcommittee; Ad hoc Mission Committee; Grainger Digital Initiative Committee; Science-Public Education Committee.

External: Manuscript reviewer: *PLoS ONE*, *Review of Palaeobotany and Palynology*; Gondwana Research. Grant Reviewer: Leverhulme Trust, UK.

### Lance Grande

External: Awarded the *Robert H. Gibbs, Jr. Memorial Award* from The American Society of Ichthyologists and Herpetologists for "an outstanding body of published work in systematic Ichthyology."

# Philipp R. Heck

<u>Field Museum</u>: Committee Member: Tawani Polar Expedition Fund, Scholarship Committee; Geology Representative, Scanning Electron Microscope Committee; Peer reviewer, meteorite and terrestrial physical geology sample request proposals.

External: Program committee member, Lunar and Planetary Science Conference 2012; Program committee member, Argonne National Laboratory Users Meeting 2012; User Executive Committee of the Argonne National Laboratory Electron Microscopy Center; Review panel member, NASA Cosmochemistry Program; Subcommittee member, Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM) that oversees the care and distribution of all samples collected by NASA's Stardust Mission; Member, Interstellar Dust Preliminary Examination Team for samples from NASA's Stardust Mission; Peer reviewer, NASA's Origins and Cosmochemistry Programs; Peer reviewer, *Meteoritics & Planetary Science*, Geochimica et Cosmochimica Acta; Member, the Chicago Center for Cosmochemistry; Member, the international consortia for the study of the meteorite falls Mifflin and Sutter's Mill; Advisor, Geological Survey of India and expedition member, first Indian Antarctic Meteorite Prospecting Expedition; Review meeting of the Electron Microscopy Center at Argonne National Laboratory held by the US Department of Energy.

### **James Holstein**

Field Museum: Peer reviewer, meteorite and terrestrial physical geology sample requests.

### Scott Lidgard

<u>Field Museum</u>: Member, Collections & Research/Information Technology Committee: Member, Grainger Digital Initiative Committee; Member, Library Committee; Member, Promotion Committee, Department of Geology.

<u>External</u>: Executive Council Member, International Bryozoological Association; Grant proposal reviewer for National Science Foundation.

### Peter J. Makovicky

<u>Field Museum</u>: Chair, Department of Geology; Member, Presidential Search Committee; Member, Exigency Committee; Member, Tenure Committee for Kenneth Angielczyk.

External: Panelist, National Science Foundation Doctoral Dissertation Improvement Grants panel 2/2012. Manuscript Reviewer: *Proceedings of the National Academy of the US, Proceedings of the Royal Society B, Naturwissenschaften, Ameghiniana, Journal of Vertebrate Paleontology, Journal of Systematic Palaeontology, Acta Palaeontologica Polonica;* Editorial Advisory Board, *Vertebrate Paleobiology and Paleoanthropology;* Co-Editor, *The Dinosauria* (3<sup>rd</sup> Ed.), University of California Press.

### Paul S. Mayer

Field Museum: Website Development Committee.

### **Olivier Rieppel**

Field Museum: Member, Science Advisory Council; Co-Editor, Fieldiana.

External: Appointment to the Editorial Board, *Journal of Zoological Systematics and Evolutionary Research*.

# Akiko Shinya

<u>External</u>: Member, Society of Vertebrate Paleontology Preparator's Committee; Member, the Society of Vertebrate Paleontology Information Management Committee; Web Editor, Society of Vertebrate Paleontology.

# William Simpson

<u>Field Museum</u>: Manager, Geology Department X-Ray Facility; Worked with Library staff to develop and expand Geology stacks into Reprint Library room; Geology Rep for work in Mezzanine of NW Lightwell including installation of more air ducting and installation of sprinklers; Worked extensively with Exhibits to do temporary deinstall/reinstall of fossil vertebrates on display needed for research.

# Paul P. Sipiera

<u>External</u>: Executive Board Member, Apple River Fort State Historic Site, Elizabeth, IL; President and Executive Board Member, Planetary Studies Foundation, Galena, IL; Volunteer Planetarium Consultant, William Rainey Harper College, Palatine, IL; Program Coordinator, JETS Observatory, Freeport, IL.

# Nathan D. Smith

<u>External</u>: Member, USAP Steering Committee for Deep Field Camps; Manuscript Reviewer: *Acta Palaeontologica Polonica, Earth and Environmental Science Transactions of the Royal Society of Edinburgh, Frontiers in Ecology and the Environment, Journal of Ornithology, Journal of Zoology, Proceedings of the Royal Society of London, B.;* Proposal Reviewer: National Science Foundation, Office of Polar Programs; Session Moderator, 72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology.

# **Constance Van Beek**

<u>External</u>: Society of Vertebrate Paleontology Preparators' Committee; Abstract Reviewer, Preparators Symposium, 72<sup>nd</sup> Annual Meeting of the Society of Vertebrate Paleontology, Raleigh, NC.

# DEPARTMENT OF ZOOLOGY

### John M. Bates

<u>Field Museum</u>: Acting Head, Division of Amphibians and Reptiles; Member, Pritzker Lab Management Committee; Member, TFM Africa Council; Member, African Training Program scientific committee; Member, Parker Gentry Award Nominating Committee.

<u>External</u>: Member, Cooper Ornithological Society Student Awards Committee; Zoology Department Liaison with Chicago office of U.S.F.W Service; Member, Editorial Board, Bulletin of the Museu Goeldi; Member, American Ornithologists' Union Collections Committee; Member, Steering Committee, VertNet program; Planning Committee Chair, 2013 Meetings of the American Ornithologists' Union Meetings (Chicago).

### **Rüdiger Bieler**

<u>Field Museum</u>: Head, Division of Invertebrates; Chair, Library Committee; Chair, SEM Committee; Lead-PI on Invertebrates/Insects Infrastructure Project.

External: Associate Editor/Editorial Board: Zoological Journal of the Linnean Society, Zootaxa, Malacologia – International Journal of Malacology, Archiv für Molluskenkunde, The Nautilus, The Festivus, Iberus, Acta Zootaxonomica Sinica, Papéis Avulsos de Zoologia, Arquivos de Zoologia; Editor (online databases): World Register of Marine Species, WoRMS (Gastropoda); ZooBank; Member, Committee on Evolutionary Biology, University of Chicago; Member, Faculty Appointments Committee, CEB, University of Chicago; various faculty and publication reviews.

## James H. Boone

<u>Field Museum</u>: Member, Emu Users Group, Web Users Group, Pest Committee, and Evacuation Team. <u>External</u>: Reviewer, book proposals, University of Chicago Press.

# Matthew P. Davis

<u>External</u>: Editor: *Zootaxa* (Fishes); Manuscript Reviewer: *Journal of Vertebrate Paleontology*, *Paleontology*, *Journal of Fish Biology*, *Biological Journal of the Linnean Society*, *Biology Letters*, *Zootaxa*.

# Jochen Gerber

Field Museum: Member, Library Committee.

<u>External</u>: President, Chicago Shell Club; Member, Terrestrial Mollusk Team, New Pest Advisory Group, APHIS (USDA); Editor for terrestrial gastropods, *Zootaxa*; Reviewer, *Check List, Journal of Zoological Systematics and Evolutionary Research*.

# Steven M. Goodman

External: Editorial Board, Faune de Madagascar, Mammalia, African Bat Conservation Newsletter, Malagasy Nature, Guides sur la diversité biologique de Madagascar, Univers Maoré, Taloha (l'Institut de Civilisations/Musée d'Art et d'Archéologie de l'Université d'Antananarivo; manuscript reviews: Acta Chiropterologica, American Journal of Primatology, Biological Journal of the Linnean Society, Conservation Biology, Environmental Conservation, International Journal of Primatology, Journal of Biogeography, Journal of Mammalogy, Journal of Zoology, Malagasy Nature, Mammalia, Science, Proceedings of the National Academy of Science, USA, Zootaxa.

### Shannon J. Hackett

<u>Field Museum</u>: Chair, Science Advisory Council; Member, Pritzker Lab Management Committee; Cochair, IT/C&R Committee; Member, Field Museum's Ad Hoc Mission Committee; Member, Grainger Digital Initiatives Team; Member, Science Media Group; Member, Web User Group; Participant, President's Leadership Council event; Manager, High Performance Computing Cluster; Collections & Research point person, Cryogenics Facility; Member, Radiation Safety Officer. <u>External</u>: Editorial Board, Molecular Phylogenetics and Evolution; Co-Chair, University of Chicago Committee on Evolutionary Biology; Planning Committee Member, 2013 Meeting of the American

Ornithologists' Union (Chicago).

### Lawrence R. Heaney

<u>Field Museum</u>: Head, Division of Mammals; Co-Chair, Pest Committee; At-Large Representative, Science Advisory Council; Member, Parker-Gentry Award Committee; Member, tenure review committees (2); primary host for Parker-Gentry Awardee for 2012.

<u>External</u>: President, International Biogeography Society; Emeritus Director, Board of Trustees, Wildlife Conservation Society of the Philippines; Consultant on Philippine conservation issues for Conservation International and the Philippine Department of Environment and Natural Resources; Associate Editor, Journal of Biogeography; Editorial Board, Silliman Journal (Philippines); Editorial Advisor, Frontiers of Biogeography.

### Janeen Jones

<u>Field Museum</u>: Chair, C&R EMu and Web Users' Group; Zoology Representative, Web Users' Group; EMu Administrator, various report writing and user training for Zoology, IT and Exhibits; Zoology Representative, Grainger Digital Initiative Team and Digital asset management system team; Zoology Representative, EMu/Drupal development committee.

### Kathleen Kelly

<u>Field Museum</u>: Member, EMu User Group; Member, Web Users Group; Member, Pests Subcommittee; Member, Evacuation Committee.

# Ben Marks

<u>Field Museum</u>: EMu users Group. <u>External</u>: Reviewer: *Ibis, Molecular Phylogenetic and Evolution, Journal of Avian Biology.* 

### Corrie S. Moreau

<u>Field Museum</u>: Member, Pritzker Laboratory Management Committee; Secretary, American Association of University Professors—Field Museum chapter; Participant, President's ad hoc Mission Committee. <u>External</u>: Faculty Member, Committee on Evolutionary Biology, University of Chicago; Academic journal editor for *PLoS ONE*; Subject journal editor of *Myrmecological News*; Manuscript reviewer, *Journal of Biogeography, Journal of Insect Science, Molecular Ecology, PLoS ONE, Proceedings of the Royal Society B, Zootaxa*; Oversight Committee Member, Global Ant Project; Member, Genomic Standards Consortium (GSC); Encyclopedia of Life curator (Ants—Formicidae); Expert on Antweb's AntAsk blog; Curator of Florida Keys Ants on Antweb.org; Curator of Queensland, Australia Ants on Antweb.org.

## Alfred F. Newton

Field Museum: Curatorial consultant, Division of Insects.

<u>External</u>: Editorial Board: *Belgian Journal of Entomology*; Manuscript Reviewer: *Cretaceous Research*; *European Journal of Entomology; Insect Systematics & Evolution; Journal of Natural History; ZooKeys; Zootaxa.* 

### **Bruce D. Patterson**

<u>Field Museum</u>: Member, Animal Care and Use Committee; Member, Curatorial Steering Committee, Council on Africa; member, Curatorial Steering Committee, Field Museum/IDP Foundation, Inc. African Training Fund; Member, Parker-Gentry Award Selection Committee; Member, Scholarship Committee; Liaison, University of Illinois at Chicago, Biological Sciences-FMNH Liaison; Lecture, Ayer Society; Lecture, FM Board Assistants Luncheon.

<u>External</u>: Associate Editor, *Mastozoología Neotropical*; Co-coordinator, Red List Authority, Neotropical Small Mammals, International Union for the Conservation of Nature; Member, African Lion Working Group, International Union for the Conservation of Nature; Member, Systematic Collections Committee, International Federation of Mammalogists; Member, Board of Directors, American Society of Mammalogists; Chair, Honorary Membership Committee, American Society of Mammalogists; Member, Organizing Committee, Society for Coevolution; 16 manuscripts reviewed for 10 journals; three grant proposals reviewed for two funding agencies.

### Alan Resetar

<u>External</u>: Member, Indiana DNR Nongame Program Amphibian and Reptile Technical Advisory Committee; Manuscript Reviewer, *Transactions of the Illinois Academy of Science*.

### Petra Sierwald

<u>Field Museum</u>: Chair, C&R Scholarship Committee; Lead-PI on REU site grant. <u>External</u>: Associate Editor/Editorial Board, *ZooKeys, Journal of Arachnology;* Member, Committee on Evolutionary Biology, University of Chicago; Various faculty and publication reviews; Member: iDigBio working group DROID2 (digitization of pinned collections), iDigBio working group MISC (minimum information standards, authority files and semantics).

### W. Leo Smith

<u>Field Museum</u>: Head, Division of Fishes; Member, Pritzker Laboratory management committee; Member, Common Ground.

<u>External</u>: Associate Editor of *Genetics, Development, and Morphology, Copeia*; Illustration Editor, *Copeia*; Board of Governor, American Society of Ichthyologists and Herpetologists; Member, Committee on Evolutionary Biology, University of Chicago; Member, Committee on Evolutionary Biology Admissions Committee, University of Chicago; Manuscript Reviewer: *Acta Zoologica, Copeia Federation of European* 

Biochemical Societies Journal, Ichthyological Research, Molecular Phylogenetics and Evolution, Proceedings of the Royal Society B, Systematic Biology, Zootaxa.

## William T. Stanley

External: Chair, Systematic Collections Committee, American Society of Mammalogists.

## Kevin Swagel

Field Museum: Member, Personnel Committee.

## Margaret K. Thayer

<u>Field Museum</u>: Head, Division of Insects; Co-PI of NSF ARI-R<sup>2</sup> Infrastructure grant; Associate Editor (Zoology), *Fieldiana*; At-Large and Alternate Zoology Member, Scientific Advisory Council (SAC); Zoology representative, A. Watson Armour Seminar Committee; Member, Zoology Promotions Committee; Coordinator, Insects EMu collection database; President, FMNH Chapter of American Association of University Professors (AAUP); Museum pest IDs; Member, FMNH EMu Users Group, Web Users Group, One Vendor Project Committee; host for multiple collection visitors; volunteer supervisor.

<u>External</u>: Editorial Board, Thomas Say Publications (Entomological Society of America); Editorial Board, *Annales Zoologici*; Comité Editorial, *Dugesiana*; Contributing Editor (Staphylinidae), www.bugguide.net; Manuscript reviewer: *Zoologica Scripta, Journal of Natural History, Cretaceous Research, Cladistics, Coleopterists Bulletin, Canadian Entomologist, Japanese Journal of Systematic Entomology;* Proposal reviewer, National Science Foundation; Member, DROID2 Working Group of iDigBio.

## Janet R. Voight

<u>Field Museum</u>: Managing Scientific Editor, *Fieldiana*; Chair and Zoology Representative, Science, Public Education Committee (SPEC); Member, Review Committee for Temporary Exhibitions Proposals; Member, Institutional Animal Care and Use Committee; Member, Promotions and Review Committee, Department of Zoology.

External: Associate Editor, *Journal of Molluscan Studies*; Editorial Board, *American Malacological Bulletin*; *Malacologia*; Panel Member, National Science Foundation; Proposal Reviewer, Ifremer (French oceanography institution); Chair, American Malacological Society Student Presentation Judging Committee; Chair, American Malacological Society Student Research Award Committee; Manuscript Reviewer: *Molluscan Research, Biological Bulletin, Marine Ecology Progress Series; Biology Letters, Oceanography, Malacologia, iMedia Ethics;* Consultant, *National Geographic Magazine*.

### **Stephanie Ware**

<u>Field Museum</u>: Administrative Assistant, Scholarship Committee; Administrative Assistant, Research Experience for Undergraduates site grant program; Team Member, Illinois Peregrine Program.

### Jason D. Weckstein

<u>External</u>: Manuscript Reviewer: *Entomological News, Southeastern Naturalist, Zootaxa;* Grant Proposal Reviewer: National Geographic Society, National Science Foundation; Science Fair Committee Member, Lincolnwood Elementary School; Perkin's Woods Forest Preserve Management Steering Committee.

### Mark W. Westneat

<u>Field Museum</u>: Chair, Institutional Animal Care and Use Committee; Field Museum-University of Chicago Teaching Liaison.

<u>External</u>: Executive Board, Phyloinformatics Research Foundation; Steering Committee, Tree of Life Web Project; Group Leader, Encyclopedia of Life; Past Chair, Division of Vertebrate Morphology, Society of Integrative and Comparative Biology; NSF Committee on Future of Systematics.

# **BIODIVERSITY SYNTHESIS CENTER**

#### Audrey Aronowsky

<u>Field Museum</u>: Member: Grainger Digital Initiative Committee, Science Media Committee, IT/C&R Committee.

#### **Beth Sanzenbacher**

<u>Field Museum</u>: Member: Grainger Digital Initiative Committee, Science Media Committee, IT/C&R Committee.

### LIBRARY

#### **Melissa Anderson**

<u>Field Museum</u>: Clean Up Committee; Evacuation Committee; Members Night Committee, Library Committee (liaison); Edible Treasures Garden Team Leader.

#### Karen Bean

Field Museum: Evacuation Committee; Edible Treasures Garden Team Member.

### Nina Cummings

Field Museum: Clean Up Committee.

Diana Duncan External: Member, American Library Association (ALA).

#### Armand Esai

<u>Field Museum</u>: IT/C&R Committee; Science Media Group; Clean Up Committee. <u>External</u>: Member, Society of American Archivists; Member, ARMA.

### **Christine Giannoni**

<u>Field Museum</u>: Library Committee; Representative, Fieldiana Board. <u>External</u>: Member, American Library Association (ALA); Member, Institutional Council of the Biodiversity Heritage Library; Coordinator, Chicago Area Museum Libraries (CAML).

#### **Michael Trombley**

Field Museum: Personnel Committee; Professional Staff Representative, Collections & Research.

### OFFICE OF COLLECTIONS AND RESEARCH

#### Kasey Mennie

<u>Field Museum:</u> Member, A Greener Field; Team Leader, Edible Treasures Garden. External: Volunteer, Dill Pickle Food Co-Op.

### Carter O'Brien

<u>Field Museum</u>: Chair, A Greener Field; Team Leader, Edible Treasures Garden; Collections and Research Coordinator, Women's Board Field Dreams program; Member, Shared Bikes Committee; Member, Food Operator Committee.

<u>External</u>: Chair, Finance Committee, Dill Pickle Food Co-Op; Member, Green Museums Steering Committee, Chicago Park District, City of Chicago; Volunteer, Treekeeper, Openlands/City of Chicago; Member, Logan Square Bike Walk.

# PRITZKER LABORATORY FOR MOLECULAR SYSTEMATICS AND EVOLUTION

#### **Kevin Feldheim**

<u>Field Museum</u>: Manager, Pritzker Laboratory for Molecular Systematics and Evolution <u>External</u>: Member: American Elasmobranch Society, American Society of Ichthyologists and Herpetologists; External Reviewer: *Copeia, Journal of Fish Biology, Molecular Ecology, PLoS ONE, Journal of Heredity, Journal of Experimental Marine Biology & Ecology, Experimental Marine Biology, Aquatic Conservation: Marine and Freshwater Ecosystems.* 

# FIELDWORK AND RESEARCH TRAVEL, 2012

### DEPARTMENT OF ANTHROPOLOGY

#### **Douglas Bolender**

<u>Fieldwork</u>: Skagafjörður Archaeological Settlement Survey, Skagafjörður, Iceland; Caribbean Plantation Project, Dominica.

Laure Dussubieux Research: Corning, NY.

Gary Feinman <u>Fieldwork</u>: Shandong, China. Research: Oaxaca, Mexico.

Mark Golitko Research: Papua New Guinea.

Jonathan Haas <u>Fieldwork</u>: Fortaleza Valley, Peru.

Chapurukha M. Kusimba <u>Fieldwork</u>: Kenya; China.

Andrew Leith Fieldwork: Camp Douglas, Chicago, IL.

### **Shannon Martino**

<u>Fieldwork</u>: Chadir Hoyuk, Turkey. <u>Research</u>: Chadir Hoyuk, Turkey.

### **Linda Nicholas**

<u>Fieldwork</u>: Shandong, China. <u>Research</u>: Oaxaca, Mexico.

### Lisa Niziolek

Research: Chester Beatty Library, Dublin, Ireland.

### William A. Parkinson

<u>Fieldwork</u>: The Diros Project, Mani Peninsula, Greece; The Körös Regional Archaeological Project, Southeastern Hungary. <u>Research</u>: Obsidian Collection Project, Milos, Greece; Clay Sample Collection, Körös Region, Hungary; Clay Sample Collection, Western Mani, Greece.

### Christopher J. Philipp

<u>Fieldwork</u>: Vanimo, Wewak, Aitape, and Port Moresby, Papua New Guinea. <u>Research</u>: Australian Museum, Sydney, Australia.

### James L. Phillips

<u>Fieldwork</u>: Tel Tayinat, Antachia, Turkey; Zincirli, Gazientep, Turkey; Kerma, Sudan. <u>Research</u>: Tel Tayinat, Antachia, Turkey; Zincirli, Gazientep, Turkey; Kerma, Sudan. Matthew Piscitelli Fieldwork: Huaricanga, Peru.

### Alaka Wali

<u>Fieldwork</u>: Cordillera Azul National Park, Peru; Ampiyacu-Apayacu River Basin, Peru; Sierra del Divisor Reserved Zone, Peru; Greater Chicago Metropolitan Region, IL. <u>Research</u>: Pawnee, Oklahoma; Crow Reservation, Montana; Chicago, IL.

### Patrick Ryan Williams

<u>Fieldwork</u>: Moquegua, Peru; Arica, Chile; Isla de Pascua, Chile. <u>Research</u>: UNCG, Greensboro, NC.

## DEPARTMENT OF BOTANY

Laura Briscoe

Fieldwork: Chile, Utah.

Michael O. Dillon

Fieldwork: Chile, Peru

## **Patrick Leacock**

<u>Fieldwork</u>: McHenry County and Chicago region, Illinois and Indiana; Bioblitz, North Park Village Nature Center, Chicago; North American Mycological Association annual foray, Scotts Valley, CA.

## Juan Larraín

Fieldwork: Chile, Fiji, New Caledonia.

### **Steven Leavitt**

<u>Fieldwork</u>: Humboldt-Toiyabe National Forest, Nevada, USA; Uinta National Forest, Utah, USA; White River National Forest, Colorado, USA.

Research: Brigham Young University, Provo, Utah.

### Robert Lücking

<u>Fieldwork</u>: Las Cruces Biological Station, Costa Rica; Las Alturas Biological Station, Costa Rica; El Delirio, Colombia; Parque Ecológico Matarredonda, Colombia; Bosques Peña de Santa Barbara Natural Reserve, Colombia; Botucatú, Brazil; Campo Grande, Brazil; Itabaiana, Brazil. <u>Research</u>: Muséum National d'Histoire Naturelle (PC), Paris, France; US National Herbarium, Washington; Universidad Distrital Francisco José de Caldas, Colombia; Universidad Nacional de Colombia; Universidade Federal de Sergipe, Brazil; Universidade Federal de Mato Grosso do Sul, Brazil.

### H. Thorsten Lumbsch

Fieldwork: Kenya, New Caledonia, Spain, Thailand.

<u>Research:</u> Botanische Staatssammlung, Munich, Germany; Cornell University, Ithaca, NY; Ramkamhaeng University, Bangkok, Thailand; Universidad de Complutense, Madrid, Spain; University of Helsinki, Finland.

### Sittiporn Parnmen

Fieldwork: Thailand.

### **Richard H. Ree**

Research: Cambridge, MA, Harvard University Herbaria; Kashmir and Himachal Pradesh, India.

### Matt von Konrat

Fieldwork: Chile, Fiji, New Caledonia, New York, NY.

## DEPARTMENT OF GEOLOGY

#### Kenneth D. Angielczyk

<u>Research</u>: Texas Natural History Collections; Texas Memorial Museum; Bernard Price Institute for Palaeontological Research; Council for Geosciences; Iziko South African Museum. <u>Fieldwork</u>: Permian of Parnaíba Basin, Brazil; Permian and Triassic of Ruhuhu Basin, Tanzania.

#### Marlene Hill Donnelly

Fieldwork: Field sketching in Northern Cascade Mountains; HI.

#### Ian Glasspool

Fieldwork: Collections development: East Lansing, MI; Athens, OH.

#### Lance Grande

Fieldwork: Green River Formation, Kemmerer, WY.

#### Philipp R. Heck

Fieldwork: Antarctica.

<u>Research</u>: Drexel University, Department of Materials Science and Engineering, Philadelphia, PA; ETH Zurich, Switzerland; Cameca Instruments, Madison, WI.

