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*Last revised: February 27, 2022***APPOINTMENT**

Gabor Fichtinger, Dr. Univ.

Professor, Canada Research Chair (Tier-1) in Computer-Integrated Surgery

School of Computing w/ cross-appointments in

Electrical and Computer Engineering, Mechanical and Materials Engineering, Pathology and Molecular Medicine, and Surgery

Queen's University

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EDUCATION

Dr. Univ. in Computer Science, Technical University of Budapest, Hungary, 1990

MSc in Electrical Engineering, Technical University of Budapest, Hungary, 1988

BSc in Electrical Engineering, Technical University of Budapest, Hungary, 1986

EXPERIENCE

- 2018- **Medical University of Vienna**, Austria; Adjunct Professor in Medical Physics
- 2014- **Western University**, London, Canada; Adjunct Research Professor in Medical Biophysics
- 2013- **University of Toronto**, Toronto, Canada; Affiliated Faculty at the TECHNA Institute
- 2010- **Johns Hopkins University**, Baltimore, USA; Adjunct Professor in Computer Science and Radiology
- 2010- **Queen's University**, Kingston, Canada; Professor in Computing, cross-appointed to Mechanical & Materials Engineering, Electrical & Computer Engineering, Surgery, Pathology & Molecular Medicine
- 2010- 2011 **Medical University of Vienna**, Austria; Visiting Professor and Marie Curie Fellow, Department of Medical Physics
- 2007-2010 **Queen's University**, Kingston, Canada; Associate Professor in Computing with cross appointment in Mechanical and Materials Engineering, Electrical and Computer Engineering, and Surgery
- 2007-2010 **Johns Hopkins University**, Baltimore, MD; Adjunct Associate Professor in Computer Science, Mechanical Engineering, and Radiology
- 2003-2007 **Johns Hopkins University**, Baltimore, MD; Associate Research Professor in Computer Science, Mechanical Engineering, and Radiology
- 2001-2003 **Johns Hopkins University**, Baltimore, MD; Assistant Research Professor in Computer Science, Mechanical Engineering, and Radiology
- 1999-2001 **Johns Hopkins University**, Baltimore, MD; Senior Research Scientist
- 1999-2007 **George Washington University Hospital**, Washington, DC; Adjunct Assistant Professor in Radiology

Curriculum Vitae

- 1998-1999 **National Oceanic and Atmospheric Administration** / Computer Sciences Corporation, Suitland, MD; Senior Computer Scientist
- 1996-1997 **Precision Mathematics, Inc.**, Columbia, MD; Senior Research and Development Engineer
- 1993-1996 **George Washington University Hospital**, Division of Radiation Oncology, Washington, DC; Senior Systems Analyst
- 1990-1993 **University of Texas Austin**, Center for High Performance Computing, Austin, TX; Post-Doctoral Fellow
- 1989-1990 **Hungarian Academy of Sciences**, Computer and Automation Institute, Budapest, Hungary; Research Associate
- 1986-1989 **INTERAG Software, Ltd.**, Budapest, Hungary; Software Development Engineer
- 1986-1989 **Budapest Technical University**, Faculty of Electrical Engineering, Hungary; Graduate Research Assistant
- 1984-1986 **Budapest Technical University**, Faculty of Electrical Engineering, Hungary; Undergraduate Research Assistant

AWARDS

Career & Research Awards Received

- Fellow, American Institute for Medical and Biological Engineering (AIMBE), 2022
- Queen's University Prize for Excellence in Research, 2020
- Canada Research Chair (Tier I) in Computer-Integrated Surgery, 2017
- IEEE Fellow, 2016
- Association for Computing Machinery (ACM) Distinguished Speaker, 2016 - 2019
- Honorary University Professor, University Budensis (Obuda University), Budapest, Hungary, 2014
- IEEE Distinguished Lecturer, Engineering in Medicine & Biology Society, 2013 - 2014
- IEEE Senior Member, 2012
- Medical Image Computing and Computer Assisted Intervention (MICCAI) Society, Fellow, 2011
- Cancer Care Ontario Research Chair in Cancer Imaging, 2010-2017
- Marie Curie Fellow, European Community, 2010-2011
- Szechenyi Fellow, Hungarian Academy of Sciences, Hungary, 1990-1991
- British Council Fellow, UK / Hungary, 1990-1991 (declined)
- Presidential Award, Young Investigators Competition, Budapest Technical University, 1983
- First Place, Young Investigators Competition, Institute of Material Sciences, Budapest Technical University, 1983
- Second Place, Young Investigators Competition, Faculty of Electrical Engineering, Budapest Technical University, 1982

Research Paper Awards

Note: See below under "Paper, Thesis and Research Awards for Students and Trainees Supervised".