#### James L. Holstein

<u>Research</u>: Lund University, Lund, Sweden. <u>Fieldwork</u>: Prospecting for Cretaceous dinosaurs in the Cedar Mountain Formation of the San Rafael Swell, SW Emery County, central Utah; Green River Formation, Kemmerer, WY.

#### Scott Lidgard

<u>Fieldwork</u>: Hopkins Marine Station of Stanford University, Monterey, CA; Elkhorn Slough National Estuarine Research Reserve, CA.

Research: California State University, San Jose, CA; University of Wisconsin, Madison, WI.

#### Peter J. Makovicky

<u>Research</u>: American Museum of Natural History, New York; Museo Ernesto Bachman, El Chocon, Neuquen, Argentina, Museo Patagonico de Ciencias Naturales, Gral. Roca, Rio Negro, Argentina. <u>Fieldwork</u>: Candeleros and Huincul Formations, Cañadon de Campanas, Neuquen Province, Argentina.

#### Paul S. Mayer

<u>Research</u>: Milwaukee Public Museum, WI; Peabody Museum, Yale University, New Haven, CT, Museum of Comparative Zoology - Harvard University, Cambridge, MA. Fieldwork: Collections development, University of Ohio, Athens, OH; Dayton, OH; Mazon Creek Area, IL.

#### **Olivier Rieppel**

Research: Tübingen, Göttingen.

#### Akiko Shinya

<u>Fieldwork</u>: Prospecting for Cretaceous dinosaurs in the Cedar Mountain Formation of the San Rafael Swell, SW Emery County, central Utah; Green River Formation, Kemmerer, WY; Hateg, Romania; Villa El Chocon, Neuquén, Argentina.

### William F. Simpson

<u>Fieldwork</u>: Prospecting for Oligocene mammals in the Brule Formation and Blue Ash Channel at Harris Ranch Badlands, Fall River County, SD; Prospecting for Cretaceous dinosaurs in the Cedar Mountain Formation of the San Rafael Swell, SW Emery County, UT.

### Paul P. Sipiera

Fieldwork: Northern IL, eastern IA, southern WI.

#### Nathan D. Smith

<u>Research</u>: Cornell Museum of Vertebrates; Museo de Ciencias Naturales San Juan; Museo Municipal Ernesto Bachmann; Museo Paleontológico Egidio Feruglio; Museo Patagonica de Ciencias Naturales; Museo Provincial Carlos Ameghino; North Carolina Museum of Natural Sciences; Smithsonian National Museum of Natural History.

<u>Fieldwork</u>: Chadron and Brule Formations, White River Badlands; Candelaros and Huincul Formations, Neuquen Province, Argentina.

#### **Constance Van Beek**

<u>Fieldwork</u>: Prospecting for Cretaceous dinosaurs in the Cedar Mountain Formation of the San Rafael Swell, SW Emery County, central Utah; Green River Formation, Kemmerer, WY.

# DEPARTMENT OF ZOOLOGY

#### John M. Bates

<u>Fieldwork</u>: Itombwe Region, Kahuzi-Biega National Park; Democratic Republic of Congo; Bwindi National Park, Uganda; Blanchardville, WI.

<u>Research</u>: University of Bukavu, Bukavu, Democratic Republic of Congo; Department of Zoology, Centre de Recherche en Sciences Naturelles (CRSN-Lwiro), Democratic Republic of Congo; Museum, Department of Zoology, Makerere University, Uganda; Western Foundation of Vertebrate Zoology, Camarillo, CA.

### Rüdiger Bieler

<u>Fieldwork</u>: Florida Keys, FL; Abaco, Bahamas. Research: Tropical Research Laboratory, Summerland Key, FL; North Myrtle Beach, SC.

#### James H. Boone

Fieldwork: Northerly Island, Chicago, IL.

### Matthew P. Davis

<u>Research</u>: University of Kansas, Lawrence, KS; American Museum of Natural History, New York, NY; Scripps Institution of Oceanography, San Diego, CA; Natural History Museum of Los Angeles County, Los Angeles, CA.

### Joshua I. Engel

<u>Fieldwork</u>: Democratic Republic of the Congo, Uganda. <u>Research</u>: New York City, NY.

### Jochen Gerber

Fieldwork: Midwestern U.S.

#### Steven M. Goodman

<u>Fieldwork</u>: Madagascar: Ankarana, Beanka, Lakato, Fandriana, Kirindy (CFPF); Comoros: Grande Comore and Anjouan.

<u>Research</u>: Paris, France, Muséum national d'Histoire naturelle; London, England, The Natural History Museum; Tring, England, The Natural History Museum.

### Shannon J. Hackett

Research: Denver Museum of Science and Nature, Denver, CO.

#### Lawrence R. Heaney

<u>Fieldwork</u>: Mt. Banahao, Laguna Province, Philippines; Pine Forest Range, Nevada. Research: Philippine National Museum; Natural History Museum of Utah.

### Robert F. Inger

Research: Southeast Asia.

#### Corrie S. Moreau

<u>Fieldwork</u>: Santa Rosa, Guanacaste, Costa Rica; Florida Keys, FL; Kampala, Uganda. <u>Research</u>: Pennsylvania State University, University Park, PA; University of California, Berkeley, CA; University of Kansas, Lawrence, KS.

#### Alfred F. Newton

<u>Fieldwork</u>: Indiana, California, Montana, Nevada, Oregon, Tennessee. <u>Research</u>: Florida State Collection of Arthropods, Gainesville; University of Central Florida, Orlando, FL.

#### Bruce D. Patterson

<u>Fieldwork</u>: Western Kenya, Coastal Kenya. <u>Research</u>: Okaukeujo, Namibia.

#### Alan Resetar

Fieldwork: Northern Indiana; St. Joseph County Parks BioBlitz, Spicer Lake, South Bend, IN.

#### **Petra Sierwald**

<u>Fieldwork</u>: Florida Keys, FL; Abaco, Bahamas. <u>Research</u>: Smithsonian Institution, Washington DC; University of Florida, Gainesville, FL.

#### W. Leo Smith

<u>Research:</u> American Museum of Natural History, NY; Natural History Museum, Los Angeles County, CA; Scripps Institution of Oceanography, CA; University of Kansas, KS.

#### William T. Stanley

<u>Fieldwork</u>: Democratic Republic of the Congo, Tanzania. <u>Research</u>: United States National Museum, Washington, D.C.; Humboldt State University Vertebrate Museum; Southern Highlands Conservation Project, Mbeya, Tanzania; University of Dar es Salaam, Tanzania; Kinshasa, DRC.

### Kevin Swagel

Fieldwork: Wisconsin, Illinois.

### Margaret K. Thayer

<u>Fieldwork</u>: Oregon, California, Indiana. <u>Research</u>: Orlando, FL; Gainesville, FL.

#### Janet R. Voight

Research: Museum of New Zealand, Te Papa Tongarewa, Wellington, New Zealand.

Harold K. Voris Research: Thailand.

Stephanie Ware Fieldwork: Chicago, IL.

## Jason D. Weckstein

<u>Fieldwork</u>: Reserva Nacional Volcan Mombacho and Reserva Natural Miraflor-Moropotente, Nicaragua. <u>Research</u>: Illinois Natural History Survey/University of Illinois, Urbana-Champaign, IL.

#### Mark W. Westneat

<u>Fieldwork</u>: Andros Island, Bahamas; Kauai, HI; Lake Michigan; Freshwater streams, IL. <u>Research</u>: Graduate University of the Chinese Academy of Sciences, Beijing, China; American University at Cairo, Cairo, Egypt.

# **BIODIVERSITY SYNTHESIS CENTER**

Torsten Dikow Fieldwork: Namibia.

Mark W. Westneat Fieldwork: Andros Island, Bahamas.

# PUBLIC EDUCATION AND OUTREACH, 2012

## DEPARTMENT OF ANTHROPOLOGY

### **Douglas Bolender**

Public Presentations: A. Watson Armour III Seminar Series, The Field Museum.

### J. P. Brown

Education Programs: Lead scientist for Digital Planet: Mummies from the Crypt.

Exhibit Development: Conservator and Lead Imaging Scientist, *Opening the Vaults: Mummies* and *Images of the Afterlife*; 3D reconstruction of Magdalenian skull for *Scenes from the Stone Age: The Cave Paintings of Lascaux*.

<u>Media Development</u>: TV interviews on CT scanning for ABC7, CBS2, WTTW11, NBC7; Print interviews for *Time Out Chicago, Chicago Sun-Times*.

<u>Public Presentations</u>: Lectures on CT scanning for Anthropology Alliance, Founders' Council, Members' Nights, South Suburban Archaeological Society, Genesis Medical Imaging Corporate Event.

<u>Tours</u>: Behind-the-scenes tours for Education Department, visiting scientists, Trustees. Web and New Media: *The Field Revealed* videos.

### Elana Carpinone

<u>Education Programs</u>: Field Museum Members' Nights; Women's Board event. Tours: Behind-the-scenes tours for Institutional Advancement.

### Laure Dussubieux

Education Programs: Anthropology Alliance coffee event.

### **Gary Feinman**

<u>Exhibition Development</u>: International tour, *Chocolate*; Content Advisor, China Hall; Contributions to Community Museum, Santiago Matatlán, Oaxaca, Mexico; Contributions to Community Museum, San Pablo Villa de Mitla, Oaxaca, Mexico.

Media Development: Press on Maya Calendar 2012: television: NBC-Chicago, CBS-Chicago, WFLD (Fox)-Chicago; radio: WBBM; newspaper: Chicago Tribune; Press on Maya obsidian study: web: EurekAlert, The Huffington Post, Nano Patents and Innovations, Science Daily, maxisciences.com, BBC Mundo, blog.science-infuse.fr, lezgetreal.com, decouvertes-archeologiques.blogspot.fr, Earth First! Newswire, Archaeological Haecceities, Archaeological News, Archaeology News Network, Red Orbit, ScienceNewsline Nature, e!Science News, Phys.Org, PressTV, Mike Ruggeri's Maya Archaeology News, El Nacional (Venezuela), Aimo (Argentina), Forte (Estonia), Múlt-Kor (Hungary); radio interview: Milt Rosenberg on WGN; Press on Maya Blue: print: Sciences et Avenir (France), Mas Alla Magazine (Spain), web: Science Codex, Red Orbit, Science Daily, entrisepost.com, derspiegel (Germany); Press on "Archaeology as a Social Science" in PNAS: web: EurekAlert, The Columbus Dispatch, Phys.Org, Red Orbit, Fossil Science News, Archaeology Daily, Heritage Daily (The Council for British Archaeology), collectingegypt.blogspot.com, gwebarchaeology.tumblr.com, features.rr.com, sciencealerts.com, longlifenote.tumblr.com, topics.treehugger.com, The Archaeology News Network Blog Posts, farmingnewsin.com. Science Index. search.wn.com; print: The Columbus Dispatch: Interviews; Xultun: New Scientist; Atzompa: National Geographic News; Collapse: New Scientist; Ethics of looted pieces in Princeton Maya exhibit: Princeton Alumni Magazine; Liz Brumfiel obituary: Sun Times; Commentary, Why Nations Fail, http://whynationsfail.com.

<u>Public Presentations</u>: Lecture on El Palmillo, Museum Committee, Santiago Matatlán, Oaxaca, Mexico. <u>Tours</u>: Behind-the-scenes tours for Museum members, visiting scholars, visiting VIPS, etc.

### Mark Golitko

Education Programs: Field Museum Members' Nights.

<u>Tours</u>: Behind-the-scenes tours for Anthropology Alliance Steering Committee, student groups. <u>Web and New Media</u>: The Field Revealed series, "The X-ray Fluorescence Lab".

# Jonathan Haas

Exhibit Development: Curator, Opening the Vaults: World's Columbian Exposition; Improvements to The Ancient Americas.

Public Presentations: "Violence in Humans: The Myth and Reality," Anthropology Alliance.

Media Development: Interviews for Peruvian television and radio programs.

Tours: Behind-the-scenes tours for visiting scholars, VIPs, incoming Museum President.

## Jamie Kelly

<u>Education Programs</u>: Field Museum Members' Nights; Anthropology Alliance and Annual Fund events. <u>Exhibit Development</u>: Anthropology Collections Manager, *Opening the Vaults: Mummies;* Anthropology Collections Manager, *Fashion and The Field Museum Collection: Maria Pinto;* Anthropology Collections Manager, *Scenes from the Stone Age: The Cave Paintings of Lascaux;* Anthropology Collections Manager, China Hall.

<u>Media Development</u>: Assisted with Wind River documentary to air on Wyoming PBS and Wind River Virtual Museum for the Wind River Reservation.

<u>Public Presentations</u>: Presenter, *Philippine Ancestral Art*, Presenter, Anthropology Alliance Event *Rescuing a Forgotten Collection: The Importance of Kish to Understanding the Ancient Near East*, Presenter, VIP Preview for *Maharaja: The Splendor of India's Royal Courts* exhibition.

<u>Tours</u>: Behind-the-scenes tours for Institutional Advancement, Group Sales, Administration, Trustees, Auxiliary Groups, Museum Members, visiting specialists, visiting VIPs, numerous school and university groups and classes.

Web and New Media: Contributor to Field Museum Anthropology Friday Artifact on Facebook.

## Chapurukha M. Kusimba

<u>Educational Programs</u>: Field Museum Members' Nights. <u>Exhibit Development</u>: Content Specialist, *Maharaja: The Splendor of India's Royal Courts.* <u>Web and New Media</u>: Field Revealed videos and audio podcasts.

# Andrew Leith

<u>Education Programs</u>: Field Museum Members' Nights. <u>Tours</u>: Behind-the-scenes tours.

### **Gloria Levitt**

<u>Education Programs</u>: Field Museum Members' Nights; Women's Board and Founder's Council events. <u>Tours</u>: Behind-the-scenes tours for donors, VIPs.

# Robert D. Martin

<u>Education Programs</u>: Field Museum Members' Nights; Founders' Frontiers Symposium; Annual Fund events; Anthropology Alliance events; Council on Africa events. <u>Exhibit Development</u>: Lead Curator, *Opening the Vaults: Mummies*; Lead Curator, *Images of the Afterlife;* Advisory Curator, *Scenes from the Stone Age: The Cave Paintings of Lascaux.* 

### Linda Nicholas

<u>Exhibition Development</u>: Contributions to Community Museum, Santiago Matatlán, Oaxaca, Mexico; Contributions to Community Museum, San Pablo Villa de Mitla, Oaxaca, Mexico. <u>Public Presentations</u>: Lecture on El Palmillo, Museum Committee, Santiago Matatlán, Oaxaca, Mexico.

### Lisa Niziolek

Education Programs: Field Museum Members' Nights; Field Ambassadors' event.

Exhibit Development: Collections assistance, *Maharaja: The Splendor of India's Royal Courts;* Collections assistance, China Hall.

<u>Tours</u>: Behind-the-scenes tours for students, interns, volunteers, staff, and visiting researchers and scholars.

Web and New Media: Content development, Java Sea Wreck website.

# **Ruth Norton**

<u>Education Programs</u>: Field Museum Members' Nights; Lecturer, Chicago Cultural Alliance; Collection Assessments for Chinese American Museum of Chicago, Polish Museum of America, American Indian Center of Chicago; Women's Board Women in Science luncheon; Seminar with Chief of the Cultural Heritage Protection Treaties Section of UNESCO; Seminar with Director of the Citizens' Archive of Pakistan.

Exhibit Development: Conservator, Fashion and The Field Museum Collection: Maria Pinto; Conservator, China Hall; Conservator, Genghis Khan; Process, FM video for Searle Lounge.

<u>Media Development</u>: Interviewed for feature article in *Medill Journal*, Northwestern University, Medill School of Journalism.

<u>Tours</u>: Behind-the-scenes tours for Institutional Advancement and President's Office; Artifact housing tour for School of the Art Institute, Brown Study Collection.

### William A. Parkinson

Education Programs: Field Museum Members' Nights; Field Museum Expeditions.

Exhibit Development: Lead Curator, *Genghis Khan*; Lead Curator, *Scenes from the Stone Age: The Cave Paintings of Lascaux*; Curator, China Hall; Committee Member, Egypt Hall Exhibit Planning Team. <u>Public Presentations</u>: Lecturer, A Particson TDK (The Student Archaeology Club of the Attila József Scientific University), Szeged, Hungary; Lecturer, University of Wisconsin-Milwaukee chapter of the Archaeological Institute of America; Lecturer, Department of Anthropology Lecture Series, Field Museum; Lecture, Office of Social Science Research, University of Illinois at Chicago; Lecturer, Department of Anthropology, University of Wisconsin, Madison, WI.

<u>Web and New Media</u>: Field Museum Expeditions: Uncovering Early Village Life in Southeastern Europe: The Körös Regional Archaeological Project; Kish Archaeological Site website rebuild.

<u>Tours</u>: Behind-the-scenes tours for Institutional Advancement, Anthropology Alliance, visiting VIPs, Irving Elementary Students, Oak Park, IL.

### Christopher J. Philipp

Education Programs: Field Museum Members' Nights.

Exhibit Development: Contributor, *Witnesses of the Past*, University of Papua New Guinea and National Library, Port Moreseby, Papua New Guinea.

<u>Tours</u>: Behind-the-scenes tours for Institutional Advancement, Group Sales, Administration, Auxiliary Groups, Museum Members, visiting specialists, visiting VIPs, Anthropology Alliance, numerous school and university groups.

### James L. Phillips

Exhibit Development: Co-Curator, Opening the Vaults: Mummies; Co-Curator, Images of the Afterlife; Co-Curator, Scenes from the Stone Age: The Cave Paintings of Lascaux.

### Matthew Piscitelli

<u>Media Development</u>: Contributor, American Association of Anthropologist blog, *The Huffington Post*; Interview for American Anthropology Association podcast series; Interview, *Box Office Magazine*.

### Alaka Wali

<u>Education Programs</u>: Anthropology Alliance; Wilmette Public Library; New York Hall of Science; Women's Board Outreach Luncheon; Algonquian Languages Conference; Members' Nights; Annual Fund Donors Event.

Exhibit Development: Co-Curator, Fashion and The Field Museum Collections: Maria Pinto. Media Development: WBEZ Radio Show (848 with Tony Sarabia). Tours: Behind-the-scenes tours for Institutional Advancement; New Trustee Orientations.

### **Brittany Wheeler**

<u>Education Programs</u>: Field Museum Members' Nights; Newberry Consortium in American Indian Studies; Field Museum Contributor, Graduate Student Summer Institute at the Newberry Library. <u>Tours</u>: Behind the scenes tours for Education Department and Algonquian Conference. <u>Other</u>: Support for visiting researchers and non-repatriation tribal visits.

## Patrick Ryan Williams

<u>Education Programs</u>: Field Museum Members' Nights; Contisuyo Archaeological Field School, Moquegua, Peru.

<u>Exhibit Development</u>: Member, Egypt Hall Planning Committee; Member, China Hall Planning Committee; Content Advisor, *Opening the Vaults: Mummies*.

Public Presentations: Opening Lecture, Wari: Lords of the Ancient Andes, Cleveland Museum of Art.

# **DEPARTMENT OF BOTANY**

### Mark Alvey

<u>Education Programs</u>: Field Museum Members' Nights; numerous behind-the-scenes tours for school groups, families, and individuals; Content coordinator, *Opening the Vaults: World's Columbian Exposition* exhibit.

## Anna Balla

Education Programs: Field Museum Members' Nights.

### Laura Briscoe

Education Programs: Field Museum Members' Nights; Educator Open House.

### William Burger

Education Programs: Field Museum Members' Nights.

### Michael O. Dillon

Web and New Media: Developer and webmaster, Andean Botanical Information System, *ABIS* (www.sacha.org).

### **Darlene Dowdy-Pritchett**

Education Programs: Field Museum Members' Nights.

## Krysta Duran

Education Programs: Field Museum Members' Nights.

### Sabine Huhndorf

Education Programs: Field Museum Members' Nights.

# Maria Lucia Kawasaki

Education Programs: Field Museum Members' Nights.

### **Patrick Leacock**

<u>Education Programs</u>: Field Museum Members' Nights; Instructor, Fungi of Northern Illinois, Morton Arboretum Naturalist Certification Program.

<u>Public Presentations</u>: Invited programs: Illinois Mycological Association, Chicago, IL; Mycological Association of Washington, Washington D.C.; McHenry County College Conference Center, Crystal Lake, IL.

Tours and Field Trips: Field trips, Illinois Mycological Association, Wisconsin Mycological Society.

# **Robert Lücking**

<u>Education Programs</u>: Field Museum Members' Nights; Lichen Exhibit at Annual Fund Behind-the-Scenes event.

Exhibit Development: Botanical elements, Biomechanics exhibit.

<u>Media Development</u>: International Innovation Journal Report "Looking for Lichen" about NSF Project "Neotropical Epiphytic Microlichens - An Innovative Inventory of a Highly Diverse yet Little Known Group of Symbiotic Organisms."

Web and New Media: New interactive identification key format for desktop and tablet computers; EOL LifeDesk pages.

## H. Thorsten Lumbsch

<u>Education Programs</u>: Educator Open House, Field Museum; numerous behind-the-scenes tours. <u>Other</u>: Behind-the-scenes tours for donors, Trustees, and other VIPS.

## Joanna McCaffrey

<u>Education Programs:</u> Field Museum Members' Nights. <u>Other</u>: Demonstrations of digitization/scanning facilities to various visitors, classes, donors, VIPs, etc.

## **Christine Niezgoda**

<u>Education Programs</u>: Field Museum Members' Nights. <u>Other</u>: Herbarium tours for Field Museum Trustees, Annual Fund members, and other Institutional Advancement constituents.

# Sittiporn Parnmen

Education Programs: Field Museum Members' Nights; Chicago Public Schools Teacher workshop.

# **Richard H. Ree**

<u>Web and New Media</u>: Developer, Biodiversity of the Hengduan Mountains web site/database; Lagrange software for historical biogeographical inference; Ivy, software for interactive phylogenetic analysis; Phylografter, collaborative synthesis of phylogenetic trees.

## Matt von Konrat

<u>Education Programs</u>: Members' Nights, Connecting Biodiversity Research with Curriculum in partnership with Wilbur Wright College and Northeastern Illinois University.

Public Presentations: Lincoln Park Conservatory, Chicago Park District, Chicago.

<u>Tours</u>: Various Behind-the-Scenes Tours, e.g., Wilbur Wright College, Chicago Art Institute, Lincoln Park Conservatory.

Web and New Media: Editor, *Liverworts*, The New Zealand Plant Conservation Network

(www.nzpcn.org.nz); Editor, *Bryophytes*, DiscoverLife (www.discoverlife.org/bryophyta); Developer and Editor of the GBIF funded *Early Land Plants Today* (http://www.early-land-plants-today.org); Contributor, www.biology.duke.edu/bryology/LiToL/; contributor to various *Field Revealed* videos.

# DEPARTMENT OF GEOLOGY

### Kenneth D. Angielczyk

<u>Education Programs</u>: *I Dig Tanzania! 2012*, educational program in which 16 teenagers from Chicago followed the work of a team of paleontologists in the Ruhuhu Basin, Tanzania, using uploaded photos, satellite phone calls, and the virtual world Teen Second Life, collaborative project between Department of Geology, Education Department, and Biodiversity Synthesis Center.

<u>Media Development</u>: Interview, *Chicago Tribune*; Author, 14 posts during Brazil fieldwork for *New York Times*' Scientist at Work blog; Guest, *Extension 720 with Milt Rosenberg*, Radio 720 WGN.

<u>Other</u>: Council on Africa and Field Associates Unpacking Party focusing on Specimens from 2012 Tanzania Fieldwork; Presentation (with Audrey Aronowsky) on *I Dig Science* and Game of Bones for Executive Committee of the Board of Trustees; Council on Africa year-end dinner.

### Marlene Hill Donnelly

Education Programs: Field Museum Members' Nights.

Other: Chicago Botanic Garden, Certificate Program classes: Botanical Drawing I, II, and III; Color Mixing I and II; Pastel Landscape Painting. Morton Arboretum, Certificate Program: Botanical Illustration.

## lan Glasspool

<u>Education Programs</u>: "Fossil Plant Lab" Earlham College, Chicago held at The Field Museum. <u>Exhibition Development</u>: Consultant, *Biomechanics;* Consultant, exhibit development at Pratt Museum, Alaska.

<u>Web abd New Media</u>: Grainger Digital Initiative, Geology and Paleobotany websites: content developer and publisher.

Media Development: Interviews: Fox News, Chicago Sun-Times, New Scientist Magazine.

<u>Other</u>: Behind-the-scenes tours: donors, university groups; fossil identification for members of the public.

### Lance Grande

Education Programs: Field Museum Members' Nights.

<u>Public Presentations</u>: Earth Science Club of Northern Illinois, "Snapshots from Deep Time: the 52-million year old community of Fossil Lake."

# Philipp R. Heck

<u>Education Programs</u>: Field Museum Members' Nights; Field Ambassador Program; Education Open House for graduate students.

Exhibit Development: New display case in the Robert A. Pritzker Center for Meteoritics and Polar Studies and at the Chicago Center for Cosmochemistry, University of Chicago.

<u>Media Development</u>: Member of the international research consortium for the study of the Sutter's Mill carbonaceous chondrite, gave interviews to several local news media including WBEZ, ABC 7 Chicago, WTTW, *Chicago Sun-Times, Chicago Tribune*, and Fox about The Field Museum's acquisition of the Sutter's Mill meteorite; Official museum press release on the publication in *Science* of the first results of the study of the Sutter's Mill meteorite.

<u>Public Presentations</u>: Host and presenter, Astronomical League's Annual Convention 2012 in the Museum's Simpson Theater; Second French-American Science Festival organized by the Consulate General of France in Chicago.

<u>Web and New Media</u>: Content provider and maintenance of new website for the Robert A. Pritzker Center (meteorites.fieldmuseum.org) and its new Facebook page; Content provider, blogger, and photographer for the expedition Meteorites & Stromatolites Expedition at the expeditions.fieldmuseum.org website. <u>Other</u>: 22 Behind-the-scenes tours of the Robert A. Pritzker Center for Meteoritics and Polar Studies for 188 visitors; 47 professional researchers visited the Robert A. Pritzker Center's collection and were given special tours; Freedom Gala, Pritzker Military Library; Mars Science Laboratory (MSL) landing event at the Museum of Science and Industry. Meteorite identification service for the general public.

## James L. Holstein

Education Programs: Field Museum Members' Nights.

Exhibit Development: Department consultant for the *Grainger Hall of Gems* content and maintenance. <u>Media Development</u>: *Chicago Tribune*, and *Chicago Tonight* interviews on Sutter's Mill meteorite fall. <u>Public Presentations</u>: Des Plaines Valley Geology Club, "Meteorite Impacts and Near Earth Objects"; Illinois Science Council Presentation on the Perseid meteor shower; Speaker "Adler After Dark" program, Adler Planetarium.

Web and New Media: Administrator for the Robert A. Pritzker Center for Meteoritics and Polar Studies Facebook page.

<u>Other</u>: 22 behind-the-scenes tours of the Robert A. Pritzker Center for Meteoritics and Polar Studies and/or the Department of Geology; Meteorite identification upon request for the general public.

### Scott Lidgard

Education Programs: Field Museum Members' Nights.

<u>Web and New Media</u>: *BryoZone* (http://www.bryozone.net), an interactive global database and website for Bryozoa that aims to foster preservation and dissemination of scientific knowledge of this diverse phylum of colonial invertebrate animals.

<u>Other</u>: Behind-the-scenes tours to visiting scientists and several college and university biology and geology classes.

### Peter J. Makovicky

<u>Education Programs</u>: Field Museum Members' Nights; Lecturer, "Ethics and Responsible Conduct in Research" to Research Experience for Undergraduate interns.

Exhibit Development: Provided content and scientific oversight of exhibit panels, interactive computer game, and two videos for Searle Lounge renovation; proposed and initiated project content for upcoming temporary exhibit *Antarctic Dinosaurs*; Provided conceptual oversight and content ideas for Field Museum exhibit cases at Lurie Children's Memorial Hospital; Content contributor, *Nature's Toolbox* exhibit. <u>Media Development</u>: Publication of paper in *Proceedings of the Royal Society B* entitled "No evidence for directional evolution of body mass in herbivorous theropod dinosaurs" was covered by several science blogs including Phys.org, newswise, examiner.com, newstrack india, etc.; Interview with Medill news service on new species of Canadian dinosaur in late November; Interviews with *Nature* and *Science* in conjunction with museum budget balancing in December 2012.

<u>Public Presentations</u>: Earth Science Club of Northern Illinois, DuPage County Community College. <u>Other</u>: Tour for Trustee Dinner hosted by John Canning; tour of CRC for guests of Trustee R. Chaifetz; Tour for guests of trustee Sue Benton.

### Paul S. Mayer

<u>Education Programs</u>: Field Museum Members' Nights; Boy Scout Geology badge program. Exhibit Development: *Biomechanics* exhibit.

Media Development: Edited short story for *In the Field* Magazine. Interviewed by Medill Reports Chicago for newspaper article on fossil spiders.

Public Presentations: Lecture for the Chicago Shell Club.

Web and New Media: Fossil of the Week on Facebook, Digitization of the Cephalopod type, Figured and referred Collection and KE EMu Database conversion.

<u>Other</u>: Silurian reef exhibit for Children's Hospital, ESCONI Rock and Mineral Show exhibit. Collection tours for classes from Northwestern University, University of Chicago, Chicago Art Institute, Rock Valley College, Cornell University, University of North Carolina—Wilmington; plus tours and various behind the scenes tours and Fossil identification for members of the public.

# **Olivier Rieppel**

Education Programs: Field Museum Members' Nights.

# Akiko Shinya

Education Programs: Field Museum Members' Nights; Dozin' with the Dinos, Boy scouts badge day.

# William F. Simpson

<u>Education Programs</u>: Field Museum Members' Nights; Content reviewer, new Harris Loans programs; Trainer, collections management techniques for Stones & Bones program.

Exhibit Development: Curator, *Extreme Mammals* traveling exhibit; Advisor, redevelopment of SUE exhibits in Searle Lounge including redesign of SUE skull case; Advisor, redesign of pterosaur exhibit in *Evolving Planet*.

<u>Media Development</u>: Various interviews on paleontology, including live interview on *Chicago Tonight*, and interview with *Red Eye*. Worked with BioSynC staff on new internet games involving Field Museum fossils.

Public Presentations: Speaker, Winter Founders' Council Fundraiser, hosted by Kate Donaldson and Ryan Whitacre; Lecturer and tour, two events in the Young Scholars Program; Lecturer and tour, Advanced Science Club of Bureau Valley High School.

<u>Web and New Media</u>: Worked with Exhibitions Media Producer to produce photos and videos of vertebrate collection ranges for video on the process of Field Museum research.

<u>Other</u>: Talk and tour of dinosaurs for terminally ill child; Fossil identification for members of the public; Supervised search of Fossil Vertebrate collections ranges by Secret Service in advance of NATO meeting; Organized displays and spoke to donors at President's Leadership Council fundraiser; Worked with John Weinstein to produce photos of vertebrate collection ranges for photos used at donor appreciation event for posting around the museum; Various behind-the-scenes tours: 13

Institutional Advancement tours including donors, dignitaries, Founders' Council Members, Members of the Board, educational tours including university classes, and intern tours; Tour of public lands collections and had discussion with Gary Machlis, Science Advisor for National Park Service, on new NPS Repository Agreement; Talk and tour of Fossil Mammal Range as children's party event for President's Leadership Council fundraiser; Organizer, field trip for 2012 Annual Meeting of the Society for Cenozoic Research, also provided tours of vertebrate collections on trip.

# Paul P. Sipiera

Education Programs: Field Museum Members' Nights.

<u>Media Development</u>: Featured scientific expert interviewed on four of Frank Carmichael's Happenings Q & A radio program brodcasts on station WLIP in Kenosha, WI; Radio interview, WCCI in Savannah, IL.

<u>Public Presentations</u>: Bi-monthly SKYWATCH (April–October) public astronomical viewing, April Boy Scout Jamboree weekend, Transit of Venus and partial solar eclipse observing events, and meteorite information sessions at the Apple River Fort State Historic Site in Elizabeth, IL; Seven presentations on Earnest Shackleton, Apollo 11 Moon landing anniversary, Mars Curiosity Rover, Antarctic search for meteorites, Perseid meteor shower, Blue Moon, and the Mayan Calendar at the 1876 Banwarth House and Museum in Elizabeth, IL; Meteorite display and demonstration provider at the JETSAstronomical Observatory, Freeport, IL; Class presentation on Antarctica, Scales Mound, IL Elementary School. <u>Other</u>: Primary point of contact for meteorite identification for the general public; Tours of the Robert A. Pritzker Center for Meteoritics and Polar Studies for special groups and individuals.

# Nathan D. Smith

Education Programs: Field Museum Members' Nights.

Web and New Media: Provided information and media for updating of *Expeditions@fieldmuseum* webpage on Antarctic field project.

<u>Other</u>: Tour of FMNH collections and preparation labs for the Loyola University Chicago Biology Boot Camp, a summer program for incoming biology majors; Tour of FMNH collections and preparation labs for the 2012 Society for Cenozoic Research meeting attendees; Tour of collections and research facilities at the Field Museum to 20 students from Schaumburg High School.

### Constance Van Beek

Education Programs: Field Museum Members' Nights; Dozin' with the Dinos Overnights.

Media Development: Various media interviews on fieldwork, preparation.

<u>Other</u>: Fossil identifications for the general public; Scientist on the Floor: Extreme Mammals presentation for donors and special guests; Teaching Assistant for "Stones and Bones: A Practicum in Paleontology," Graham School of General Studies, University of Chicago

<u>Tours</u>: Various behind-the-scenes tours, private tours for donors and special guests; Geology clubs; Scout groups and teachers' groups.

# DEPARTMENT OF ZOOLOGY

## Rebecca Banasiak

<u>Education Programs</u>: Field Museum Members' Nights; Tanzanian educational outreach products (posters, calendars, booklets, guide sheets); Instructor, Field Museum "Boy Scout Badge Days"; Illustrator, *Virtual Visits*; Artist, The Big Draw at the Field Museum Sketch Scavenger Hunt; Instructor, Field Ambassador Education Workshop.

<u>Media Development</u>: Developer, "African Type Project" on KE Emu.

<u>Tours:</u> Various behind-the-scenes tours for Field Museum guests, School for the Art Institute of Chicago students, etc.

<u>Web and New Media</u>: Developer, *Mammals of Tanzania*; Developer, Field Museum Division of Mammals Website; Content Provider, "Mammal Mondays" on FMNH Facebook page.

Other: Developer (photographs and illustrations), various publications on Tanzanian small mammals.

### John M. Bates

<u>Education Programs</u>: DePaul University Architecture class, Columbia University Communications Course, University of Chicago, Introduction to Field Museum Course; University of Chicago Graduate Ethics course. Field Museum Council on Africa, President's Leadership Council/Harris Loan Reopening, Leakey Dinner, Filed Associate Council on Africa unpacking party, Council on Africa Behind the scenes tour, Parker/Gentry Award presentation.

Exhibit Development: Collections and research content advisor, *Ronald and Christina Gidwitz Hall of Birds*.

Public Presentations: Lake County Audubon, McHenry County Audubon.

### **Rüdiger Bieler**

Exhibit Development: "Science on the Half Shell" traveling exhibition (based on RB's Exploring the Bivalve Tree of Life research program).

<u>Media Development</u>: Use of field and laboratory photographs in various exhibition and textbook projects. <u>Tours</u>: Various behind-the-scenes tours.

<u>Web and New Media</u>: Developer, bivalve-focused web sites www.bivatol.org, www.bivatol.org/bits and gastropod-focused site at vermetus.org; Developer, Expeditions: Moreton Bay site; Developer, *Malacological Journals & Newsletters* (http://emuweb.fieldmuseum.org/iz/journals.php) website.

### James H. Boone

Education Programs: Field Museum Members' Nights.

Exhibit Development: Content Specialist, Abbott Hall of Conservation—Restoring Earth and Biomechanics.

Media Development: Insect of the week - FMNH Facebook feature.

<u>Tours</u>: Various behind-the-scenes tours for: Institutional Advancement, new employees, students, visiting specialists.

Web and New Media: Content specialist, Division of Insects web page.

Other: Developer, Insect staff display case.

# Gracen Brilmyer

<u>Media Development</u>: Designed and created Ants of the Florida Keys poster for public outreach; created insect drawings for Field Museum Facebook page.

<u>Tours</u>: Various behind-the-scenes tours, including School of the Art Institute undergraduate classes and other visitors.

### Matthew P. Davis

<u>Education Programs</u>: Field Museum Members' Nights; Dozin With the Dinos (tours, presentations). <u>Exhibit Development</u>: Content Advisor, *Creatures of Light* exhibit.

Tours: Numerous tours, fishes collection for high school students.

Web and New Media: Content creator for websites and audio podcasts (What the Fish podcast).

## Joshua I. Engel

Media development: Appearance on Chicago Tonight.

<u>Public Presentations</u>: Evanston North-Shore Bird Club; McHenry County Audubon Society; Lake-Cook Audubon Society; Prairie Woods Audubon Society; DuPage Birding Club.

Web and New Media: Content manager, African Birds.

<u>Other</u>: Field trip leader, Illinois Young Birders, Illinois Ornithological Society, Evanston North Shore Bird Club.

## Jochen Gerber

<u>Education Programs</u>: Field Museum Members' Nights. <u>Tours</u>: Various behind-the-scenes collections tours.

### Anna Goldman

<u>Education Programs</u>: Field Museum Members' Nights; Project Exploration's Junior Paleontologist Program; Mammal Instructor, Boy Scout Badge Day; Dozin with the Dinos Workshop; Organized mammal display table and volunteers for Donor Appreciation Night; Updated case content for Harris Education and Loan; Mammal Preparation Demonstration for President's Leadership Council / Harris Education and Loan Re-Launch; Evolution and Mammals Tour for AP Biology Students from St. Charles North High School.

<u>Public Presentations</u>: "I Found This at the Side of the Road," A Guide to Skeletal Preparation: A Natural History Network Event, University Museum of Zoology, Cambridge University, England.

<u>Tours</u>: Various behind-the-scenes tours for Institutional Advancement, donors, trustees, visiting VIP's, new employees, visiting professors, and students.

<u>Web and New Media</u>: Youth Design Team Video about Humans vs. Dolphins, Developer for Virtual Visits Pilot Program and Squirrel Beetle time-lapse video.

<u>Other</u>: Trained students and international researchers from National Museums of Kenya; Karisoke Research Center, Rwanda; Universidade Federal do Espírito Santo, Brazil; on mammal preparation and collection management.

### Steven M. Goodman

<u>Media Development</u>: Newspaper interview, *La Monde*; Radio interview, Radio France International, several Malagasy radio stations; Television interview, Malagasy Broadcasting Company, France 5; Magazine interviews and corrections, *National Geographic*.

### Shannon J. Hackett

<u>Education Programs</u>: Field Museum Members' Nights; Education programs on the changing nature of science for science teachers; education programming associated with *DNA Discovery Center*, education programming for home school students, Field Museum; DNA Residency Program, Discovery Center high school and teacher internship program, Field Museum; NIH collaboration with University of Chicago to create systems biology, evolution, and genomics programs; Education Teacher Training Workshops on birds, systematics, and evolution.

Exhibit Development: Curator, Ronald and Christina Gidwitz Hall of Birds; DNA Discovery Center. Media Development: Interview for ABC7 news regarding opening of Bird Hall; Interview and weeklong internship for Medill School of Journalism students, Northwestern University.

Public Presentations: Talk to the Scientist Hour in the DNA Discovery Center; Presenter, Evanston Bird Club.

Tours: Various collection tours and presentations about the Department of Zoology, Pritzker Laboratory, and the Bird Division.

Web and New Media: Content Specialist, Ronald and Christina Gidwitz Hall of Birds; Member, Web User's Group; Content Specialist, DNA Discovery Center web site; Content Specialist, Pritzker Lab web site; Content Specialist, Early Bird Tree of Life web site; Content Specialist, DNA Discovery Center's Facebook page; Content Specialist, FMNH Facebook "Bird of the Week."

## Lawrence R. Heaney

Exhibit Development: Contributor of video content for "Extreme Mammals," an author of article for In the Field that promoted the exhibit.

Media Development: Interview as President of International Biogeography Society for International Innovation magazine and website.

Tours: Ambassador Jose Cuisia and Consul General Leo Herrera-Lim, Philippines; Assistant Director and staff of Philippine National Museum; behind-the-scenes tours of research and collection areas for Institutional Advancement.

## Mary Hennen

Education Programs: Field Museum Members' Nights.

Web and New Media: Chicago Peregrine Program website.

Media Development: Interviews: CBS, NBC, ABC, Chicago Tribune, Chicago Sun-Times, Hyde Park Herald, Elgin Courier News, Lake Cook Audubon Newsletter, WGN radio, WBBM radio.

Tours: Dozin with the Dinos, Group Sales, 95% Share; Chicago Audubon Society; Near North Montessori School: Museum of Science & Industry; School of the Art Institute; U.S. Fish & Wildlife Service Volunteers; Greenwood School of Waukegan; Madison Audubon Society.

Other: Director, Chicago Peregrine Program.

## Janeen Jones

Education Programs: Field Museum Members' Nights.

Tours: Hope College Invertebrate Zoology Class tour: various behind-the-scenes collection tours. Web and New Media: Web Publisher; Professional Staff Web Video project organizational committee.

# Kathleen Kelly

Education Programs: Field Museum Members' Nights.

Tours: Behind-the scenes collection tours for Dozin with the Dinos, Institutional Advancement, visiting VIPs, Auxiliary Groups, college courses, etc.

Web and New Media: Content Specialist, Amphibians and Reptiles Divisional web site.

### Ben Marks

Exhibit Development: Ronald and Christina Gidwitz Hall of Birds, meetings about development of the upcoming Biomechanics exhibit.

Public Presentations: University of Loyola Freshman orientation; SAIC Form and Function design course; Philippine National Museum Committee

### Susan F. Mochel

Education Programs: Field Museum Members' Nights. Exhibit Development: Contributor: Creatures of Light, Biomechanics. Web and New Media: Participant: What the Fish?, Professional Staff Video. Tours: Behind-the-scenes tours of Division of Fishes Collections for various groups and individuals.

# Corrie S. Moreau

<u>Education Programs</u>: Lecturer, Field Museum Youth Design Team academic high school course; Ant Course presentation, Kampala, Uganda, Africa.

Exhibit Development: Lead curator, *The Romance of Ants* exhibit; Content contributor, *Nature's Toolbox: Biodiversity, Art, and Invention* exhibit.

<u>Media Development</u>: Lead curator, *The Romance of Ants* exhibit; Interviewed for Field Museum Women's Board "Women in Science" video podcast; Interviewed by the *Chicago Tribune* for article about urban ant collecting and citizen science; Interviewed for NPR's News Blog "The Two Way" about the NPR AntCam; Radio interview for Chicago radio station (101.9 FM) on "MIX Matters."

Public Presentations: Presenter, School for the Art Institute of Chicago's entomology course.

Tours: Ant Course at Southwest Research Station in Kampala, Uganda, Africa.

<u>Web and New Media</u>: *Romance of Ants* companion website; *AntWeb*–AntBlog "expert"; AntWeb – Ants of the Florida Keys; AntWeb – Ants of Queensland, Australia; Personal Field Museum website; Ant Genomics website.

<u>Other</u>: Various collection tours and presentations about the *DNA Discovery Center* and Division of Insects.

# Andria Niedzielski

<u>Education Programs</u>: Field Museum Member's Nights; Mammals display table at Donor Appreciation Night; Mammal Preparation - President's Leadership Council/Harris Education and Loan Re-Launch Exhibit Development; Dozin' With The Dinos; Animal Teeth/ Diet Lecture; Big Draw Chicago; Educator Open House—"Virtual Visits (Pilot Program)."

<u>Tours</u>: Behind-the-scenes tours: Boy Scout groups, classes from The School of the Art Institute of Chicago.

<u>Web and New Media:</u> Virtual Visits participant; Expansion of Philippine Mammal Website. <u>Other</u>: Trained students & international visitors mammal preparation techniques and cataloging procedures.

# Bruce D. Patterson

Education Programs: Field Museum Members' Nights.

<u>Exhibit Development</u>: Content specialist/co-curator for *Extreme Mammals*; revised labels for "Mammals of the World"; consultation on specimens for *Biomechanics*; planning for "Bats: Masters of the Night." <u>Media Development</u>: *Chicago Tonight* episode on *Extreme Mammals*"; CBS Evening News episode on cougars in the Midwest; "Mysteries of the Museum" episode on Tsavo lions.

Tours: Leader, "Big Cats of Botswana."

Web and New Media: personal web site; Google Scholar (profile); "Lions," One Species at a Time, Encyclopedia of Life (podcast); "Bat Calls from Kenya," The Field Revealed (video).

# Martin D. Pryzdia

<u>Education Programs</u>: Field Museum Members' Nights. <u>Tours</u>: Various behind-the-scenes tours.

# Alan Resetar

<u>Education Programs</u>: Field Museum Members' Nights; Leader, Chicago Wilderness Calling Frog Survey Workshop, Chesterton, IN; Herp survey team leader, St. Joseph County Parks BioBlitz, Spicer Lake, South Bend, IN.

Exhibit Development: Biomechanics.

Media Development: Interview for WBEZ "Curious City" program.

<u>Tours</u>: Co-leader, behind-the-scenes Tour of Field Museum CRC wet collections for various groups. <u>Web and New Media</u>: Field Museum Facebook Herp Day; Alan Resetar staff blog.

# Petra Sierwald

Exhibit Development: Content development, *Biomechanics* exhibition.

<u>Media Development</u>: Millipede type specimen imaging and development of morphological atlas. Tours: Various behind-the-scenes tours.

<u>Web and New Media</u>: Development of *Milli-PEET*, extensive site on millipede morphology, systematics and biology, http://fieldmuseum.org/explore/milli-peet/milli-peet-class-diplopoda.

### W. Leo Smith

Education Programs: Field Museum Members' Nights.

Exhibit Development: Lead curator, Creatures of Light exhibit.

Media Development: Interviews: WGN Radio.

<u>Public Presentations</u>: Presenter, Meet the Scientist Hour, *DNA Discovery Center*, Dozin' with the Dinos; Founder's Council.

<u>Tours:</u> Behind-the-scenes tours for Education department and institutional advancement, visiting scientists, VIPs, etc.

Web and New Media: What the Fish? Biweekly fish podcast.

### William T. Stanley

<u>Education Programs</u>: Field Museum Members' Nights; Tanzanian educational outreach products (posters, calendars, booklets); Education Virtual Classroom.

Exhibit Development: Advisor: Biomechanics, Extreme Mammals.

Media Development: Bats on Halloween, ABC news.

<u>Tours</u>: Tour Leader, Field Museum Tanzania Safari; Tour Leader, Trustee Serengeti tour; Myriad Behind-the-scenes tours for Field Museum Board members; Institutional Advancement, new Trustees, visiting VIPs; Unpacking Party.

<u>Web and New Media Projects</u>: Developer, *Mammals of Tanzania*; *Mammal Mondays* on FMNH Facebook page; Developer, Field Museum Division of Mammals Website; *Field Revealed* video.

### Kevin Swagel

Education Programs: Field Museum Members' Nights.

Exhibit Development: Contributor, *Creatures of Light*, Contributor, *Biomechanics*.

Tours: Behind-the-scenes tours for a variety of groups, classes, and individuals.

Web and New Media: Interview, What the Fish?; Participant, Professional Staff video.

### Margaret K. Thayer

Education Programs: Field Museum Members' Nights.

Exhibit Development: Content advisor, Nature's Toolbox.

<u>Media Development</u>: Guest on *Worldview*, WBEZ; Guest on Extension 720, WGN.

<u>Tours</u>: Various behind-the-scenes tours.

<u>Web and New Media</u>: Co-maintainer of Division of Insects' web pages; Personal web profile with occasional blog posts; Webmaster, FMNH-AAUP chapter website.

### Janet R. Voight

Education Programs: Field Museum Members' Nights.

Exhibit Development: Content specialist, *Creatures of Light* temporary Exhibition; Contributor, *Nature's Tool Box*.

<u>Media Development</u>: Interviews about invasive species and deep-sea conservation with MSNBC, *BBC News, Nature News, Science Mail* (AAAS), BBC Radio "*The World Today*," *National Geographic News,* British Science Omega; *BBC Wildlife Magazine*; Naked Scientist podcast

(http://www.thenakedscientists.com); interview and photo shoot for *Chicago Reader* annual People issue; live radio interview with call-ins: *The Larry Meiller Show*, Wisconsin Public Radio.

<u>Public Presentations</u>: Invited Keynote Speaker University of Wisconsin, Madison: Darwin Days; Keynote speaker Malcolm X College Science, Technology Engineering Math Symposium, Chicago, IL.

Web and New Media: Featured Scientist, *The Field Revealed* video series "Getting to Know the Deep Sea."

Tours: Four Behind the Scenes Tours for Founders Council members.

## Harold K. Voris

Education Programs: Field Museum Members' Nights.

### Stephanie Ware

Education Programs: Field Museum Members' Nights.

Exhibit Development: Content provider, World of Birds.

<u>Media Development</u>: Interviews or photographs for *Chicago Tribune*, *Chicago Sun-Times*, WGN, CBS-Chicago, NBC-Chicago, Fox-Chicago and other local media.

<u>Web and New Media</u>: Administrator, Scholarship Committee Application site; Developer/Administrator, *Midwest Peregrine Falcons* Flickr group; Content provider, FMNH *Illinois Peregrines* page; Content provider, *The Field Revealed*, "Recovering Peregrines with Mary."

Tours: Various behind-the-scenes tours.

<u>Other</u>: Designer, photographer and content provider for the "Collections and Research Scholarship Committee 2012 Summer Interns" booklet.

### Jason D. Weckstein

<u>Education Programs</u>: Field Museum Members' Nights; Specimen show-and-tell for 3<sup>rd</sup> Grade, Lincolnwood Elementary School; Specimen show-and-tell for Malaria: Blood, Sweat, and Tears exhibit opening; Lecture for two visiting Art Institute of Chicago Ornithology classes on bird parasite research. <u>Web and New Media</u>: *Field Revealed* video, "Variety is the Spice of Lice" (http://vimeo.com/44956295); *Expeditions@fieldmuseum* videos: "Amazonian Birds" (http://vimeopro.com/fieldmuseum/amazonianbirds"; Contributor, http://birds.fieldmuseum.org/ website; constructed website for National Science Foundation Funded Project on southern Amazonian birds and their parasites.

Public Presentations: Evanston North Shore Bird Club.

<u>Tours</u>: Myriad Behind-the-scenes tours for elementary school groups; Northerly Island field walk with summer interns.

### Mark W. Westneat

Education Programs: WhyReef, Encyclopedia of Life, IGERT Training program.

Exhibit Development: Biomechanics exhibit development.

Public Presentations: Donor Appreciation Night.

<u>Tours</u>: Behind-the-scenes tours for Institutional Advancement, prospective donors, Collections and Research Board members, visiting classes.

<u>Web and New Media</u>: Research web site, software development, Encyclopedia of Life, Biodiversity Synthesis Center; *Science@FMNH* videos; video for *Biomechanics*.

### **BIODIVERSITY SYNTHESIS CENTER**

### Audrey Aronowsky

<u>Education Programs</u>: Field Museum Members' Nights, I Dig Tanzania, Digital Planet, Summer Youth Design Team.

Public Presentations: Presenter, Annual Fund and Founders Council groups.

Tours: Various behind-the-scenes tours.

Web and New Media: WhyReef, Science@FMNH series, Bird Hall website, BioSynC quarterly enewsletter, EOLetter.

### **Torsten Dikow**

Education Programs: Field Museum Members' Nights.

<u>Tours</u>: Various behind-the-scenes tours. <u>Web and New Media</u>: Asiloidea LifeDesk.

# Sarah Kim

Education Programs: Field Museum Members' Nights.

### **Beth Sanzenbacher**

Education Programs: Field Museum Members' Nights; *I Dig Tanzania; Digital Planet;* Summer Youth Design Team. <u>Public Presentations</u>: Presenter, Annual Fund and Founders Council groups. <u>Tours</u>: Various behind-the-scenes tours. <u>Web and New Media</u>: *WhyReef, Science@FMNH* series, *What the Fish?* series, Bird Hall website, BioSynC quarterly e-newsletter, EOLetter.

### Mark W. Westneat

Exhibit Development: Curator, *Biomechanics* exhibit. <u>Public Presentations</u>: Presenter, Annual Fund and Founders Council groups. <u>Tours</u>: Various behind-the-scenes tours.

### LIBRARY

#### **Melissa Anderson**

<u>Education Programs</u>: Field Museum Members' Nights; Edible Treasures Garden Programming. <u>Other</u>: Behind-the-scenes tours for various groups; Chicago Foundation for Women: leadership and development workshop.

### Karen Bean

<u>Education programs</u>: Field Museum Members' Nights; Presentation on skills training for 2012 Youth Design Team.

<u>Other</u>: Behind scenes tours and demonstrations for school groups; Promotional outreach (Imaging the Field).

#### Nina Cummings

Education Programs: Field Museum Members' Nights.

#### Diana Duncan

<u>Education Programs</u>: Field Museum Members' Nights. <u>Other</u>: Various Library and Rare Book Room tours.

### Armand Esai

Education Programs: Field Museum Members' Nights.

#### **Christine Giannoni**

<u>Education Programs</u>: Field Museum Members' Nights. <u>Other</u>: Various Library and Rare Book Room tours.

### **Michael Trombley**

Education Programs: Field Museum Members' Nights.

## OFFICE OF COLLECTIONS AND RESEARCH

### **Kasey Mennie**

<u>Education Programs</u>: Team leader, "Lunch & Learn" series, Edible Treasures Garden. <u>Web and New Media</u>: Designer, Edible Treasures Garden map; Designer, graphics for Collections & Research 2012 Annual Report.

### Carter O'Brien

Education Programs: Field Museum Members' Nights.

Media Development: Interviewed for Edible Treasures Garden installation, Dig In.

<u>Web and New Media</u>: Content Manager: A Greener Field websites on *fieldmuseum.org*, Facebook; Music Composer: "Discovering Mount Gorongosa," "Bat Calls from Kenya," http://fieldmuseum.org/explore/the-field-revealed.

### PRITZKER LABORATORY FOR MOLECULAR SYSTEMATICS AND EVOLUTION

#### **Kevin Feldheim**

<u>Education Programs</u>: *DNA Discovery Center* High School and Teacher Internship program. <u>Other</u>: Various behind-the-scenes collections tours; Content Specialist, *DNA Discovery Center* website; Content Specialist, *Pritzker Lab* website.

### Erica Zahnle

<u>Education Programs</u>: *DNA Discovery Center* High School and Teacher Internship program; Chicago Systems Biology Center for the Study of Transcriptional Networks outreach; IMSA Student Inquiry and Research Program.

<u>Other</u>: Various behind-the-scenes collections tours; Content Specialist, *DNA Discovery Center* website; Content Specialist, *Pritzker Lab* website; *DNA Discovery Center* Facebook page.

### **Brian Wray**

<u>Other</u>: Various behind-the-scenes collections tours; Content Specialist, *DNA Discovery Center* website; Content Specialist, *Pritzker Lab* website; *DNA Discovery Center* Facebook page.

## **HIGHER EDUCATION, 2012**

(College/University Teaching, Graduate Advising, Internships, etc.)

## DEPARTMENT OF ANTHROPOLOGY

#### **Douglas Bolender**

<u>Graduate Students Advised</u>: Kathryn Catlin (University of Massachusetts-Boston). <u>Teaching</u>: "Environmental Archaeology," Northwestern University; Guest lectures in: "Introduction to Archaeology" and "Medieval Materialities," Northwestern University.

### J. P. Brown

<u>Undergraduate Interns</u>: Andrea Rummel (University of Chicago); Catherine Althaus (Northwestern University).

Graduate Interns: Ashley Jehle (Buffalo State College).

### **Elana Carpinone**

Undergraduate Interns: Aiyana Moorhead (Boston University).

#### **Gary Feinman**

<u>Undergraduate Interns</u>: Holly Smith (Swarthmore University); Monica Rosenberger (Carthage College); Amanda Onalaja (New York University); Teressa Peirona (Loyola University); Eileen O'Donnell (Art Institute of Chicago).

<u>Graduate Interns</u>: Samantha Pietruszewski (University of Illinois at Chicago).

<u>Graduate Students Advised</u>: Samantha Pietruszewski, Matthew Piscitelli (University of Illinois at Chicago). <u>Graduate Student Associates</u>: Lacey Carpenter (University of Michigan).

<u>Graduate Student Training</u>: Eight Chinese graduate students in archaeology (Shandong University, Jinan, China).

### Mark Golitko

Teaching: "Anthropology 100: The Human Adventure," University of Illinois at Chicago.

### Jonathan Haas

<u>Graduate Students Advised</u>: Ashlee Craig, Edward Jackitis (Northern Illinois University); Sofia Chacaltana, Matthew Piscitelli, Cecilia Smith, Pinar Uner (University of Illinois at Chicago).

### Jamie Kelly

<u>Undergraduate Interns</u>: Peter Altaffer (Loyola University); Sarah Carlson (Illinois Wesleyan University); Maura Condon (DePaul University); Susan Jones (Wheaton College); Paula Makuch (University of Illinois at Chicago); Amanda Respess (Northeastern Illinois University). Graduate Interns: Amy Zillman (Northwestern University).

### Chapurukha M. Kusimba

<u>Graduate Students Advised</u>: Colin LeJeune, Lindsey Proctor, John Villecco (University of Illinois at Chicago); Kong Cheong (Trent University); Carla Klehm (University of Texas at Austin); Ibrahim Busolo (University of Nairobi-Kenya).

# **Gloria Levitt**

<u>Undergraduate Interns</u>: Caroline Clay, Jessica Pantel, Alexander Pirela (North Central College); Aiyana Scully Moorhead (Boston University).

<u>Other</u>: Fund Scholarship for anthropology, North Central College.

# Robert D. Martin

<u>Undergraduate Interns</u>: Catherine Althaus (Northwestern University); Andrea Rummel (University of Chicago); Kelley Seifert (Iowa State University).

<u>Graduate Students Advised</u>: Cindy Carlson, Edna Davion, Matthew Heintz, Lu Yao (University of Chicago).

<u>Teaching</u>: "Primate Evolution" taught as part of the *Primates and Human Evolution* program for Study Abroad students, Paris Center of University of Chicago.

<u>Other</u>: Participation in selection of graduate students (University of Chicago, Committee on Evolutionary Biology).

# Linda Nicholas

<u>Undergraduate Interns</u>: Holly Smith (Swarthmore University); Monica Rosenberger (Carthage College); Amanda Onalaja (New York University); Teressa Peirona (Loyola University); Eileen O'Donnell (Art Institute of Chicago).

Graduate Interns: Samantha Pietruszewski (University of Illinois at Chicago).

<u>Graduate Student Training</u>: 8 Chinese graduate students in archaeology (Shandong University, Jinan, China).

## Lisa Niziolek

<u>Undergraduate Students Advised</u>: Ashley Barba, Alice Bunch, Paula Makuch, Eva Martinez, Alexis Ochalla, Leona Quist, Allison Upton (University of Illinois at Chicago); Maura Condon (DePaul University); Amanda Respess (Northeastern Illinois University).

<u>Graduate Students Advised</u>: Rory Dennison, Matthew Piscitelli, Danielle Riebe (University of Illinois at Chicago).

Teaching: "Writing Culture," University of Illinois at Chicago.

## **Ruth Norton**

<u>Undergraduate Interns</u>: Amaris Sturm (University of Delaware); Megan Mueller (Southern Illinois University); Lauren Fahey (Wellesley College).

<u>Graduate Interns</u>: Liz Sorokin (Buffalo State College).

<u>Graduate Researcher</u>: Alexander Dittus (Staatliche Akademie der Bildenden Künste Stuttgart). <u>Teaching</u>: "Natural Dyes," Buffalo State College; "Collections Care I," University of Chicago Graham School.

### William Parkinson

<u>Undergraduate Interns</u>: Jillian Chlumsky (University of Illinois at Chicago); Patrick Druggan, Jacqueline Lipphardt, Meagan Luthern, Kyle Olson (Ohio State University).

<u>Graduate Students Advised</u>: Rory Denison, William Patrick Ridge, Danielle Riebe, Erin Rice, Rebecca Seifried (University of Illinois at Chicago); Tamás Polanyi (Northwestern University); Ian Pawn (Florida State University); Sylvia Deskaj (Michigan State University).

<u>Postdoctoral Scholars Advised</u>: Sirma Alexandrova, Shannon Martino, America for Bulgaria Foundation Postdoctoral Fellows; Douglas Bolender, Northwestern University Postdoctoral Fellow.

<u>Teaching</u>: Independent Study, University of Illinois at Chicago; "Regional Analysis in Archaeology," University of Illinois at Chicago.

<u>Other</u>: Director, International Research Experience for Students: U.S.-Hungarian-Greek Collaborative International Research Experience for Students on Origins and Development of Prehistoric European Villages, Körös Regional Archaeological Project, Vésztő, Hungary.

### Christopher J. Philipp

<u>Undergraduate Interns</u>: Grace Apfeld (Rice University); Anna Lindquist (University of Illinois at Chicago); Katelyn Melloh (University of Notre Dame); Marissa Rivera (DePaul University); Sarah Rivers (Northern Illinois University).

### John Edward Terrell

<u>Graduate Interns</u>: Sara DiDomenico, Pilar Escontrias (Northwestern University). <u>Teaching</u>: "Friendship: Anthropological & Evolutionary Perspectives" (University of Illinois at Chicago). <u>Other</u>: Organizer and project leader for "Social Network Analysis Seminar Series," Field Museum.

## Alaka Wali

<u>Graduate Students Advised</u>: Paul Bick, Zachary Blair, Evin Rodkey (University of Illinois at Chicago). <u>Graduate Interns</u>: Sarah Casson (Grinnell College); Marvi Mazhar (Polytechnic Di Torino); Kristen Simmons (University of Chicago); Jessica Jaffe (Tulane University).

## Patrick Ryan Williams

<u>Undergraduate Students Advised</u>: Augusta Gudeman (University of Chicago); Stephanie Lear (University of Illinois at Chicago).

<u>Graduate Students Advised</u>: Emily Baca, Gabriel Cantarutti, Sofia Chacaltana, Rebecca Deeb, Rory Dennison, John Hicks, David Reid, Danielle Riebe, Matthew Piscitelli, Doug Smit (University of Illinois at Chicago); Pilar Escontrias (Northwestern University).

Teaching: "Archaeological Field Methods," University of Illinois at Chicago.

# DEPARTMENT OF BOTANY

## **Mark Alvey**

<u>Other</u>: Behind-the-scenes tours for students and faculty from Chicago Initiative for Research and Recruitment in Undergraduate Science (DePaul University, Harold Washington College, Truman College), University of Chicago Post-Baccalaureate Research Education Program, North Park University Ecology class, and Dominican University Museum Studies class.

### Kevin Havener

<u>Undergraduate Interns</u>: Shawna Bartnik, Laura Bezler, Kristina Lugo (Roosevelt University); Emine Kochakova, Arista Tischner (University of Illinois at Chicago); Michael Niezgoda (Michigan State University); Chelsea Franklin, Daniel O'Rourke, De Katie Roznai, Yarency Rodriguez (De Paul University), Enrique Torres, Sherit Stovall (Wright College); Anna Krembs, Jared Lang, Lisa Murata, Oana Vadineanu, Zak Zillen (Northeastern Illinois University).

### Lucia Kawasaki

<u>Undergraduate Interns</u>: Laura Bezler, Shawna Bartnik, Kristina Lugo (Roosevelt University); Emine Kochakova, Arista Tischner (University of Illinois at Chicago); Michael Niezgoda (Michigan State University); Chelsea Franklin, Daniel O'Rourke, De Katie Roznai, Yarency Rodriguez (De Paul University), Enrique Torres, Sherit Stovall (Wright College); Anna Krembs, Jared Lang, Lisa Murata, Oana Vadineanu, Zak Zillen (Northeastern Illinois University).

### **Steven Leavitt**

<u>Undergraduate Interns</u>: Bradley Loomis (Green Mountain College); Kristiina Mark (University of Tartu, Estonia).

### **Robert Lücking**

<u>Graduate Students Advised</u>: Matthew Nelsen (University of Chicago); Manuela Dal-Forno (George Mason University, Virginia); Alejandrina Bárcenas Peña, Ricardo Miranda (Universidad Nacional Autónoma de México); Daniela Lizano (Universidad de Costa Rica); Dania Rosabal López (Universidad de Oriente, Santiago de Cuba); Nancy Mateus, Bibiana Moncada, Angélica Rincón (Universidad Nacional, Colombia); Adriana Ardila (Universidad Distrital Francisco José Caldas, Colombia); Luisa Betancourt (Universidad Distrital, Colombia); Rouchi Nadine Pelaez, Sebastián Silano, Alejandro Pérez, (Universidad Distrital Francisco José de Caldas, Colombia); David Díaz Escandón, Edier Soto-Medina (Universidad del Valle, Colombia); Jesús Hernández (Universidad Simón Bolivar, Venezuela); Janice Gomes Cavalcante, Dannyelly Santos Andrade, Grayce Kelly Océa, Marlon Wendell de Oliveira dos Santos, Katia Almeida de Jesus, Viviane Monique dos Santos, Driele Tavares de Goes, (Universidade Federal de Sergipe, Brazil); Luciana Calado Rodrigues (Universidade Federal de Sergipe, Itabaiana, Brazil) Shirley Cunha Feuerstein (Universidad Federal do Paraná, Curitiba, Brasil); Arlene Lisangan-Tabaquero (Saint Mary's University, Bayombong, Philippines).

<u>Courses</u>: OTS Specialty Course "Tropical Lichens and Forest Health: A Multidisciplinary Approach," Las Cruces Biological Station, Costa Rica; Mini-Course "Desde la secuencia a la filogenia: introduccion al analisis de datos moleculares" (Universidade Estadual Paulista Júlio de Mesquita Filho, Botucatú, Brazil).

# H. Thorsten Lumbsch

High School Intern: Janet Morales (Lane Tech College Prep, Chicago, IL).

<u>Undergraduate Interns</u>: Cornelia Fanter (DePaul University); Bradley Loomis (Green Mountain College, ME); Aparna Nutakki (University of Chicago).

Graduate Student Advised: Raquel Pino Bodas (Universidad Complutense de Madrid, Spain).

Postdoctoral Scientists: Steven Leavitt, Sittiporn Parnmen.

Teaching: "Complex Interactions" (University of Chicago).

Examiner: Opponent for Ph.D. defense (University of Helsinki, Finland).

# **Christine Niezgoda**

<u>Undergraduate Interns</u>: Qianyu Ying (Lake Forest College); Allie Stone (School of the Art Institute, Chicago); Elliot Gitter (DePaul University).

<u>Other</u>: Herbarium tours for classes from Maharishi University, Fairfield, Iowa, Trinity Christian College, DePaul University, National-Louis University, Northern Illinois University.

## Sittiporn Parnmen

<u>Interns</u>: Aparna Nutakki (University of Chicago); Nell Fanter (DePaul University). <u>Invited Lectures</u>: Faculty of Science, PhD and Msc Students (Srinakharinwirot University); Faculty of Science, Msc Students (Ramkhamhaeng University).

### Richard H. Ree

Undergraduate Interns: Megan Vats (Loyola University).

<u>Graduate Students Advised</u>: Katherine Brooks, Edna Davion, Deren Eaton, Kathryn Larson, Matthew Nelsen, Benjamin Rubin, Ben Winger, Nate Upham, Traci Viinanen (University of Chicago); Diane McCarthy, Michael Jorgenson (University of Illinois at Chicago); Anne Greenberg (Yale University). <u>Teaching</u>: Short course on next-generation genotyping-by-sequencing for grad students and post-docs, Field Museum.

# Matt von Konrat

<u>Undergraduate Interns</u>: Laura Bezler, Shawna Bartnik, Kristina Lugo (Roosevelt University); Emine Kochakova, Arista Tischner (University of Illinois at Chicago); Michael Niezgoda (Michigan State University); Chelsea Franklin, Daniel O'Rourke, De Katie Roznai, Yarency Rodriguez (De Paul University), Enrique Torres, Sherit Stovall (Wright College); Anna Krembs, Jared Lang, Lisa Murata, Oana Vadineanu, Zak Zillen (Northeastern Illinois University).

Graduate Students: Mereia Katafono (University of the South Pacific, Fiji).

# DEPARTMENT OF GEOLOGY

# Kenneth D. Angielczyk

<u>Undergraduate Interns</u>: Florence Lin (University of Illinois). <u>Graduate Students Advised</u>: Co-advisor, Jonathan S. Mitchell (Committee on Evolutionary Biology, University of Chicago). Teaching: Guest lecturer, University of Chicago "Introduction to The Field Museum" course.

### lan Glasspool

Graduate Student Advised: Colleen Michael (Northwestern University).

### Lance Grande

Undergraduate Interns: Spiro Sullivan (University of Chicago).

<u>Courses</u>: "Stones and Bones: A Course in Paleontological Theory and Practice," University of Chicago (undergraduate level).

## Philipp R. Heck

Postdoctoral Scientists: Matthias M. M. Meier (Lund University, Sweden).

Graduate Students Advised: Levke Kööp, Reto Trappitsch (University of Chicago).

<u>Undergraduate Interns</u>: Maria Valdes (University of Chicago); Sam Simon (Carnegie Mellon University); Eleanor Albarran (Princeton University); Christopher Boudreaux (Dartmouth College).

<u>High School Interns</u>: Evan Johnson-Ransom (Brother Rice High School), Sarah Pipal (Lyons Township High School), Evelina Yarmit (Highland Park High School), Libby Dybal (Glenbrook North High School), Rebecca Friedlander (Adlai E. Stevenson High School).

<u>Invited/Guest Lectures</u>: Department of Geography-Geology, Illinois State University, Normal, IL, "Fossil Meteorites: Traces of Cosmic Collisions."

## Scott Lidgard

Postdoctoral Scientists: Beckett Sterner.

<u>Graduate Students Advised</u>: Kristen Jenkins (Committee on Evolutionary Biology, University of Chicago), Aaron Kandur (Department of Ecology and Evolution, University of Chicago).

Graduate Student Interns: Judith Kaplan (University of Wisconsin, Madison).

<u>Undergraduate Interns</u>: Michael McGovern, Julia Quigley (University of Chicago).

Invited/Guest Lectures: History of Science Department, University of Wisconsin, Madison, WI.

### Peter J. Makovicky

<u>Graduate Students Advised</u>: Co-advisor for Jonathan S. Mitchell (Committee on Evolutionary Biology, University of Chicago); Stephen Brusatte (Columbia University); Clint Boyd (UT Austin); Federico Gianechini (CONICET, Argentina).

<u>Undergraduate Interns</u>: Franco Gallastegui (University of Chicago); Diana Boudreau (Augustana College).

<u>Invited/Guest Lectures</u>: Seminar, "Trophic evolution in theropod dinosaurs," Department of Geological Sciences, UT Austin.

<u>Courses</u>: Geos 30500 "History of Terrestrial Ecosystems," Department of Geophysical Sciences, University of Chicago, Fall Quarter.

### Paul Mayer

<u>Undergraduate Interns</u>: Alex Layng (Northwestern University). <u>High School Interns</u>: Gabriel Ward (Randolph Upper School, Huntsville, AL).

### **Olivier Rieppel**

<u>Graduate Student Advised</u>: Rebecca Dikow (University of Chicago); Le-tian Ma (Peking University). <u>Courses</u>: Spring Quarter Class, "Evolutionary Morphology of Vertebrates," Northwestern University (undergraduate level).

### William F. Simpson

<u>Undergraduate Intern</u>: Diana Boudreau (Augustana College). <u>High School Intern</u>: William Buchman.

# Paul P. Sipiera

<u>Invited/Guest Lectures</u>: Lecture on the topic of the Mars Curiosity Rover for a meeting of the Phi Alpha Theta Honors Society at William Rainey Harper College, Palatine, IL.

### Nathan D. Smith

<u>Undergraduate Interns</u>: Diana Boudreau, Elizabeth Fisher, Spencer Hellert, Vernon Meidlinger-Chin (Augustana College); Liam Heins (University of Chicago).

<u>Courses</u>: Instructor, Department of Biology, BIOL 240 "Evolution," Howard University (Fall, 3cr); Instructor, Field Museum of Natural History REU Program, "Phylogenetic Systematics" (summer course); Instructor, Department of Geology, GL 376 "Fossil Mammals of the White River Badlands," Augustana College (summer course).

<u>Invited/Guest Lectures</u>: "Dinosaurs on Ice: Fossil Hunting in the Early Jurassic of Antarctica," Department of Biology, BIOL 217 "Honors Orientation" Howard University (Dr. Michael Lipscomb, instructor); "Historical biogeography: early development and new analytical approaches," Biological Sciences, University of Chicago (BIOS 23406 Biogeography; Dr. Lawrence Heaney, Instructor).

# DEPARTMENT OF ZOOLOGY

### John M. Bates

<u>Graduate Students Advised</u>: Shane DuBay, Emma Gregg, Alison Johnson, Aaron Olsen, Aaron Savit, Ben Winger (University of Chicago); Isabel Caballero, Luca Borghesio (University of Illinois at Chicago); Eliot Miller (University of Missouri, St. Louis); Rozenn Bailleul-LeSuer (Oriental Institute). <u>Undergraduate Interns</u>: Holly Lutz (University of Chicago); Luke Campillo (Drake University); Daniel Montgomery (Indiana State University).

High School Interns: Nathan Goldberg (Latin School).

Courses: Guest lecturer, University of Chicago "Introduction to The Field Museum" course.

### **Rüdiger Bieler**

<u>Postdoctoral Associates</u>: Sid Staubach, Rosemary Golding, André Sartori. <u>Graduate Students advised</u>: John Wilk (University of Illinois at Chicago). <u>Undergraduate Students Advised</u>: Iqra Mushtaq (Loyola University). Courses: "From So Simple a Beginning: Evolution," University of Chicago.

### James H. Boone

<u>High School Interns</u>: Stacey Huynh (J. Sterling Morton East High School). <u>Undergraduate Interns</u>: Stephanie Garcia (Loyola University); Daniel Le, Elana Ryznar, Jenny Farrell, Athens Chen (School of the Art Institute Chicago); Sonia Leon (Elmhurst College); Margaret Sladek (Loyola University).

### Jochen Gerber

Undergraduate Intern: T. James Poulos (University of Illinois).

### Steven M. Goodman

<u>Graduate Students Advised</u>: Hery Rakotondravony, Julie Ranivo, Soanandrasana Rahelinirina, Martin Raheriarisena, Zafimahery Rakotomalala, Fanja Ratrimomanarivo, Oliarinony Ranalison, Désire Randriamasimanana, and Patricia Maminirina, Juliana Rasoma, Radosoa Andrianaivoarivelo, Sama Zefania, and Félix Rakotondraparany, Lily Rene de Roland, Aristide Andrianarimisa, Joelisoa Ratsirarison, Achille Raselimanana (Université d'Antananarivo); Amyot Kofoky, Tsibara Mbohoahy (Université de Toliara); Clément Gilbert (Stellenbosch University); Vincent Florens (Université de La Réunion); Leigh Richards, Thesine Naidoo, Taryn Ralph (University of Kwa-Zulu Natal); Nicole Weyeneth (Université de Geneve); DEA students, Université d'Antananarivo – 11 different students; DEA students, Université de Mahajanga – three different students; Master's students, University of Kwa-Zulu Natal – four different students.

<u>Courses</u>: "Biogéographie des animaux terrestres de Madagascar" (Graduate Student Seminar) et « Modèles de micro-endemism à Madagascar », Université d'Antananarivo; "Biogéographie des animaux terrestres de Madagascar" (Graduate Student Seminars), Université de Mahajanga.

<u>Honorary Appointments</u>: Honorary Professor, University of Kwa-Zulu Natal, South Africa; Professor, Université d'Antananarivo and Université de Mahajanga; Research Associate, The American Museum of Natural History; Visiting Scientist, The University of Michigan Museum of Zoology; Research Associate, University of Hamburg, Germany; Conseil Scientifique Régional du Patrimoine Naturel, Mayotte, France; Comité Scientifique Régional du Patrimoine Naturel, Préfecture de La Réunion, France.

# Shannon J. Hackett

<u>High School Interns</u>: Ben Hullinger, Walker Kettelkamp (Evanston Township High School); Griffin Harris (New Trier High School); Malia Wenny, Ellen Geiser (Illinois Math and Science Academy); Luke O'Conner (Jones College Prep); Jesse Kusimba (Oak Park High School); Catherine Zhou (University of Chicago Lab School); Audrey Putman (Morgan Park Academy).

Undergraduate Interns: Chris Ivanovich (University of Chicago).

<u>Graduate Students Advised</u>: Nicholas Block, Rebecca Dikow, Aaron Savit, Ben Winger (University of Chicago); Sarah McVicar (Northwestern University).

Staff Scientists Advised: Jason Weckstein, Holly Lutz, Heather Skeen.

<u>Trainees</u>: Tom Champion (Naperville North High School); Ana Simpson (Austin Polytechnical Academy). <u>Instructor</u>: University of Chicago's Introduction to Research at Field Museum.

<u>Invited/Guest Lectures</u>: Guest Lecturer for genomics class at University of Chicago; Guest Lecturer, evolution class, Loyola University; presentation on Doctoral Dissertation Improvement grants to University of Chicago students.

<u>Other</u>: Co-Chair, University of Chicago Committee on Evolutionary Biology; Steering Committee, University of Chicago's GAANN program; Fellow, University of Chicago's Institute for Genomics and Systems Biology; Co-PI and Presenter, University of Chicago and Field Museum joint program in systems biology for high school students and high school teachers.

### Lawrence R. Heaney

<u>High School Interns Advised:</u> Jennifer Gray and James Carthew (Evanston Township High School, Evanston).

Undergraduate Student Advised: Andrew Pfieffer (Northwestern University).

<u>Graduate Students Advised</u>: Member of graduate committees for 4 students; one, University of Chicago, two, University of Illinois at Chicago and one at University of Minnesota.

Field Museum Scholar Advised: Philip Piper.

Courses: "Biogeography," University of Chicago.

# Susan Mochel

<u>High School Interns</u>: Olivia Perozo (University of Chicago Laboratory School). <u>Undergraduate Interns</u>: Matt Girard (Loyola University).

### Corrie S. Moreau

<u>High School Interns:</u> Charles Griggs (Proviso Mathematics and Science Academy); Katherine McDonnell, (St. Francis High School).

<u>Undergraduate Interns</u>: Ariel Fang, Caroline Hanson (School of the Art Institute of Chicago); Arista Tischner (University of Illinois at Chicago); Sara Zufan (DePaul University).

<u>Graduate Students Advised</u>: Benjamin Rubin, Max Winston (University of Chicago); Yi Hu (Drexel University).

Postdoctoral Associates: Stefanie Kautz.

Trainees: Rebekah Baquiran; Gracen Brilmyer; Alexandra Westrich; Brian Wray.

Courses: Ant Course, Kampala, Uganda, Africa, field-based course.

Invited/Guest Lectures: University of Chicago, Chicago, IL.

Other: Held workshop for FMNH summer interns on applying and getting into graduate school.

### Alfred F. Newton

<u>Graduate Students Advised</u>: David J. Clarke (University of Illinois at Chicago); Angelico Asenjo (Universidade Federal do Paraná, Brazil); Chenyang Cai (Nanjing Institute of Geology and Palaeontology, Nanjing, China).

## Bruce D. Patterson

High School Interns Advised: Daniel Patterson, Lyons Township H.S.

Undergraduate Interns Advised: Alexandra Weber, Loyola University of Chicago.

<u>Graduate Students Advised</u>: Alex Mwazo Gombe (Kenyatta University, Nairobi, Kenya); Carrie Seltzer, Erika Arnold, Victoria Flores (University of Illinois at Chicago); Eric Hancock, Christopher Schell, Nate Upham (University of Chicago); David Wechuli (Chepkoilel University College, Eldoret, Kenya). <u>External Examiner</u>: Hassan Babiker (University of Cape Town, South Africa); Julia Schad (Universität Potsdam, Germany).

<u>Courses</u>: "Readings: Evolutionary Biology," University of Chicago; "Evolutionary Biology," University of Chicago.

International visiting scholars: Daniela Rossoni and Bárbara de Andrade Costa, Univ. São Paulo, Brazil; Elissandra Chiquito, Univ. São Paulo, Piracicaba, Brazil; Natali Hurtado, Univ. Nac. May. San Marcos, Peru; João Luis da Fonseca, Univ. Fed. Espírito Santo, Brazil.

## Alan Resetar

<u>Undergraduate Interns</u>: Danielle Wasserman (Purdue University); Michael Page (Northeastern Illinois University).

Graduate Students Advised: Joshua Traub (John Carroll University).

### Petra Sierwald

<u>Graduate Students Advised</u>: Michael Jorgensen, Robin Mores (University of Illinois at Chicago); João Paulo P. Pena Barbosa (Laboratório de Artrópodes, Instituto Butantan, São Paulo, Brazil); Veverle San Juan (University of the Philippines, Los Baños); Nguyen duc Anh (Institute of Ecology and Biological Resources, Hanoi, Vietnam).

<u>Courses</u>: "From So Simple a Beginning: Evolution," University of Chicago; German School of Chicago: arachnid and bird education program.

### W. Leo Smith

<u>Graduate Students Advised</u>: Rebecca Dikow, Timothy Sosa (University of Chicago). <u>Graduate Student Committee Member</u>: Jeremy Harris (Loyola University, Chicago); Lauren Sallan, Thomas Stewart (University of Chicago); Laura Schwartz (University of Illinois at Chicago). <u>Postdoctoral Associates</u>: Matthew Davis.

Courses: "Scientific Integrity and Ethical Conduct of Research," University of Chicago.

### Kevin Swagel

Undergraduate Interns: Matthew Girard (Loyola University).

### Margaret K. Thayer

<u>High School Interns</u>: Christian Valderrama (J. F. Kennedy High School, Chicago); Kathy Zhou, (International School of Beijing, Beijing, China.)

<u>Undergraduate Interns</u>: Anthony Deczynski (University of Delaware); Will Montag (Bowdoin College); Mairead Baker (Northwestern University).

<u>Graduate Students Advised</u>: Dave J. Clarke (University of Illinois at Chicago), K. Taro Eldredge (University of Kansas).

<u>Visiting Students</u>: Chenyang Cai (Nanjing Institute of Geology and Palaeontology, China); John Leavengood (University of Kentucky).

# Janet R. Voight

Undergraduate Intern: Meghan Rock (California State University, Monterey Bay).

## Harold K. Voris

Graduate Students Advised: Chattraphas Pongcharoen (Chulalongkorn University, Bangkok, Thailand).

### Jason D. Weckstein

<u>High School Interns Advised</u>: Malia Wenny (Illinois Math and Science Academy); Nathan Goldberg (Latin School of Chicago).

<u>Undergraduate Interns Advised</u>: Ari Ricd (Lawrence University); Jennie Lee (University of Chicago); Nathan Trautenberg (Northwestern University).

Graduate Students Advised: Wanyoike Wamiti (Kenyata University/National Museum's of Kenya).

### Mark W. Westneat

<u>Undergraduate Interns</u>: Marianne Seneszco, Trevor Thompson, Sydney Rosebraugh (University of Chicago).

<u>Graduate Students Advised</u>: Joanna Mandecki, Charlene McCord, Aaron Olsen, Michael Alcorn, Daniela Palmer (University of Chicago).

Courses: IGERT training course in motor control and movement, University of Chicago;

"Comparative Vertebrate Anatomy," University of Chicago.

<u>Invited/guest lectures</u>: Graduate University of the Chinese Academy of Sciences, Beijing, China; American University at Cairo, Cairo, Egypt.

### **BIODIVERSITY SYNTHESIS CENTER**

### **Mark Westneat**

<u>Graduate Students Advised</u>: Joanna Mandecki, Charlene McCord, Aaron Olsen (University of Chicago); Steve Hanson (University of Illinois at Chicago), Janelle Morano (Loyola University).

### Joshua Drew

<u>High School Student Interns</u>: Charlotte Collins (Latin School, Chicago, IL); Amber Richardson, Darcae Holmes (VOISE Academy, Chicago, IL).

### Audrey Aronowsky

<u>Undergraduate Student Interns</u>: Francesca Moroni (University of Wisconsin–Madison); Charles Larson, (Calvin College).

### **Torsten Dikow**

<u>Undergraduate Student Interns</u>: Stephanie Leon (University of California-Riverside).

### **Beth Sanzenbacher**

Undergraduate Student Interns: Timothy Sauer, Adam Orton (Columbia College, Chicago, IL).

# PRITZKER LABORATORY FOR MOLECULAR SYSTEMATICS AND EVOLUTION

### Kevin A. Feldheim

<u>Graduate Students Advised</u>: Shannon O'Leary (Stony Brook University); Chris Schroeck (University of Illinois at Chicago); Andrea Bernard (Nova University); Nicole Phillips (Murdoch University).

<u>Training (molecular techniques)</u>: Nell Fanter (DePaul University); Charles Griggs (Proviso Math and Science Academy); Jesse Kusimba (Oak Park River Forest High School); Bradley Loomis (Green Mountain College); Emma Mihevc (Georgia Tech); Aparna Nutakki (University of Chicago); Luke O'Connor (William Jones College Prep High School); Audrey Putman (Morgan Park Academy); Anna Simpson, (Austin Polytechnical Academy); Mark Swanson (Illinois Wesleyan); Nate Trautenberg (Northwestern University); Megan Vats, Alex Weber (Loyola University); Catherine Zhou (University of Chicago Lab School).

<u>Training (microsatellite development)</u>: Shannon O'Leary (Stony Brook University); Evelyn Williams (postdoc, Morton Arboretum); Jason Palagi (University of Illinois at Chicago).

# Erica Zahnle

<u>Training</u>: Ellen Geiser (Illinois Math and Science Academy); Anna Simpson (Austin Polytechnical Academy); Catherine Zhou (University of Chicago Lab School); Audrey Putman (Morgan Park Academy).

## Brian Wray:

Training: Gracen Brilmyer (Art Institute of Chicago), Charles Griggs (Proviso Math and Science Academy).

# TRAINING PROGRAMS, 2012

In local lecture halls, at international universities, in our DNA Lab, in our collections, and at far-flung field sites, the following is an overview of the diverse array of training programs led by the curators and professional staff of Collections & Research in 2012. Each year members of The Field Museum's scientific staff of Collections & Research lead a wide spectrum of formal and hands-on training in collections-based research for high school, undergraduate and graduate students, and young professionals. Building on the Museum's core subject matter in evolutionary and environmental biology and anthropology/archaeology, these programs fulfill many functions: encouraging young students to consider careers in the sciences, providing the collections-based foundation for Ph.D. dissertations, and training early-career scientists from other countries to tackle environmental conservation issues at home.

# HIGH SCHOOL AND UNDERGRADUATE INTERNSHIPS

#### Field Museum Scholarship Committee Internships

Each year The Field Museum supports summer internships for undergraduate students to work directly with scientists at The Field Museum on collections-based research projects. In 2012, the Scholarship Committee supported eight students with funding from our NSF Research Experiences for Undergraduates (REU) program and two students with funding from our Prince Internship Program. The eight REU interns were as follows. Anthony Deczynski (University of Delaware) worked with Associate Curator and Head of Insects Margaret K. Thaver on a project entitled "Bringing new beetles to light." Franco Gallastegui (University of Chicago) worked with Associate Curator of Paleontology Peter Makovicky testing trophic niche evolution in theropod dinosaurs using systematic traits of teeth. Jennie Lee (University of Chicago) studied "Amazonian speciation in a ring: Phylogeographic history of the Channel-billed and White-throated toucans" with Associate Curator John Bates and Staff Scientist Jason Weckstein (Zoology/Birds). Florence Lin (University of Illinois at Urbana-Champaign) worked with Assistant Curator of Paleomammalogy Ken Angielczyk on a project entitled "Who is Anomodont A? Archiving and Reconstructing Serially-sectioned Dicynodont Skulls." Bradley Loomis (Green Mountain College) investigated morphological evolution in lichens under the supervision of MacArthur Associate Curator Thorsten Lumbsch. Daniel Montgomery (Indiana State University) worked with Associate Curator John Bates and Staff Scientist Josh Engel (Zoology/Birds) studying the genetic structure of birds in the Albertine Rift of Africa and implications for conservation and climate. Igra Mushtag (Lovola University of Chicago) worked with Curator Rüdiger Bieler and Post-doctoral Research Scientist Sid Staubach (both of Zoology/Invertebrates) on "The Bivalve Tree of Life: understanding the evolution of clams, mussels, oysters and their relatives." Arista Tischner (University of Illinois at Chicago) worked with Assistant Curator Corrie S. Moreau and Postdoctoral Research Scientist Stefanie Kautz (both Zoology/Insects) on a project entitled "Origin and rise of a giant: Phylogeography of the Neotropical bullet ant Paraponera clavata." The Prince program supported the internships of Stephanie Garcia (Loyola University of Chicago) and Mark Swanson (Illinois Wesleyan University); Stephanie worked with Collection Manager James H. Boone (Zoology/Insects) on a project entitled "Specimen Transactions," while Mark worked with Associate Curator John Bates and Staff Scientist Josh Engel (Zoology/Birds) researching genetic and morphologic structure in the Barred Owl.

#### **Boone Scholars Internships for East Asian Studies**

Supported by a bequest from the late Commander Gilbert E. Boone and his wife Katharine Phelps Boone, the Boone Scholars Internships for East Asian Studies provide highly qualified undergraduates the opportunity to study at The Field Museum and work with Anthropology collections from Japan, Korea, China, and elsewhere in the eastern part of Asia. The 2012 Boone Scholars were Maura Condon from DePaul University and Amanda Respess from Northeastern Illinois University. The focus of their activities was the *Java Sea Wreck* collection, which includes high-fired ceramics and earthenware, iron ingots and other metal objects, aromatic resin, elephant ivory, glass, and personal effects of the crew and merchants

of a 13<sup>th</sup>-century ship. Although the vessel sank in the Java Sea, its cargo is primarily from China. As part of their training, Maura and Amanda learned how to describe, measure, photograph, label, and catalog objects from this collection. They also translated and analyzed inscriptions and examined design motifs found on some of the shipwreck's ceramics. The inscription work is particularly valuable and has revealed the complex social, economic, and political relationships that China had with not only traders and consumers in Southeast Asia but also communities from the Middle East, some members of which settled at China's burgeoning trade ports during this time. To disseminate their findings, Maura and Amanda wrote text and identified images for a website that will feature the Museum's *Java Sea Wreck* collection. These activities provided our interns with a first-hand look at some of the daily work required to care for archaeological collections in a museum setting and enabled them to engage in collections-based research focusing on East Asia.

# Anthropology Alliance Interns

Launched by the Anthropology Department's auxiliary "friends" group in 2000, this program supports undergraduate involvement in anthropology research, including direct salary for Museum-based undergraduate collection management interns, and travel expenses for interns assisting in archaeological or ethnographic fieldwork. In 2012 there were four fieldwork interns and two collections interns supported by the Anthropology Alliance. Matthew Piscitelli of University of Illinois at Chicago spent the summer conducting archaeological research at the site of Huaricanga along the north central coast of Peru with Dr. Jonathan Haas. Colin LeJeune of the University of Illinois at Chicago joined Dr. Chap Kusimba for his ongoing work in Kenya. Pilar Escontrías of Northwestern University joined Dr. Ryan Williams for a season of fieldwork in Peru. Danielle Riebe joined Dr. William Parkinson in Greece to assist with his work on the Diros Project. Kirsten Madsen of the University of Chicago and Grace Apfeld of Rice University worked as collection management interns, working with Head Registrar Alan Francisco and Regenstein Collections Manager Chris Philipp, learning formal museum methods of cataloging, archival research, and collections care.

# **GRADUATE PROGRAMS**

# University of Chicago – Committee on Evolutionary Biology (CEB)

This Ph.D. program within Biological Sciences at the University of Chicago—a collaboration among the University, The Field Museum, Brookfield Zoo, Lincoln Park Zoo, and Argonne National Lab—has been training students in evolutionary biology for more than 40 years. Twenty-one Field Museum scientists are involved in CEB, comprising more a third of its faculty and supervising more than half of the program's Ph.D. candidates. Richard and Jill Chaifetz Associate Curator Shannon Hackett (Zoology/Birds) serves as Associate Chair of CEB. Field Museum curators currently serve as primary dissertation advisors for 16 CEB students (out of 30 total). 2012 marked the 7<sup>th</sup> year of support from a highly competitive Department of Education program to enhance the training of gradate students in evolutionary biology and conservation science.

# University of Chicago – Organismal Biology and Anatomy (OBA)

Mark Westneat, Curator of Zoology (Fishes), is adjunct faculty in OBA, where he teaches "Comparative Vertebrate Anatomy" and several graduate courses on biomechanics. Dr. Westneat is currently supervising four OBA dissertations, bringing to 13 the number of OBA students for whom he has served as major advisor; he has also served on 10 other OBA dissertation committees.

# University of Illinois at Chicago/Field Museum Anthropology Ph.D. Program

This program was established in 1995 in order to strengthen anthropology course offerings at UIC and enable the university to grant the Ph.D. in Anthropology, as well as to facilitate access by UIC faculty and students to Field Museum collections. Besides teaching on a regular basis at UIC, all of The Field Museum's anthropology curators are adjunct professors and members of the UIC graduate faculty, chairing Ph.D. committees, as well as serving on admissions committees, and on search and promotion

committees for teaching and faculty positions. A new feature of the program in 2011–12 were three jointly funded postdoctoral fellowships, all UIC graduates, who teach at UIC and conduct research under the mentorship of curators at the Museum. Field Museum curators collectively chaired nine doctoral committees in 2012. There are currently over 50 Ph.D. students in the program, and FM curators work with more than half of them in some capacity (as dissertation committee members, intern supervisors, or informal advisors for first-year students).

# Northwestern University/Field Museum Program in Anthropology

Formalized in Fall 2001, this program consolidated an emerging relationship between the Anthropology programs at The Field Museum and Northwestern University. Seven Field Museum anthropology curators have adjunct professor status at Northwestern, and engage in biannual teaching duties at the University, and select NU anthropologists have adjunct curator status at the Field. The Museum and Northwestern jointly fund a postdoctoral scientist in residence.

# University of Illinois at Chicago – Ecology and Evolution Program

This graduate-degree granting program within the Department of Biological Sciences at the University of Illinois at Chicago is a collaboration of the department's eight organismal biologists with nine curators at The Field Museum, as well as scientists from the Brookfield Zoo, the Morton Arboretum, and other area institutions. The collaboration grew out of joint interest in training international colleagues, and the program has hosted three MacArthur-sponsored programs for training in tropical conservation, as well as several NSF-funded PEET programs in Botany and Zoology. Seven students based in the Museum's Department of Zoology and three in Botany pursued their graduate studies under this program in 2012. In addition, the program welcomed its first undergraduate student, a bachelor's student, funded by the Brazilian government's "Science without Borders" program. MacArthur Curator Bruce Patterson (Zoology) serves as the institutional liaison.

# **Resident Graduate Students**

As the "Higher Education" section of this report demonstrates, graduate student advising, dissertation supervision, and university teaching are central to the academic mission of Collections & Research. Among the many doctoral students mentored by Field Museum curators is a core group of students whose work is squarely based in the Museum's collections and labs—our Resident Graduate Students. The students not only have curators on their dissertation committees, but also office space at the Museum, access to its facilities, and many of the same privileges as staff. In 2012 The Field Museum provided training in collections-based research to 54 Resident Students from the University of Chicago, the University of Illinois at Chicago, and Northwestern University, as well as universities beyond Chicago (see "Resident Graduate Students" section for details).

# FIELD-BASED TRAINING FOR HIGH SCHOOL AND UNDERGRADUATES

# Stones and Bones: A Course in Paleontological Research and Field Work

For the past eight summers Lance Grande (Senior Vice President and Head of Collections and Research) has taught a field course to a small group of advanced placement high school students, assisted by James Holstein and Akiko Shinya (Geology). The four-week course is run through the University of Chicago and The Field Museum and covers paleontological theory, method and practice, and includes an introduction to paleontology at the Museum, two weeks of hands-on field work in the mountain desert near Kemmerer, Wyoming, and a wrap-up week at the Museum focusing on preparation and collection management, and analysis of the collected material. In 2012, 17 students participated in the program. Past participants in the program have gone on to the paleontology program at Northern Illinois University, the archaeology programs at Loyola and Washington University at St. Louis, and the Museum Studies Masters' Program at Wesleyan, in addition to many students who have returned to the Museum as volunteers and interns.

#### **Contisuyo Field School**

This Field Museum program introduces undergraduates to archaeological excavation and laboratory analysis techniques, at sites in southern Peru. The primary archaeological field site is a mountaintop Wari city (600–1000 AD). The field school operates in conjunction with the Contisuyo Museum in the southern department of Moquegua. The program is led by Associate Curator and Chair Ryan Williams and Adjunct Curator Donna Nash (both Anthropology), including faculty from the University of North Carolina-Greensboro, the University of Florida, and the Contisuyo Museum. Now in its sixth year, the program hosted nine undergraduates in 2012, six from UIC and three from UNCG.

# Proyecto Arqueologico Norte Chico

Directed by MacArthur Curator Jonathan Haas of Anthropology and Dr. Winifred Creamer, Adjunct Curator and Presidential Research Professor at Northern Illinois University, this project investigates the origins of Andean civilization in coastal Peru. The program has involved more than a dozen University of Illinois at Chicago graduate and undergraduate students since 1999, and has provided eight full fellowships to UIC graduate students since 2003. One UIC Ph.D. student, Matthew Piscitelli, is currently doing his dissertation on the role of religion in the emergence of complex societies in the Norte Chico region. Seven students at NIU have completed Master's theses based on excavated materials from the project.

# INTERNATIONAL TRAINING AND CAPACITY-BUILDING

# Vahatra and advancement of Malagasy conservation biologists

From 1993 to 2007 Steve Goodman (MacArthur Field Biologist, Dept. of Zoology) led a joint Field Museum-World Wildlife Fund (WWF) "Ecology Training Program" (ETP) in the biological sciences for Malagasy graduate students. In 2007, ETP evolved into Vahatra, a Malagasy-run NGO led by former ETP students who are now internationally-known field biologists in their own right, and faculty members at different Malagasy universities. Dr. Goodman is the Scientific Advisor for Vahatra, and serves as primary advisor or committee member for numerous students preparing Master's or Ph.D. degrees at the universities of Antananarivo, Mahajanga, Toliara (Madagascar); KwaZulu Natal (South Africa); and Paris and La Reunion (France). Between the ETP and Vahatra programs more than 400 Malagasy students have participated in field schools, and the program has yielded more than 600 scientific publications. Around 110 Malagasy students earned advanced degrees within the national university system in the fields of zoology and conservation biology, and many graduates have gone on to important posts in the non-government and government sectors on Madagascar and are advancing conservation programs there. Vahatra publishes a scientific journal known as Malagasy Nature, dedicated to the natural history of Madagascar and neighboring islands. Vahatra starting publishing a guide series to the biodiversity of Madagascar, with the first three books published in 2011, including bats (Goodman), small mammals (Soarimalala and Goodman), and endemic birds (Raherilalao and Goodman), and another in 2012 on Carnivora (Goodman

#### Training Programs in Latin American Lichenology and Mycology

Lichens are sensitive indicators of environmental health and, with their rich chemistry, also sources for pharmaceutically active compounds. Yet, especially in tropical regions, they are still poorly known. Since 2002, Collections Manager and Adjunct Curator Robert Lücking (Botany) has conducted training programs for Latin American lichenology and mycology students and professionals, including special courses at Universidad de Costa Rica, Universidad Peruana Cayetano Heredia Peru, Universidad Distrital Francisco Jose Caldas in Colombia, and at Las Cruces Biological Station in Costa Rica (sponsored by the Organization for Tropical Studies). In 2007 Robert launched an NSF-funded project that supported lichen workshops in 16 Latin American countries through 2012, covering tropical lichenology, quantitative field sampling methods, multivariate analysis of community data, and phylogenetic methods. As part of this program, in 2012 he held seven workshops in Colombia and Brazil, training some 80 students and early-career scientists. Over the span of the project, Robert led a total of 42 workshops for 452 participating

students and professionals, from 24 countries. The project also supported five Ph.D. thesis projects, one completed and two near completion, 11 Master's thesis projects, seven of which have been completed, and 34 undergraduate-level thesis projects, 17 of which have been completed. Several of the concluded thesis works led to Ph.D. projects by the successful candidates, both overseas and the US (e.g., Oregon State University, George Mason University in Virginia, University of Frankfurt in Germany, University of Barcelona). In addition, this year Robert also organized the second OTS lichen course, focusing on environmental health and bioindication, again at Las Cruces Biological Station in Costa Rica.

# East Asian Lichenology and Mycology

MacArthur Associate Curator and Chair Thorsten Lumbsch (Botany) continued the sixth year of his training program for students interested in Lichenology and Mycology in East Asia starting. He is currently collaborating with two working groups. In 2012 Dr. Lumbsch traveled to Thailand for the Meeting of the International Association for Lichenology and also for field trips in eastern Thailand with his collaborators. Thorsten is also hosting a postdoctoral scientist from Thailand, Sittiporn Parnmen, who is working on an NSF-funded project on the lichen family Graphidaceae.

# Lichenology in East Africa

Since 2009 Thorsten Lumbsch has conducted workshops on lichen taxonomy in Kenya, Uganda and Tanzania, led field trips in Kenya and Tanzania, and hosted graduate students from Kenya and Tanzania at the Museum. The program is a collaboration with the National Museums of Kenya, supported by the IDP Foundation, Inc. In 2012 Thorsten traveled to Kenya to collaborate on fieldwork with his student, Paul Kirika. Paul successfully finished his Master's Thesis at Moi University in 2012, and started his Ph.D. thesis, also supported by the IDP Foundation, Inc.

# Mammalian Biodiversity in the Philippines

For more than 25 years Curator Larry Heaney (Zoology/Mammals) has been training Filipino scientists on the documentation and conservation of vertebrate biodiversity in the Philippines—home to one of most unique and severely threatened biodiversity hotspots on earth. With funding from the Museum, the National Science Foundation, the MacArthur Foundation, and the Negaunee Foundation, Dr. Heaney has trained more than 80 young Filipino university biologists, park managers, and government officials, and has conducted many workshops and intensive courses at University of the Philippines—Los Baños and University of the Philippines main campus (Diliman). In 2012, the project provided advanced training in field research techniques and manuscript preparation to people from several government offices and universities, and a museum. Larry works extensively with the Wildlife Conservation Society of the Philippines, which he helped to establish in 1992, advising young biologists on research and career development, and chairs a WCSP committee of young biologists who provide recommendations to the Philippine government regarding endangered species. In 2012, he was invited to serve as an advisor to the National Museum of the Philippines on development of new research, collections, and training facilities taking place as part of a museum expansion program.

# COLLECTIONS- AND LAB-BASED TRAINING AT THE FIELD MUSEUM

# **NSF PEET projects**

The PEET program (Partnerships for the Enhancement of Expertise in Taxonomy), the National Science Foundation's response to ever-shrinking expertise in "whole organism" biology, made major grants to support intensive studies of "under-studied" organisms, with projects providing comprehensive training in collections-based, monographic studies for postdoctoral associates, graduate students, and undergraduate interns. The program funded five projects at The Field Museum since the late 1990s; the remaining PEET project still underway at FMNH is Associate Curator Petra Sierwald's large-scale millipede study "The Diplopoda: Research, Taxonomic Training and Computerization," which provided training for two postdocs, four Ph.D. students, two Masters' students, and over a dozen interns. Overall the project produced four professors, all now training their own undergraduate and graduate students, and one Myriapod curator in Germany. The project also supported (and the Museum continues to support) millipede training and millipede research conducted by early-career millipede systematists in the Philippines, Brazil, Vietnam and Thailand.

# **Training in Molecular Analysis Techniques**

The Pritzker Laboratory for Molecular Systematics and Evolution is a multi-user Field Museum facility dedicated to the collection and analysis of genetic data on the evolutionary relationships among species. A. Watson Armour III Lab Manager Kevin Feldheim conducts training for new users in all phases of the data collection process, from DNA extraction to sequencing to analysis of the resulting data. During 2012 lab staff trained 35 new users, ranging from high school interns to Ph.D. students to international scientists, including visitors from Cuba, Peru, Ukraine, and Estonia. Study topics included toucans, malaria, Belding's ground squirrels, sawfish, sponges, liverworts, venomous fish, flowering plants, lichenized fungi and great white sharks.

# **INTERNS, 2012**

#### HIGH SCHOOL INTERNS

#### **Department of Anthropology**

Maria Sabater (Hewitt School).

#### **Department of Botany**

Janet Morales (Lane Tech High School).

#### Department of Geology

Rebecca Friedlander (Adlai E. Stevenson High School); Evan Johnson-Ransom (Brother Rice High School); Niall Griffin (Glenbard West High School); William Buchman, Libby Dybal (Glenbrook North High School); Evelina Yarmit (Highland Park High School); Sarah Pipal (Lyons Township High School); Gabriel Ward (Randolph Upper School, Huntsville, AL).

#### **Department of Zoology**

Jenny Gray, Jamie Carthew, Gabriel Hast, Ben Hullinger, Walker Kettelkamp (Evanston Township High School); Elspeth Stewart (Home Schooled); Ellen Gieser, Malia Wenny (Illinois Math & Science Academy); Kathy Zhou (International School of Beijing High School); Christian Valderrama (J. F. Kennedy High School); Stacey Huynh (J. Sterling Morton East High School); Luke O'Connor (Jones College Prep); Charlotte Collins, Nathan Goldberg (Latin School of Chicago); Daniel Patterson (Lyons Township High School); Ethan Berman (Parker School); Ethan Gyllenhal, Jesse Kusimba (Oak Park High School); Charles Gregg (Proviso Mathematics and Science Academy); Katherine McDonnell (St. Francis High School); Andrew Fialkowski (St. Ignatius High School); Olivia Perozo, Catherine Zhou (University of Chicago Lab School); Darcae Holmes, Amber Richardson (VOISE Academy).

#### Pritzker Laboratory for Molecular Systematics and Evolution

Audrey Putman (Morgan Park Academy).Ellen Gieser (Illinois Math & Science Academy); Luke O'Connor (Jones College Prep); Jesse Kusimba (Oak Park High School); Catherine Zhou (University of Chicago Lab School).

#### UNDERGRADUATE STUDENT INTERNS

#### **Department of Anthropology**

Kristin Swalchick (Arizona State University); Aiyana Moorhead (Boston University); Monica Rosenberger (Carthage College); Maura Condon, Jessica Jackson Brown, Marissa Rivera (DePaul University); Margaret Geoga (Harvard University); Sarah Carlson (Illinois Wesleyan University); Kelley Seifert (Iowa State University); Emily Gregg (Kenyon College); Peter Altaffer, Daniel Brunk, Teressa Peirona (Loyola University); Amanda Onalaja (New York University); Caroline Clay, Carly Johnston, Amanda Marolf, Jessica Pantel, Alexander Pirela (North Central College); Amanda Murphy, Amanda Respess (Northeastern University); Sarah Rivers (Northern Illinois University); Catherine Althaus, Amy Zillman (Northwestern University); Jamie Countryman (Oberlin College); Grace Apfeld (Rice University); Eileen O'Donnell (School of the Art Institute of Chicago); Holly Smith (Swarthmore College); Madeleine Schwartz (Tulane University); Hannah Koch, Anna Lindquist, Kirsten Madsen, Andrea Rummel, Alanna Warner (University of Chicago); Amaris Sturm (University of Delaware); Alice Bunch, Paula Makuch, Eva Martinez, Alexis Ochalla, Cassie Pontone, Barbara Posinger, Lindsey Proctor, Leona Quist, Allison Upton (University of Illinois at Chicago); Aidan Hercules, Meagan Thies (University of Iowa); Morgan Iddings, Katelyn Melloh (University of Notre Dame); Susan Jones (Wheaton College).

# **Department of Botany**

Sergio Garcia, Chelsea Franklin, Daniel O'Rourke, De Katie Roznai, Yarency Rodriguez, Elliot Gitter (DePaul University); Bradley Loomis (Green Mountain College); Qianyu Ying (Lake Forest College); Megan Vats (Loyola University); Michael Niezgoda (Michigan State University); Jared Lang, Anna Krembs, Lisa Murata, Oana Vadineanu, Zak Zillen (Northeastern Illinois University); Laura Bezler Shawna Bartnik, Kristina Lugo (Roosevelt University); Allie Stone (School of the Art Institute, Chicago); Emine Kochakova, Arista Tischner (University of Illinois at Chicago); Parth Shah (University of Illinois at Urbana-Champaign); Immanuel Stern (University of Wisconsin-Madison); Enrique Torres, Sherit Stovall (Wright College).

# **Department of Geology**

Diana Boudreau, Elizabeth Fisher, Spencer Hellert, Vernon Meidlinger-Chin (Augustana College); Sam Simon (Carnegie Mellon University); Christopher Boudreaux (Dartmouth College); Robert North (Northeastern Illinois University); Alex Layng (Northwestern University); Eleanor Albarran (Princeton University); Franco Gallastegui, Liam Heins, Spiro Sullivan, Maria Valdes (University of Chicago); Florence Lin (University of Illinois).

#### Department of Zoology

Molly Fisher (Cornell University); Sara Zufan (DePaul University); Karolina Kutcha, Angelina Patti, Lynika Strozier, (Dominican University); Luke Campillo (Drake University); Sonia Leon (Elmhurst College); Emma Claire Mihevc (Georgia Tech University); Mark Swanson (Illinois Wesleyan University); Daniel Montgomery (Indiana State University); Ari Rice (Lawrence University); Stephanie Garcia, Iqra Mushtaq, Joy Peplinski, Caitlyn Schmid, Margaret Sladek, Alexandra Weber (Loyola University); Rachel Martiniak, Rachael McClellan, Sylvia Orellana, Michael Page, Sarah Wachowski (Northeastern Illinois University); Hannah Grooms, Natalie Lake, Andrew Pfeiffer, Allison Pope, Elizabeth Velazquez (Northwestern University); Danielle Wasserman (Purdue University); Aaron-Bereich Apilado, Athens Chen, Carlos Enriquez, Ariel Fang, Ellie Farmer, Jenny Farrell, Caroline Hanson, Elana Ryznar, Oliver Todd (School of the Art Institute of Chicago); Chris Ivanovich, Sydney Rosebraugh, Marianne Seneczko, Trevor Thompson (University of Chicago); Anthony Deczynski (University of Delaware); Arista Tischner (University of Illinois at Chicago); Thor Hansen, T. James Poulos (University of Illinois at Urbana-Champaign); Kyle David (University of Miami); Letitia Jacques (University of Montana).

# Library

Gina De Keersmaecker, Adam Frisch, Silvana Poole, Marisa Szpytman, Diane Strzelecki.

# **GRADUATE STUDENT INTERNS**

#### **Department of Anthropology**

Ashley Jehle (Buffalo State College); Mary Cochrane (Columbia University); Amanda Wolf, (Northern Illinois University); Sara DiDomenico, Pilar Escontrías (Northwestern University); Jessica Jaffe (Tulane University); Charlotte Bossick (University of Bristol); Kristen Simmons, Emily Wilson, Lu Yao (University of Chicago); Colin LeJeune, Matthew Piscitelli, Danielle Riebe, (University of Illinois at Chicago).

#### **Department of Geology**

Levke Kööp (University of Chicago).

#### **Department of Zoology**

Martha Iserman, Meghan Rock (California State University-Monterey Bay).

# **TEACHER INTERNS**

**Pritzker Laboratory for Molecular Systematics and Evolution** Anna Simpson (Austin Polytechnical Academy); Tom Champion (Naperville North).

# **RESIDENT GRADUATE STUDENTS, 2012**

#### DEPARTMENT OF ANTHROPOLOGY

Northern Illinois University Ashlee Craig

Northwestern University Pilar Escontrias

University of Chicago Edna Davion, Lu Yao

University of Illinois at Chicago Emily Baca, Gabriel Cantarutti, Sofia Chacaltana, Rebecca Deeb, Rory Dennison, John Hicks, Caleb Kestle, Colin LeJeune, James Meierhoff, Stephanie Moorman, Samantha Pietruszewski, Matthew Piscitelli, David Reid, William Ridge, Danielle Riebe, Rebecca Seifried, Doug Smit

# DEPARTMENT OF BOTANY

University of Illinois at Chicago Dawson White

<u>University of Chicago</u> Deren Eaton, Matthew Nelsen

Northwestern University Laura Briscoe

### DEPARTMENT OF GEOLOGY

University of Chicago Jonathan S. Mitchell

# DEPARTMENT OF ZOOLOGY

<u>Charles Stuart University</u> Raoul Davion

Northwestern University Sarah McVicar

University of Chicago Michael Alcorn, Nick Block, Rebecca Dikow, Shane DuBay, Victoria Flores, Justin Lemberg, Joanna Mandecki, Charlene McCord, Aaron Olsen, Daniela Palmer, Benjamin Rubin, Aaron Savit, Timothy Sosa, Thomas Stewart, Nathan Upham, Ben Winger, Max Winston

University of Illinois at Chicago Erika Arnold, Matthew Carson, David J. Clarke, Nicholas Crouch, Michael Jorgenson, Carrie Seltzer, John Wilk

University of Kansas Sarah Gibson

Chulalongkorn University, Thailand Chattraphas Pongchareon

# VOLUNTEERS, 2012

# DEPARTMENT OF ANTHROPOLOGY

Tanya Aceves, Janice Bell Kaye, Richard Bisbing, C. Thomas Brockmann, Tatsumi Brown, Kristin Buskirk, Ellis Caspary, Laura Chaillie, Lei-Lani Chan, Tiffany Charles, Magdalyne Christakis, Jillian Chlumsky, Sara Colaianni, Sarah Coleman, Gabriele Da Silva, Lauren Fahey, Nancy Feldman, Rebecca Gallagher, Peter Gayford, William Goldman, Vida Goldstein, Richard Guzik, Peggy Hoberg, Martina Hough, Jack MacDonald, Josephina Meleico, Daniel Melone, Courtney Miller, Lois Moeller, Robert Moeller, Claire Odland, Anelia Petrova, Niya Petrova, Cassie Pontone, Marissa Rivera, Sarah Rivers, Katherine Roberts, Dawn Russell, Esther Schechter, Monica Sentoff, Stephen Sentoff, Terri Sinnott, Lisa Stringer, Meagan Thies, Jean Vondriska, Edward Yastrow, Julia Young.

# **DEPARTMENT OF BOTANY**

Zorica Dabich (Bryology), Karen Engel (Bryology), Wyatt Gaswick (Mycology), Richard Hyerczyk (Mycology), Nancy Klaud (Scientific Illustration/Flowering Plants), Alice Piller (Mycology), Walter Reising (Data preparation/Digital imaging), Jill Riddell (Mycology), John Schmadeke (Flowering Plants), Andrew Schmitz (Bryology/Flowering Plants), Leon Shernoff (Mycology), Peter Sullivan (Flowering Plants).

# DEPARTMENT OF GEOLOGY

Jan Marie Aramini (Vertebrate Paleontology), Janice Beck (Vertebrate Paleontology), Kelly Bice (Vertebrate Paleontology), Irene Broede (Vertebrate Paleontology), Steven R. Clawson (Vertebrate Paleontology), Mary Sue Coates (Physical Geology), Larry Coronelli (Paleobotany), Elizabeth Dybal (Physical Geology), Cary Easterday (Invertebrate Paleontology), Mike Eklund (Vertebrate Paleontology), Rebecca Friedlander (Physical Geology), Stephen Gieser (Vertebrate Paleontology), Michael Hanson (Vertebrate Paleontology), Gerald Hough (Vertebrate Paleontology), Tom Kerstann (Vertebrate Paleontology), Dennis Kinzig (Vertebrate Paleontology), Joanne Kluga (Vertebrate Paleontology), John McConnell (Invertebrate Paleontology and Paleobotany), Elisabeth Meeker (Vertebrate Paleontology), Jacob Meyer (Vertebrate Paleontology), Brian Morrill (Vertebrate Paleontology), Timothy Nelson (Vertebrate Paleontology), Karen Nordquist (Vertebrate Paleontology), Mary Peters (Vertebrate Paleontology), Catherine Pries (Invertebrate Paleontology), Bob Rosenberg (Vertebrate Paleontology), Anne-Elizabeth Stone (Physical Geology), Samuel Sullivan (Vertebrate Paleontology), Karen Vendl (Physical Geology), Mark Vendl (Physical Geology), Ylanda Wilhite (Vertebrate Paleontology), Jack Wittry (Paleobotany and Invertebrate Paleontology), Kurt Zahnle (Vertebrate Paleontology), William Zandrew (Vertebrate Paleontology), Elaine Zeiger (Paleobotany), Steven Zitowsky (Vertebrate Paleontology).

#### DEPARTMENT OF ZOOLOGY

Eric Ahlgren (Fishes), Bob Andrini (Birds), Marie Angkuw (Birds), Tom Anton (Amphibians and Reptiles), Nancy Bigelow (Insects), Richard Bloomfield (Insects), Helen C. Bonbrest (Invertebrates), Robert Boswell (Birds), Brendan Boyer (Insects), Joan Bruchman (Birds), Casey Buchanan (Birds), Renee Buecker (Insects), Peter Buol (Birds), Drew Carhart (Insects), Mei-Ling Chung (Invertebrates), Stephanie Clark (Invertebrates), Tracy Damitz (Mammals), Jameson Doody (Mammals), John Dorshorst (Insects), Thomas Durica (Insects), Marion Dunn (Fishes), Alison Ebert (Mammals), Ralph Eiseman (Birds), Glenn Gabanski (Birds), Dr. Arlene Ghiron (Insects), Matthew Girard (Fishes), Harvey Golden (Mammals), Joan Goldstein (Fishes), Richard Guzik (Invertebrates), Erin Hall (Mammals), Michael Hanson (Birds), Joanna Hosteny (Birds), Jeff Hoswell (Fishes), Gerry Hough (Insects), Graham Hoviland (Mammals), Lisa Hung (Insects), Herbert Hymen (Birds), Dr. James P. Kase (Insects), Kelsey Keaton (Insects), Ruth Keeru (Mammals), Arlene Koziol (Birds), Sara Kunkel (Birds), Daniel Le (Insects), Kahlee Leingang (Mammals), Deborah Leja (Insects), Thomas Lesh (Invertebrates), Joanne Levy (Amphibians and Reptiles), Gaetano Marangelli (Birds), Teresa Mayfield (Amphibians and Reptiles), Steve Moore (Mammals), Susan Okey (Insects), Sylvana Peneff (Birds), Sheila Reynolds (Mammals), Alia Rezk (Mammals), Aspen Reese (Mammals), Lindsey Rowland (Birds), Joe Rowlett (Fishes), Meera Sethi (Birds), Elizabeth Simmons (Insects), Terri Sinnott (Fishes), Tracey Slade (Insects), Vicky Slania (Birds), Lauren Smith (Mammals), Rebecca Smith (Invertebrates), Michael Smoody (Amphibians and Reptiles), Dave Strecker (Insects), Diana Sudyka (Birds), Joshua Traub (Amphibians and Reptiles), Deo Tuyisingize (Mammals), Sandra Van Tilburg (Birds), Christina Vincent (Insects), Christine Vittoe (Invertebrates), Matthew Vrazo (Invertebrates), David Walker (Invertebrates), Robert Weiglein (Birds), Mary Wells (Mammals), Helen Wilson (Mammals), Amanda Zeigler (Birds).

#### LIBRARY

Patricia Barker, Christine Frazer, Elizabeth Giles Glenn, Aubrey Howard, Melissa Humphreys, Bernice Jacobs, Kristin Jacobsen, Barbara Palmer, Gwyn Smith, Hsi-Tsin Tsiang, Mary Valsa, Warren Valsa, Wendall Wilson.

# HONORARY APPOINTMENTS, 2012

# DEPARTMENT OF ANTHROPOLOGY

### **Curators Emeritus**

Phillip Lewis, Ph.D., Primitive Art, Melanesian Ethnology Bennet Bronson, Ph.D., Asian Archaeology and Ethnology

# Adjunct Curators

Elizabeth Abrams, Ph.D., Biomedical Anthropology Dean E. Arnold, Ph.D., Mesoamerican and South American Archaeology and Ethnology Brian Bauer, Ph.D., Andean Archaeology Deborah Bekken, Ph.D., East Asian Archaeology and Zooarchaeology James A. Brown, Ph.D., North American Archaeology Winifred Creamer, Ph.D., Archaeology of the Americans Antonio Curet, Ph.D., Circum-Caribbean Anthropology Molly Doane, Ph.D., Sociocultural Anthropology Timothy Earle, Ph.D., Archaeology of Complex Societies Mark Hauser, Ph. D., Historical Archaeology and Archaeology of African Diasporas Mitch Hendrickson, Ph.D., Southeast Asian Archaeology Chuimei Ho, Ph.D., East and Southeast Asian Art and Archaeology Paul Hockings, Ph.D., Southern Asia Social Anthropology Katherine Hoffman, Ph.D., Linguistic and Sociocultural Anthropology Matthew Johnson, Ph.D., Archaeology of Britain and Europe Laura Junker, Ph.D., Complex Societies, Maritime Trade, and Ceramic Production Lawrence H. Keeley, Ph.D., Europe and North American Paleolithic Archaeology Waud Kracke, Ph.D., Social Anthropology, Psychoanalysis, Dreams Sibel Barut Kusimba, Ph.D., African Archaeology Christopher W. Kuzawa, Ph.D., Health, Human Growth and Development Vincent LaMotta, Ph.D., Bioarchaeology, American Southwest Archaeology William Leonard, Ph.D., Biological Anthropology Mark Lietchty, Ph.D., Anthropology and History Thomas McDade, Ph.D., Human Biology John Monaghan, Ph.D., Anthropology and History, Religion Donna Nash. Ph.D., Andean Archaeology Linda Nicholas, M.A., Mesoamerican Archaeology Joel Palka, Ph.D., Mesoamerican Archaeology Crystal Patil, Ph.D., Global Health James L. Phillips, Ph.D., Old World Prehistory, Stone Tools Jack H. Prost, Ph.D., Physical Anthropology and Primate Behavior Gayatri Reddy, Ph.D., Cultural, Gender Anthropology Helen Robbins, Ph.D., Repatriation Cynthia Robin, Ph.D., Archaeology, Social Organization Helen B. Schwartzman, Ph.D., Psychological Anthropology Sylvia Vatuk, Ph.D., Cultural, Gender, and Urban Anthropology, India Mary J. Weismantel, Ph.D., Cultural Anthropology, Food, Adoption Sloan Williams, Ph.D., South American Bioarchaeology

### **Research Associates**

Kathleen Adams, Ph.D., Sociology Babunte Agbaje-Williams, Ph.D., African Anthropology Philip J. Arnold, III, Ph.D., Mesoamerican Archaeology, Craft Production and Ethnoarchaeology

Sylvia Astalis, Ph.D., Evolutionary Anthropology Richard Blanton, Ph.D., Mesoamerican Archaeology Jane E. Buikstra, Ph.D., Skeletal Biology, Paleopathology, Paleodemography, Forensic Anthropology Maria Cattell, Ph.D., Anthropology and Gender, Age Raymond Codrington, Ph.D., Cultural Anthropology Michael David Colvard, DDS, Medical Anthropology William J. Conklin, Ph.D., Peruvian Anthropology Nicole Couture, Ph.D., Latin America Susan deFrance, Ph.D., Zooarchaeology, Andean Archaeology Paul R. Duffy, Ph.D., Emergent Social Inequality, Bronze Age Europe Christine Dunford, Ph.D., Ecology, Cultural Anthropology Ronald K. Faulseit, Jr., Ph.D., Mesoamerican Archaeology David Goldstein Ph. D., South American Anthropology Ruth Gomberg-Munoz, Ph.D., Political and Economic Anthropology Anne. L. Grauer, Ph.D., Physical Anthropology, Skeletal Biology, North America Augustin Ferdinand Charles Holl, Ph.D., West African Prehistory, African-American Archaeology John Janusek, Ph.D., Andean Archaeology Carolyn Schiller Johnson, Ph.D., Ethnomusicology James Ketelaar, Ph.D., East Asian History Sharon Lewis Peniston, Ph.D., Urban anthropology, Kinship structures, U.S. and Caribbean Maria C. Lozada, Ph.D., Peruvian Archaeology Edward F. Maher, Ph. D., Ancient Eastern Mediterranean, Zooarchaeology Maxine E. McBrinn, Ph. D., Southwestern Archaeology Donald E. McVicker, Ph.D., Mesoamerican Archaeology Michael E. Moseley, Ph.D., South American Archaeology Rahul Oka, Ph.D., African Anthropology Nikos Papadopoulos, Ph.D., Applied Geophysics and Remote Sensing Nadine Ruth Peacock, Ph.D., Biological Anthropology, Africa William Pestle, Ph.D., Biological Anthropology Mario Rivera, Ph.D., Andean Archaeology Robert L. Rotenberg, Ph.D., Cultural Anthropology Apostolos Sarris, Ph.D., Applied Geophysics and Remote Sensing Esther Schechter, Ph.D., New Guinea Research Program Nicola Sharratt, Ph.D., Andean Archaeology Fred H. Smith, Ph.D., Physical Anthropology Charles Stanish, Ph.D., Andean Anthropology Gil J. Stein, Ph.D., Near Eastern Archaeology Ann L.W. Stodder, Ph.D., Bioarchaeology, Oceania Emily Stovel, Ph.D., Andean Anthropology Mary Thieme, M.A., Mesoamerican Archaeology Zhu Tieguan, Ph.D., Asian Anthropology Russell Tuttle, Ph.D., Biological Anthropology Kevin Vaughn, Ph. D., Andean Anthropology Benjamin Vining, Ph.D., Andean Archaeology Jonathan Walz, Ph.D., African Archaeology Ronald Weber, Ph.D., Amazon Basin and Northwest Coast Archaeology and Ethnology William Whitehead, Ph.D., Andean Anthropology Cyril Wilson, Ph.D., Environmental Geography Karen Wilson, Ph.D., Art and Archaeology of the Ancient Near East

Richard W. Yerkes, Ph.D., European and Mediterranean Archaeology

#### **Associates**

Daniel Brinkmeier, M.A., South America, Applied Anthropology, Outreach Connie Crane, B.A., North American Ethnology Peter Gayford, B.A., African Archaeology and Ethnology Jack M. MacDonald, M.S., Oceania Claire Odland, M.A., African and South American Textiles Lisa Stringer, M.A., Archaeology Edward Yastrow, B.A., Human Origins

### DEPARTMENT OF BOTANY

# Curators Emeritus

William Burger, Ph.D., Flowering Plants Michael O. Dillon, Ph.D., Flowering Plants John J. Engel, Ph.D., Bryology

#### Adjunct Curators

William A. Alverson, Ph.D., Flowering Plants Peter G. Avis, Ph.D., Mycology Robin B. Foster, Ph.D., Flowering Plants Sabine Huhndorf, Ph.D., Mycology Patrick Leacock, Ph.D., Mycology Robert Lücking, Ph.D., Lichenology Gary L. Smith Merrill, Ph.D., Bryology Matt von Konrat, Ph.D., Bryology/Pteridophytes

#### **Visiting Curator**

Fred R. Barrie, Ph.D., Flowering Plants

#### **Research Associates**

Carrie J. Andrew, Ph.D., Mycology Peter Avis, Ph.D., Mycology Daniel Ballhorn, Ph.D., Lichenology John E. Braggins, Ph.D., Bryophytes Julieta Carranza, Ph.D., Mycology Ana Crespo, Ph.D., Lichenology Eve Emshwiller, Ph.D., Ethnobotany Fernando A. Fernandez, Ph.D., Mycology Jesús Garcia Jiminez., Biol., Mycology Nancy Garwood, Ph.D., Flowering Plants David S. Glenny, Ph.D., Bryology Luis D. Gómez, Ph.D., Mycology James G. Graham, Ph.D., Flowering Plants J. Kelly Gravier, Ph.D., Mycology Matthew Greif, Ph.D., Mycology Nancy Hensold, Ph.D., Flowering Plants Patrick Herendeen, Ph.D., Flowering Plants Andrew Hipp, Ph.D., Flowering Plants Sara Hoot, Ph.D., Flowering Plants Michael Huft, Ph.D., Flowering Plants Richard Hyerczyk, B.S., Lichenology Boris Igic, Ph.D., Flowering Plants

Wei Jiang-Chun, Ph.D., Mycology Marian R. Kadushin, Ph.D., Flowering Plants Jason Koontz, Ph.D., Flowering Plants Thomas G. Lammers, Ph.D., Flowering Plants Jorgé Gómez Laurito, B.S., Flowering Plants Segundo Leiva González, Ph.D., Flowering Plants David Lentz, Ph.D., Flowering Plants Blanca Leon, Ph.D., Pteridology David P. Lewis, M.S., Mycology Richard A. Lupia, Ph.D., Paleobotany James Luteyn, Ph.D., Flowering Plants François M. Lutzoni, Ph.D., Lichenology Maria de Milagro Mata Hidalgo, Mycology Susana A. Magallón-Puebla, Ph.D., Paleobotany Roberta Mason-Gamer, Ph.D., Flowering Plants Rogers McVaugh, Ph.D., Flowering Plants Maria Ines Messuti, Ph.D., Mycology Andrew Miller, Ph.D., Mycology Gregory M. Mueller, Ph.D., Mycology Michael Nee, Ph.D., Flowering Plants Cirilo Nelson, Ph.D., Flowering Plants Lorin I. Nevling, Jr., Ph.D., Flowering Plants Khwanruan Papong, Ph.D., Lichenology Linda Prince, Ph.D., Flowering Plants Kathleen Pryer, Ph.D., Pteridology Victor Quipuscoa Silvestre, Ph.D., Flowering Plants James Rastorfer, Ph.D., Bryology Jacinto C. Regalado, Jr., Ph.D., Flowering Plants Isidoro Sanchez Vega, Ph.D., Flowering Plants Imke Schmitt, Ph.D., Lichenology Rudolf M. Schuster, Ph.D., Bryology Alan R. Smith, Ph.D., Pteridology D. Doel Soejarto, Ph.D., Flowering Plants Tod F. Stuessy, Ph.D., Flowering Plants Jun Wen, Ph.D., Flowering Plants Norman Wickett, Ph.D., Bryology Evelyn Williams, Ph.D., Flowering Plants Andrew Wilson, Ph.D., Mycology Kenneth Young, Ph.D., Flowering Plants Nyree Zerega, Ph.D., Flowering Plants

#### Field Associates

Sandra Knapp, Ph.D., Flowering Plants Antonio Molina R., Ing. Agr., Flowering Plants

#### **Associates**

Anders Hagborg, B.S., Bryology Joanna McCaffrey, M.S., Collections Digitization Betty Strack, M.S., Mycology Gayle Tonkovich, M.S., Flowering Plants

#### DEPARTMENT OF GEOLOGY

#### **Curators Emeritus**

John R. Bolt, Ph.D., Fossil Amphibians and Reptiles Matthew H. Nitecki, Ph.D., Fossil Invertebrates Bertram G. Woodland, Ph.D., Petrology

#### Adjunct Curators

Ian Glasspool, Ph.D., Paleobotany Paul P. Sipiera, Ph. D., Meteoritics

#### **Research Associates**

William L. Abler, Ph.D., Fossil Vertebrates Edgar Allin, Ph.D., Fossil Vertebrates Gloria Arratia, Ph.D., Fossil Fishes Allison L. Beck, Ph.D., Fossil Vertebrates William Bemis, Ph.D., Fossil Vertebrates Daniel B. Blake, Ph. D., Fossil Invertebrates C. Kevin Boyce, Ph.D., Paleobotany Christopher A. Brochu, Ph.D., Fossil Vertebrates Greg Buckley, Ph.D., Fossil Vertebrates Andrew Campbell, Ph.D., Meteoritics Matthew T. Carrano, Ph.D. Fossil Vertebrates Julia A. Clarke, Ph.D., Fossil Vertebrates Robert Clayton, Ph.D., Meteoritics/Geochemistry Michael Ivor Coates, Ph.D., Fossil Fishes Peter R. Crane, Ph.D., Paleobotany Darin A. Croft, Ph.D., Fossil Vertebrates Nicolas Dauphas, Ph.D., Cosmochemistry Andrew Davis, Ph.D., Meteoritics/Geochemistry David Kenneth Elliott, Ph.D., Fossil Vertebrates Greg Erickson, Ph.D., Fossil Vertebrates Daniel Fisher, Ph.D., Fossil Invertebrates John Flynn, Ph.D., Fossil Mammals Michael Foote, Ph.D., Fossil Invertebrates Catherine Forster, Ph.D., Fossil Vertebrates Nadia B. Fröbisch, Ph.D., Fossil Vertebrates Gary Galbreath, Ph.D., Fossil Vertebrates Terry Allen (Bucky) Gates, Ph.D., Fossil Vertebrates Timothy Gaudin, Ph.D., Fossil Mammals Paul M. Gignac, Ph.D., Fossil Vertebrates Terry Grande, Ph.D., Fossil Fishes Gerald Grellet-Tinner, Ph.D., Dinosaurs Lawrence Grossman, Ph.D., Meteoritics Thomas Guensburg, Ph.D., Fossil Invertebrates William Hammer, Ph.D., Fossil Reptiles Eric Hilton, Ph.D., Fishes James Hopson, Ph.D., Fossil Vertebrates David Jablonski, Ph.D., Fossil Invertebrates Christine Janis, Ph.D., Fossil Mammals/other verts. Harry J. Jerison. Ph.D., Fossil Vertebrates Christian F. Kammerer, Fossil Vertebrates David Krause, Ph.D., Fossil Vertebrates

Daniel Ksepka, Ph.D., Fossil Vertebrates Michael LaBarbera, Ph.D., Fossil Invertebrates Riccardo Levi-Setti, Ph.D., Fossil Invertebrates R. Eric Lombard, Ph.D., Fossil Vertebrates Ernest Lundelius, Ph.D., Fossil Mammals Zhe-Xi Luo, Ph.D., Fossil Vertebrates Jennifer C. McElwain, Ph.D., Paleobotany Frank McKinney, Ph.D., Fossil Invertebrates Doris Nitecki, Fossil Invertebrates Philip M. Novack-Gottshall, Ph.D., Fossil Invertebrates Lynn K. Nyhart, Ph.D., Fossil Invertebrates/History of Biology J. Michael Parrish, Ph.D., Fossil Reptiles Roy E. Plotnick, Ph.D., Fossil Invertebrates Robert R. Reisz, Ph.D., Fossil Reptiles Frank M. Richter, Ph.D., Meteoritics Ray Rogers, Ph.D., Sedimentology Rudyard W. Sadleir, Ph. D., Fossil Vertebrates Birger Schmitz, Ph.D., Meteoritics Paul Sereno, Ph.D., Fossil Reptiles Neil H. Shubin, Ph.D. Fossil Vertebrates Christian A. Sidor, Ph.D., Fossil Vertebrates Nathan D. Smith, Ph.D., Fossil Vertebrates Thomas Stephan, Ph.D., Meteoritics Neil C. Sturchio, Ph.D., Meteoritics Stuart S. Sumida, Ph.D., Fossil Vertebrates Stephen R. Sutton, Ph.D., Meteoritics Alfred Traverse, Ph.D., Fossil Plants/Paleopalynology Meenakshi Wadhwa, Ph.D., Meteoritics Mark Webster, Ph.D., Fossil Invertebrates Robin Whatley, Ph.D., Fossil Vertebrates André Wyss, Ph.D., Fossil Mammals Lindsay E. Zanno, Ph.D., Fossil Vertebrates

#### **Associate**

Marlene Hill Donnelly, B.S., A.A., Scientific Illustration

# DEPARTMENT OF ZOOLOGY

#### **Curators Emeritus**

Robert F. Inger, Ph.D., Amphibians and Reptiles Alfred F. Newton, Ph.D., Insects Harold K. Voris, Ph.D., Amphibians and Reptiles

#### Field Associates

Tom Anton, M.A., Midwestern Amphibians and Reptiles Sherif Baha El Din, M.S., Herpetology of Egypt Barbara Becker, M.A., Zoology Research Somchai Bussarawit, B.S., Marine Biology Tanya Chan-ard, M.S., Forest Biology and Herpetology Merel J. Cox, M.S., Geology, Snakes of Thailand Leif Davenport, Mammals of Burundi Susan Davis, M.S., Neotropical Birds

Terrence C. Demos, M.Sc., African Small Mammals Steve Fratello, Guyanan Butterflies Bruce Hayward, Ph.D., African Mammals Nina R. Ingle, Ph.D., Philippine Mammals and Conservation Djoko T. Iskandar, Ph.D., Genetic and Systematics of Amphibians Maklarin Lakim, Research Officer Vachira Lheknim, Ph.D., Fish of Thailand Ruben I. Madriz, B.S., Insects Cryogenic Collections Kelvin Lim Kok Peng, Amphibians and Reptiles Antonio Machado-Allison, Ph.D., South American Fishes David Matusik, Lepidoptera Taxonomy Gregory Mayer, Ph.D., Organismic and Evolutionary Biology Nicholas Ntare, B.Sc., Albertine Rift Mammals Manuel A. Plenge, Peruvian Bird Distribution Brett Scheffers, Ph.D., Amphibians of Borneo and the Philippines Blas Tabaranza, M.S., Philippine Mammals Jamie Thomerson, Ph.D., Central and South American Fishes Ruth Utzurrum, Ph.D., Philippine Mammals

#### **Research Associates**

Michael Alfaro, Ph.D., Molecular Systematics David Angulo, M.S., Computer Technology and Databases Anchalee Aowphol. Ph.D., Ecology and Population Genetics Mary Ashley, Ph.D., Conservation Genetics Wirt Atmar, Ph.D., Diversity and Community Structure Danny Balete, M.S., Philippine Mammals and Conversation Rosemary Barraclough, Ph.D., Blood Bird Parasites Jason E. Bond, Ph.D., Systematics of Diplopoda and Araneae Rauri Bowie, Ph.D., African Bird Systematics John Cadle, Ph.D., Herpetology Angelo Capparella, Ph.D., Evolution of Neotropical Birds Jose Maria Cardoso da Silva, Ph.D., Amazonian Birds Barry Chernoff, Ph.D., South American Fishes/Conservation Stephanie Clark, Ph.D., Land and Freshwater Gastropods Dale Clayton, Ph.D., Host/Parasite Coevolution Melissa Cogan-Morales, Ph.D., Bat Morphology Timothy Collins, Ph.D., Molecular Evolution of Mollusks Norbert Cordeiro, Ph.D., Ecology of African Birds Joel Cracraft, Ph.D., Avian Systematics and Evolutionary Biology Kevin S. Cummings, Ph.D., Freshwater Bivalves Marian Dagosto, Ph.D., Primates Carl W. Dick, Ph.D., Systematics of Streblidae (Diptera)/Host-Parasite Biology Arvin Diesmos, M.S., Philippine Amphibians Katharina Dittmar, Ph.D., D.V.M. Bat - Bat Fly Coevolution Michael L. Draney, Ph.D., Systematics of Linyphiidae (Araneae) Amy Driskell, Ph.D., Evolution of Birds and Bioinformatics Brian Dyer, Ph.D., Biomechanics Jacob Esselstyn, Ph.D., Asian and African Mammals John Fitzpatrick, Ph.D., Evolutionary Ecology and Biogeography of Neotropical Birds Timothy Gaudin, Ph.D., Edentates Daniel Gebo, Ph.D., Primates Cynthia Gerstner, Ph.D., South American Armored Catfishes Gonzalo Giribet, Ph.D., Marine Mollusks

Jagueline Goerck, Ph.D., Conservation in Brazil Paul Z. Goldstein, Ph.D., Systematics of Lepidoptera Joel Greenberg, Ph.D., Chicago Natural History Justin R. Grubich, Ph.D., Coral Reefs and Biomechanics Melina Hale, Ph.D., Biomechanics John Harshman, Ph.D., Systematics of Birds Malcolm Hast, Ph.D., Mammalian Vocal Apparatus John M. Healy, Ph.D., Marine Mollusks Jacques Hill, Ph.D., Southeast Asian Herpetology Michael S. Horn, Ph.D., Computer Science Rainer Hutterer, Ph.D., Mammalian Insectivores Bruce C. Jayne, Ph.D., Marine and Estuarine Snakes William B. Jefferies, Ph.D., Coevolution and Symbiosis in Crustaceans Zifeng Jiang, Ph.D., Genomics of Emerging Pathogens Ulf Johanson, Ph.D, Himalayan Bird Ecology Kevin Johnson, Ph.D., Systematics and Evolution of Birds Christian Kammerer, B.S., Deep Sea Fishes Daryl Karns, Ph.D., Herpetology and Community Ecology Douglas Kelt, Ph.D., South American Mammals David H. Kistner, Ph.D., Systematics of Staphylinidae Associated with Ants and Termites James Koeppl, Ph.D., Statistical Properties of Animal Populations Michael LaBarbera, Ph.D., Biomechanics Michael Lannoo, Ph.D., Amphibian Conservation Biology Lucinda Lawson, Ph.D., Frog Systematics Edgar Lehr, Ph.D., Neotropical Herpetology Peter E. Lowther, Ph.D., Field Museum Nest and Egg Collection Vimoksalehi Lukoschek, Ph.D., Marine and Estuarine Snakes Jessie Maisano, Ph.D., Skeletal Morphology of Squamates Luisa Marcelino-Backman, Ph.D., Corals Christopher J. Marshall, Ph.D., Systematics of Coleoptera Sean Menke, Ph.D., Evolutionary Ecology of Formicidae (Hymenoptera) Peter Meserve, Ph.D., Population Ecology of Mammals Paula M. Mikkelsen, Ph.D., Marine Mollusks John C. Murphy, M.S., Herpetology Charles Nadler, M.D., Sciuridae John O'Neill, Ph.D., Neotropical Birds Link Olson, Ph.D., Malagasy Mammals Perry Ong, Philippine Mammals Jennifer Osterhage, Ph.D., Molecular Biology and Genetics Victor Pacheco, M.A., Peruvian Mammals Somsak Panha, Ph.D., Land Gastropods of Southeast Asia Ronald Panzer, Ph.D., Invertebrate Conservation Stewart B. Peck, Ph.D., Systematics of Coleoptera Richard E. Petit, Marine Gastropods Paulo Petry, Ph.D., South American Fishes Ronald Pine, Ph.D., Taxonomy of South American Mammals James Pokines, Ph.D., Taphonomy-Archeology of Mammal Bones Jan Johan ter Poorten, Ph.D., Cardiidae Taxonomy Trevor Price, Ph.D., Ecology and Evolution of Asian Warblers Stephen Pruett-Jones, Ph.D., Behavior and Ecology of Birds George B. Rabb, Ph.D., Taxonomy of Salamanders, Phylogeny of Snakes Timothy Rawlings, Ph.D., Marine Mollusks Justine Ray, Ph.D., Central African Mammals

Matthew Ravosa, Ph.D., Primates Sushma Reddy, Ph.D., Asian Biogeography and Phylogenetics Scott Robinson, Ph.D., Neotropical Birds Callum Ross, Ph.D., Biomechanics Luis Ruedas, Ph.D., Southeast Asian Mammals Jennifer Fessler Salazar, Ph.D., Butterflyfish Phylogenetics and Biogeography Victor Sanchez-Cordero, Ph.D., Mexican Mammals Noé U. de la Sancha, Ph.D., Paraguayan Mammals André Sartori, Ph.D., Marine Bivalves Thomas Schulenberg, Ph.D., Neotropical Birds Jodi Sedlock, Ph.D., Bat Ecology Sergio Solari, M.S., Mammals of Peru Alexey Y. Solodovnikov, Ph.D., Systematics of Staphylinidae (Coleoptera) Scott Steppan, Ph.D., Rodent Evolution Bill Strausberger, Ph.D., Cowbirds Bryan L. Stuart, Ph.D., Herpetology Robert Stuebing, M.S., Malaysian Ecology Natalia K. Taft, Ph.D., Biomechanics Tan Fui Lian, Amphibians and Reptiles of Borneo José Tello, Ph.D., Evolution and Diversification of Birds Kumthorn Thirakhupt, Ph.D., Southeast Asian Herpetology Vinton Thompson, Ph.D., Systematics of Hemiptera Robert Timm, Ph.D., New World Mammals David E. Vaughn, Ph.D., Coral Reefs Paúl Velazco, Ph.D., Neotropical Mammals Gary Voelker, Ph.D., Bird Systematics Bruce Walsh, Ph.D., Systematics of Lepidoptera Joseph Walsh, Ph.D., Mammalian Systematics Paul W. Webala, Ph.D., Kenyan Bats Jason Weir, Ph.D., Evolution and Diversification of Birds Fred F. Wells, Ph.D., Marine Mollusks Kevin White, Ph.D., Genomics of Emerging Pathogens Chris Yahnke, Ph.D., Neotropical Mammals Andrew Yang, Ph.D., Systematics of Formicidae (Hymemoptera) Anne Yoder, Ph.D., Primate Evolution John Yunger, Ph.D., Mammals of the Chicago Area

# Associates

Michael Brattain., B.S., Coleoptera Matt Bonnan, Ph.D., Vertebrate Paleontology Daniel A. Brinkmeier, B.F.A., M.Sc., Education and Outreach Barbara Brown, B.A., Primates Lauren E. Brown, Ph.D., Herpetology of Midwestern U.S. Thomas M. Butynski, Ph.D., African Primates Sidney Camras, M.D., Systematics of Conopidae (Diptera) Arvin C. Diesmos, M.S., Philippines Amphibians Barbara A. Harney, M.S., Mammal Ecology Rubin Madriz, B.S., Cryogenics N. Aldrin D. Mallari, M.S., Philippines Conservation Peggy Macnamara, Artist Clara Richardson, M.S., Scientific Illustrator Nina Sandlin, B.A., Taxonomy of Linyphildae (Araneae) Daniel A. Summers, M.S., M.B.A., Insects Collections Maria Josefa Veluz, M.S., Philippine Mammals John A. Wagner, Ph.D., Systematics of Staphylinidae: Pselaphinae (Coleoptera)

# LIBRARY

# **Associates**

Paul Brinkman, Ph.D., Library Ken Grabowski, M.S, Library

# COLLECTION STATISTICS, 2012 Collection Size and Growth

	2011 Number of Specimens	2012 Number of Specimens	2011-2012 growth
DEPARTMENT OF ANTHROPOLOGY			
Africa Europe Asia South America Central & Middle America North America Pacific Osteological Collection <b>Subtotal</b>	109,036 37,560 94,860 54,885 28,389 664,855 59,165 31,791 <b>1,080,541</b>	109,139 37,560 95,062 54,886 31,680 664,894 59,194 31,793 <b>1,084,208</b>	103 0 202 1 3,291 39 29 2 2 3,667
DEPARTMENT OF BOTANY	, ,		
Algae Bryophytes Ferns Fungi (including lichens) Seed Plants <b>Subtotal</b>	78,142 249,324 181,338 206,508 2,158,933 <b>2,874,245</b>	78,142 289,120 181,432 209,807 2,161,132 <b>2,919,633</b>	0 39,796 94 3,299 2,199 <b>45,388</b>
DEPARTMENT OF GEOLOGY			
Physical Geology Invertebrate Paleontology Paleobotany Vertebrate Paleontology <b>Subtotal</b>	54,930 322,852 88,830 82,579 <b>549,191</b>	56,196 322,985 97,204 83,468 <b>559,853</b>	1,266 133 8,374 889 <b>10,662</b>
DEPARTMENT OF ZOOLOGY			
Amphibians and Reptiles Birds Fishes Insects Invertebrates Mammals <b>Subtotal</b>	294,372 500,641 1,912,770 12,509,735 4,641,706 214,918 <b>20,074,142</b>	296,564 504,429 1,915,674 12,594,735 4,676,504 219,778 <b>20,207,684</b>	2,192 3,788 2,904 85,000 34,798 4,860 <b>133,542</b>
TOTAL SPECIMENS	24,578,119	24,771,378	193,259

# **COLLECTION STATISTICS, 2012**

# Outgoing Loans from Field Museum Collections

	Number of Loans	Number of Specimens
DEPARTMENT OF ANTHROPOLOGY	10	103
Subtotal	10	103
DEPARTMENT OF BOTANY		
Algae Bryophytes	0 6	0 205
Ferns	3	537
Fungi (including lichens)	14	591
Seed Plants Subtotal	51 <b>74</b>	8,718 <b>10,051</b>
DEPARTMENT OF GEOLOGY		
Physical Geology	21	37
Invertebrate Paleontology	14	184
Paleobotany	8	3,757
Vertebrate Paleontology	38	293
Subtotal	81	4,271
DEPARTMENT OF ZOOLOGY		
Amphibians and Reptiles	83	2,285
Birds	129	3,207
Fishes	32	1,814
Insects	93	29,258
Invertebrates Mammals	25 57	4,337 1,602
Subtotal	419	<b>42,503</b>
TOTAL	584	56,928

# **COLLECTION STATISTICS, 2012**

# Incoming Loans from Other Institutions or Parties

	Number of Loans	Number of Specimens
DEPARTMENT OF ANTHROPOLOGY	0	0
Subtotal	0	0
DEPARTMENT OF BOTANY		
Algae	0	0
Bryophytes	16	276
Ferns	0	0
Fungi (including lichens)	28	934
Seed Plants	9	911
Subtotal	53	2,121
DEPARTMENT OF GEOLOGY		
Physical Geology	2	2
Invertebrate Paleontology	1	2
Paleobotany	1	25
Vertebrate Paleontology	n/a	n/a
Subtotal	4	29
DEPARTMENT OF ZOOLOGY		
Amphibians and Reptiles	41	383
Birds	10	186
Fishes	11	589
Insects	21	9,078
Invertebrates	5	66
Mammals	16	328
Subtotal	104	10,630
TOTALS	161	12,780

# **COLLECTION STATISTICS, 2012**

# **Use of Collections by Visitors**

	<u>Scientif</u> Total Visitors	<u>ic Visitors</u> Total Visitor Days	<u>Clas</u> Total Classes	<u>ses</u> Total Students	<u>Public Outr</u> Total Tours	<u>reach</u> Total Visitors
ANTHROPOLOGY						
Subtotal	89	170	2	28	181	1,330
BOTANY						
Algae	0	0	0	0	0	0
Bryophytes	11	82	1	15	0	0
Fungi (including lichens)	5	217	0	0	0	0
General Herbarium	11	11	11	158	10	77
Seed Plants	44	86	0	0	0	0
Subtotal	71	396	12	173	10	77
GEOLOGY						
Physical Geology	22	23	0	0	1	3
Invertebrate Paleo	21	48	1	2	1	3
Paleobotany	17	17	0	0	8	93
Vertebrate Paleo	52	141	2	33	3	23
Subtotal	112	229	3	35	13	122
ZOOLOGY						
Amphib./Reptiles	54	475	10	245	64	435
Birds	36	355	27	380	319	3,220
Fishes	73	151	27	788	69	626
Insects	47	145	11	251	27	83
Invertebrates	13	23	0	0	10	70
Mammals Subtotal	210 <b>433</b>	617 <b>1,766</b>	98 172	1,625	457	1,926
Subiolai	433	1,700	173	3,289	946	6,360
TOTALS	705	2,561	190	3,525	1,150	7,889

# LIBRARY STATISTICS, 2012

Manageranh Durahasa	Monograph	Serial	Serial	0:4
Monograph Purchase	Exchange	Subscriptions	Exchange	Gift
172	72	277	1,118	207
Cataloging Stats				

Cataloging Stats			
	New Records	Record Updates	Images
General Collection	1,642	540	0
Rare Book Collection	283	0	0
Photo Archives	4,807	9,028	17,612

# **Collection Use**

	Museum	Public/External Requests	Biodiversity Heritage Library Scanning
General Collection	596	47	43
Rare Book Room	28	6	
Archives	166	84	
Photo Archives	106	123	
Interlibrary Loan	94	486	

#### **BIODIVERSITY SYNTHESIS CENTER, 2012**

The Encyclopedia of Life (EOL) serves as an open-access online reference and database for information on every named species. The EOL is used as both a teaching and a learning tool; helping scientists, educators, students, and the community at large gain a better understanding of biodiversity and evolution. By 2013, EOL aims to 1) generate one million species pages, each containing content verified by scientific experts, 2) digitize a large portion of the core biodiversity literature, 3) generate educational materials for students, schools and universities, and citizen scientists, and 4) use EOL page content and cross-linkages as a resource to generate new synthetic knowledge about the world's biodiversity.

The project, funded by the MacArthur and Sloan Foundations, brings together several of the world's leading natural history institutions, including the Smithsonian Institution, The Field Museum, Harvard University, the Marine Biological Laboratory, the Missouri Botanical Garden, and the Biodiversity Heritage Library consortium. EOL's core activities are led by five working groups: Species Sites (led by Cynthia Simms-Parr, SI), Biodiversity Informatics (led by Nathan Wilson, MBL), Scanning and Digitization (led by Tom Garnett, BHL), Education and Outreach (led by Marie Studer, Harvard) and Biodiversity Synthesis (led by Mark Westneat, FM).

The Biodiversity Synthesis Center's mission is to increase the pace of scientific discovery about biodiversity, conservation, and the evolution of life. BioSynC serves as a liaison between the international scientific community and EOL. BioSynC helps to recruit EOL involvement within the scientific community and organizes and hosts "Synthesis Meetings" bringing together experts in systematics, conservation, informatics, and programming to generate data, applications, and visualizations that will promote biodiversity research, education, and conservation.

In 2012, BioSynC hosted five synthesis meetings, strengthening the scientific profile of EOL and The Field Museum in the international scientific community. To date, synthesis meetings represent the most significant avenue for the internationalization of EOL, involving more than 1,200 participants from 45 countries. Synthesis meetings produce scientific content for EOL, new software and tools for EOL, scientific publications, and major grant proposals, among other things.

This year, BioSynC staff were awarded more than \$130,000 in new grants and contributed to innovative digital learning programs in the Museum, including WhyReef and Conservation Connection. WhyReef (collaboration with FM Education) produced a simulated coral reef in the virtual world Whyville.net and reached more than 150,000 unique users in its target age group: 8–16 year olds. WhyReef teaches kids about marine biodiversity and conservation.

# FIELDIANA, 2012

*Fieldiana* is a peer-reviewed monographic series published by the Field Museum of Natural History. *Fieldiana* focuses on mid-length monographs and scientific papers pertaining to collections and research at Field Museum. The two series pertain to subject matter in the fields of Anthropology and Botany, Geology, and Zoology. Curators, research associates, full-time scientific support staff, full-time paid postdoctoral fellows, graduate students of Field Museum curators, and fellowship awardees may submit manuscripts for publication in *Fieldiana*.

This year, *Fieldiana* published two volumes in our 8.5 x 11 inch format with a total of 224 pages. Associate Curator of Zoology Janet Voight led the editorial staff for the third year as Managing Scientific Editor, supported by MacArthur Curator Jonathan Haas and Curator Gary Feinman as co-Associate Editors of *Fieldiana Anthropology* and, as Associate Editors for *Fieldiana Life and Earth Sciences*, Botany Department Chair and MacArthur Associate Curator Thorsten Lumbsch, Rowe Family Curator of Evolutionary Biology Olivier Rieppel (Geology) and Associate Curator of Zoology Margaret Thayer. Library Technical Assistant Michael Trombley continued as Editorial Assistant for *Fieldiana*. Michael's knowledge of journal distribution, gained through his work with the Library, has streamlined distribution and invoicing for current volumes and reflects the overall deepening of the relationship between *Fieldiana* and the Library. Michael also handles sales of past volumes.

Field Museum Librarian Christine Giannoni continues to provide critical insight to the *Fieldiana* Editorial Board and we share part of the revenue *Fieldiana* earns through its electronic distribution via BioOne with the Library. In addition, because The Field Museum is considered a publisher on BioOne, the library receives a discount that allows Museum access to this online resource. *Fieldiana Life and Earth Sciences* and *Fieldiana Anthropology* are available on BioOne

(http://www.bioone.org/action/showPublisher?code=fmnh); *Fieldiana Anthropology* debuted on JSTOR (http://www.jstor.org/action/showPublication?journalCode=fieldianaanthro) in November 2011 and currently all issues related to Anthropology published by The Field Museum since 1895 are available at that site. JSTOR, like BioOne, offers online access to institutions, and soon to individuals, of the journals it archives. JSTOR, being more familiar to the Anthropology audience, will increase the visibility of the journal.

*Fieldiana Life and Earth Sciences* will publish its next volume in mid-February 2013. The 65 page-long opus, by M. J. Ghedotti and M. P. Davis, reports a morphological study and phylogenetic analysis that reconstructs the history of North American fishes of the topminnows and killifishes to reveal how differences among them in salinity tolerance evolved.

*Fieldiana Anthropology* will publish Volume 43 by Summer 2013. This report of Gary Feinman and Linda Nicholas' decades of archeological research in the Valley of Oaxaca and the Ejutla Valley in Mexico's Southern Highlands. This exceptionally long and data-rich volume reviews the settlement patterns in the valleys from a diachronic macroscale perspective.

### Fieldiana: Life and Earth Sciences

Lombard, R.E., J. Anderson, M. Ruta, and S. S. Sumida, eds. (2012). Studies in vertebrate paleobiology – Essays in honor of John R. Bolt. Vol. 5. Publication Number 1562. 148 + xvi pp.

Patterson, B. D. and P. W. Webala (2012). Keys to the bats (Mammalia: Chiroptera) of East Africa. Vol. 6. Publication Number 1563. 60 pp.

# LIBRARY, 2012

The mission of The Field Museum Library is to build, organize and maintain for use the research collections essential to the Museum's scientific, educational and exhibition programs. Since its creation in 1894 at the Museum's founding, the Library's holdings have grown to incorporate specialized books and journals in the main library, as well as the special collections of the Museum archives, photo archives and the rare book room. The strengths of the Library collections closely parallel the strengths of the Museum's scientific collections in the fields of Anthropology, Botany, Geology, Paleontology and Zoology.

In 2012, the Marie Louise Rosenthal Library at The Field Museum continued to focus on the critical tasks of improving access to collections, the preservation of materials and effective management of the collection. Library Staff and select volunteers continued to provide reference services to museum staff, students, associates and volunteers in the Library's main Reading Room. As the Library is also open to members of the general public, those individuals working at the reference desk also assist local students and other visiting researchers with their requests.

While the Library subscribes to over 250 domestic and foreign journals, the principal means of acquiring foreign journals remains our exchange program through which the Library receives over 900 serials and monographs from museums, societies, academies, and other organizations worldwide. Exchange partners receive in return one or more of the Museum's Fieldiana scientific series, *Fieldiana: Anthropology* or *Fieldiana: Life and Earth Sciences.* The Library also provides access to thousands of titles via subscriptions to electronic databases such as BioOne and Academic Search Premier.

The Library continues to be an active participant in interlibrary loan services between other university and research libraries worldwide. We fulfill over 1,000 loan requests annually for monographs or select journal articles from publications held at the Library.

The Library has, since 2005, been undertaking the process of converting our paper card catalog into electronic records. In 2012, the cataloger completed the cleanup of the Field collection (works donated by Museum President Stanley Field, 1875–1964) and began cleanup of the World's Columbian Exposition collection. As part of a project to evaluate a backlog of uncataloged materials, staff reviewed 408 titles, of which 228 were cataloged and added to the collections.

In 2007, The Field Museum Library joined as a participating member of the Biodiversity Heritage Library (BHL). The Library continues to make important contributions to this initiative via digitization and other staff support. The Museum Librarian was invited to Cape Town, South Africa as part of a delegation of BHL Librarians working to create a BHL Africa node.

The Library Photo Archives continued to fulfill both "in-house" and external requests for images for use in exhibitions, publications and documentaries. At the same time, digitization activities continued in the Photo Archives with over 1,246 glass and film negatives being scanned, catalogued and digitally conserved in 2012. The original negatives have been re-housed in acid-free enclosures and placed in a climate controlled collections space.

The Museum Archives, which functions as the official repository of much of the Museum's historical records and documents, continued to support the research needs of staff and external researchers. The Archives received over 60 linear feet of new material in 2012, including the records of the Exhibitions Department, the Education Department, and Public Relations. Interns and volunteers under the Archivist's direction also completed finding aid indexes for Museum Taxidermist Leon Pray, Botany Curator Rolf Singer, and Birds Curator Rudyerd Boulton. The Archivist and volunteers also undertook a small digital scanning project to reproduce archival materials for a Canadian First Nations Cultural organization.

Library staff continue to be active in supporting student activities, from hosting Library Science and History interns to granting interviews and providing tours. Both interns and volunteers play an important role in Library activities, assisting in cataloging, circulation and digitization projects.

# PRITZKER LABORATORY FOR MOLECULAR SYSTEMATICS AND EVOLUTION, 2012

The Pritzker Laboratory for Molecular Systematics and Evolution was named in recognition of generous support from The Pritzker Foundation. The Pritzker Lab is a Field Museum multi-user core facility whose mission is the collection and analysis of genetic data. The majority of the data collected are DNA sequences. The main sources of specimens used in the laboratory are the frozen tissue collections of The Field Museum's Zoology and Botany Departments, although herbarium and traditional museum skins are also used. DNA sequence data are desirable for many reasons in evolutionary studies. Chief among these is the fact that DNA sequences are composed of only four nucleotide bases, resulting in data that are, in some analytical respects, very simple. Another extremely useful property of DNA sequence data is the high level of comparability across species and across studies. Together, these properties mean that DNA sequence data can be used to investigate diverse questions at all levels in the biological hierarchy: questions about individuals, populations, species, and even phyla and kingdoms.

In addition to DNA sequence data, the lab had several ongoing projects employing fragment analysis. For example, microsatellite DNA data are being used to examine mating systems of sand tiger sharks, the evolution of brood parasitism in cowbirds, and the population genetics of smalltooth sawfish.

The primary activity of lab users is the collection and analysis of genetic data for inferring the evolutionary, or phylogenetic, relationships among species. This knowledge of phylogenetic relationships is fundamental to understanding organismal evolution and the origins of biological diversity. Patterns of phylogenetic relationships among species can be used to trace evolutionary changes and provide insights to the biological and geological histories of geographic regions. Another focus of lab research involves characterizing the amount of genetic variation within and among populations. These data can be used to help guide conservation efforts, and to study the processes driving evolution, such as mate choice.

The majority of lab users are Field Museum curators, their graduate students from the University of Chicago and the University of Illinois at Chicago, and their post-doctoral researchers. As it does every year, the lab had many international visitors in 2012. This year, we had visitors from Cuba, Peru, Ukraine, and Estonia. Each of these visitors was trained in the proper methods for collecting genetic data for their various projects. In 2012, we trained 35 national and international scientists to collect genetic data on a wide variety of organisms including great white sharks, lichenized fungi, toucans, malaria, Belding's ground squirrels, sawfish, sponges, liverworts, venomous fish, and flowering plants. The many areas of inquiry pursued by these researchers include coevolution of parasites and hosts, the evolution of life history traits, rates of evolutionary change, biogeography, conservation, sexual selection, speciation, and natural selection at the molecular level. More than 100 new and continuing projects used the DNA sequencing facilities in 2012.

This past year was the fourth full year that our exhibit, the *Daniel F. and Ada L. Rice DNA Discovery Center*, was open to the public. This exhibit puts a public face on the Pritzker lab. In the exhibit space, visitors have an opportunity to witness DNA research in action and speak directly with scientists about their work in our "Talk to the Scientist Hour." In addition, visitors can explore hands-on interactives, videos, and engaging displays that provide information on the basics of DNA and offer a behind-the-scenes look at the incredible diversity of the Museum's collections. In conjunction with this exhibit, the Pritzker Lab hosted the fifth installment of the DNA residency program. This program brought four high school students and two high school biology teachers into the Museum's Pritzker Lab for a six-week course. As part of this course, they were trained in genetic techniques, including DNA extraction, polymerase chain reaction (PCR), and DNA sequencing. One group collected data for Dr. Shannon Hackett's emerging pathogens project, another group collected data for Dr. Kevin Feldheim's study on the conservation genetics of smalltooth sawfish.

The Pritzker Lab is a non-departmental unit of Collections and Research supervised by a Management Committee. It is available for use by the curators and staff members of the Museum, their collaborators and students. All users of the lab are responsible for designing, performing and financing their own lab work. We welcome additional collaborations with new institutions and researchers. For more information on specific research projects, please see the web pages of the Pritzker Lab:

http://fieldmuseum.org/explore/department/pritzkerlab; or the individual pages of committee that manages the facility: John Bates (Zoology); Thorsten Lumbsch (Botany); Shannon Hackett (Zoology); Rick Ree (Botany); Leo Smith (Zoology); Corrie Moreau (Zoology); and Kevin Feldheim (Pritzker Lab).

# SCANNING ELECTRON MICROSCOPE LABORATORY, 2012

The Field Museum's two scanning electron microscopes (SEMs) are invaluable research tools for examining fine surface details of three-dimensional objects and specimens from the Museum's collections. The capability of viewing objects at very low magnifications as well as high magnifications (over 100,000 times life-size) is one of the special features of our SEMs. Images obtained from the scanning electron microscope achieve higher resolution and higher magnification than those observed with light microscopy, and the SEM images also provide 300 times more depth-of-field than those obtained with conventional light microscopy.

In addition to imaging, the variable pressure LEO (Carl Zeiss) EVO Scanning Electron Microscope is equipped with an Oxford Instruments INCA Energy Dispersive Spectroscopy (EDS) system that performs nondestructive major and minor elemental analysis of a variety of objects. This SEM was installed in April 2004 and has an extra large chamber for viewing sizeable specimens and objects. The LEO (Zeiss) SEM with the Oxford EDS was generously funded by an anonymous donor and is part of the Museum's Elemental Analysis Facility.

The SEM Lab also has an Amray 1810 SEM that has been upgraded with a PC having a digital imaging capturing system. The Amray SEM is an excellent tool for very low magnification in addition to high magnification work, examination without destructive methods (e.g. uncoated specimens), and a large range of specimen movement and positioning. Specimen preparation instruments include a Denton Vacuum Desk IV Sputter Coater for coating non-conductive specimens with a thin layer of gold and a Balzers Critical Point Dryer for drying soft tissue.

The SEM Laboratory is a multi-user research facility used by researchers and students in The Field Museum's Departments of Anthropology, Botany, Geology, and Zoology. The laboratory is managed by Betty Strack. The SEM committee is currently chaired by Rüdiger Bieler (Zoology). The other SEM committee members are Philipp Heck (Geology), Larry Heaney (Zoology), Ryan Williams (Anthropology), Rick Ree (Botany), and Betty Strack (SEM Lab). 31 curators, graduate students (mostly from the University of Chicago and the University of Illinois at Chicago), undergraduate interns, professional staff, research associates, and international visiting/collaborating scientists from Collections and Research used the SEMs in 2012. The staff, students, and collaborating scientists that had research projects include: Danny Balete, João Paulo Barbosa, Rüdiger Bieler, J.P. Brown, Anthony Deczynski, Jake Esselstyn, Franco Gallastegui, Ian Glasspool, Larry Heaney, Philipp Heck, Patrick Herendeen, James Holstein, Levke Koop, Nan Liu, Zhiwei Liu, Matthias Meier, Iqra Mushtaq, Anh Duc Nguyen, Andria Niedzielski, Lisa Niziolek, Olena Peregrym, Rick Ree, Petra Sierwald, Bill Stanley, Sid Staubach, Margaret Thayer, Reto Trappilsch, Janet Voight, Matt von Konrat, Alexandra Westrich, and Andy Wilson.

In 2012, the SEM continues to be an important component of many new and continuing research projects. Topics of these projects and specimens/objects studied include:

- Meteorites: presolar stardust and solar system materials (included elemental analysis)
- 13<sup>th</sup> century Chinese ceramics from Java Sea Wreck (included elemental analysis)
- · Fossil and extant plants
- · Morphology of bivalves and gastropods
- Millipede morphology atlas
- Morphology of rove beetles
- New shrew from Congo
- · Philippine mammal teeth and skulls bats and rodents
- · Dinosaur tooth enamel microstructure

# SCHOLARSHIP COMMITTEE, 2012

During 2012 the Scholarship Committee awarded 23 visiting scholarships, two fellowships, eight REU (Research Experiences for Undergraduates) internships and 11 high school and undergraduate internships in all four Collections & Research departments.

Visiting scientists came from around the globe, including Australia, Brazil, Canada, Colombia, Germany, Hong Kong, Italy, Peru, Sri Lanka, Sweden, Thailand, the United Kingdom and Vietnam as well as the U.S.

The Scholarship Committee is currently chaired by Associate Curator Petra Sierwald (Zoology/Insects). Research Assistant Stephanie Ware (Zoology/Insects) serves as Committee Administrative Assistant. The representatives are Regenstein Curator John Terrell (Anthropology), Collections Manager & Adjunct Curator Robert Lücking (Botany), Robert A. Pritzker Assistant Curator Philipp Heck (Geology) and MacArthur Curator Bruce Patterson (Zoology).

# Scholarships, Fellowships, and Internships Awarded in 2012

**Lester Armour Family Graduate Fellowship** (for outstanding graduate students to pursue advanced studies in one of the scientific departments at the museum): Nathan Upham.

**Women's Board "Women in Science" Fellowship** (for exceptional women Ph.D. candidates in the natural sciences): Charlene Buxman.

**Thomas J. Dee** scholars (for research and academic fellowships with priority given to younger, less established research workers): Fredeliza Zamora Campos, James Christopher Lamsdell, John M. Leavengood, Philip John Piper, Katherine Szabó, Laurie D. Webster, George (Buz) D.F. Wilson and Sara Yeung.

The Borg-Warner **Robert O. Bass** Visiting Scientist scholars (research opportunities for distinguished national and foreign scientists to use our collections and library holdings): Nguyen Duc Anh, Charles D. Bell, Thiago Vernaschi Vieira da Costa, Sarah Z. Gibson, Hai Minh Howard Michael Huynh, Gunther Köhler, Caleb McMahan, Matthias M. M. Meier and Alejandro Otero.

**Karl P. Schmidt** scholars (for the training of young scientists who desire to study at The Field Museum): João Paulo Peixoto Pena Barbosa, Kevyn Gammie, Natali Edith Hurtado Miranda, Khwanruan Papong and David Antonio Sánchez.

**Research Experiences for Undergraduates** (educational opportunity for students in the biological sciences to interact with scientists dedicated to the study of organic diversity): Anthony Deczynski, Franco Gallastegui, Jennie Lee, Florence Lin, Bradley Loomis, Daniel Montgomery, Iqra Mushtaq and Arista Tischner.

**Undergraduate Internships** (work experience whereby an undergraduate or recent graduate gains hands-on training in his/her field of expertise for one or more semesters): Stephanie M. Garcia and Mark Swanson.

**High School Internships**: Niall Griffin, Charles Griggs, Stacey Huynh, Evan Johnson-Ransom, Katherine McDonnell, Janet Morales, Sarah Pipal, Christian Valderrama and Evelina Yarmit.