Curriculum Vitae

Publishing Awards

- Gold Award for Online Publishing & Podcasts from the Association Media & Publishing, 2010 (contributed segment)
- Finalist for National Media Award for Best Podcast, 2010 (contributed segment)
- Association of American Publishers, PROSE Awards for Excellence in Physical Sciences & Mathematics, awarded to Springer Handbook of Robotics, 2008 (contributed chapter)

Teaching and Mentoring Awards

- Principal's Student Inquiry Teaching Award, Queen's University, 2015 (<http://www.queensu.ca/ctl/awards/principals-awards>)
- [Howard Staveley Teaching Award](#), Queen's University, School of Computing, 2009
- [The McDonald Award for Excellence in Mentoring and Advising](#), The Johns Hopkins University, Whiting School of Engineering, 2006

Curriculum Development Awards

- Teaching and Learning Enhancement Grant Award, Queen's University, 2008
- William R. Kenan, JR Fund Award for Innovative Undergraduate Teaching, 2005
- William R. Kenan, JR Fund Award for Innovative Undergraduate Teaching, 2004

PROFESSIONAL LEADERSHIP AND SERVICES

Note: The boards, journal editorial boards and conferences chaired listed below comprise the flagship organizations and scientific forums in the field of computer-assisted surgery and interventions.

Society Boards

- International Society of Computer Assisted Surgery (ISCAS), member of the Executive Board – since 2010; member of the Advisory Board – since 2018
- Medical Image Computing and Computer Assisted Interventions (MICCAI) Society
 - Member of the Board of Directors (2006 – 2017)
 - General Secretary (2013 – 2017)
 - Treasurer (2009 – 2013)
- IEEE Engineering in Medicine & Biology Society, Administrative Committee, member 2015-2016

Journal Editorial Boards

- IEEE Transactions on Biomedical Engineering – Associate Editor, since 2010
- IEEE Transactions on Biomedical Engineering – Special Issue Associate Editor, 2012/2013
- International Journal of Computer Assisted Radiology and Surgery – Deputy Editor, since 2015
- Medical Image Analysis Journal – Editorial Board Member, since 2008
- Medical Image Analysis Journal – Special Issue Guest Editor, 2009/2010 and 2018/2019; Special Issue Managing Guest Editor, 2011/2012

Conference Chairing

- Imaging Network of Ontario, General Co-Chair and Program Co-Chair, 2022

Curriculum Vitae

- Medical Image Computing and Computer Assisted Interventions, Program Co-Chair, 2018
- Imaging Network of Ontario, General Co-Chair and Program Co-Chair, 2018
- Medical Image Computing and Computer Assisted Interventions, General Chair, 2011
- Medical Image Computing and Computer Assisted Interventions, Program Co-Chair, 2008
- Information Processing in Computer-Assisted Interventions, Program Co-Chair, 2013

PROFESSIONAL SERVICES

Task Groups

- American Association of Physicists in Medicine, Task Group No. 240: Ultrasound-guided Surgery, (2013-2020)
- American Association of Physicists in Medicine, Working Group on Robotic Brachytherapy, (2015-2020)
- American Association of Physicists in Medicine, Task Group No. 192: Guidelines for Image-guided Robotic Brachytherapy (2008-2014)
- AdMeTech Foundation, International Prostate MRI Working Group (2005-2013)
- Thermal Therapy Subcommittee of American Association of Physicists in Medicine (1999-2008)
- U.S. Department of Energy, SLATEC Committee on High-Performance Computing (1990-1993)
- ISO/ANSI Computer Graphics Standard Group, contributing member (1989-1993)

Conference Program Committees

Note: Listed in alphabetical order; recurring services for conferences pertaining to Medical Image Computing and Computer Assisted Interventions

- Augmented Environments Computer-Aided Interventions (AE-CAI), continually since 2013
- Computer Assisted Surgery and Radiology (CARS), continually since 2013
- Hamlyn Symposium on Medical Robotics, London, UK, continually since 2010
- IEEE Engineering in Medicine and Biology Society (EMBS) Annual Conference, 2015
- Imaging Network of Ontario (ImNO), Canada, continually since 2012
- Innovative Solutions for Cancer Care, AdMeTech Foundation, 2003, 2005, 2007
- Information Processing in Computer-Assisted Interventions (IPCAI), continually since 2012
- Medical Image Computing and Computer Assisted Interventions (MICCAI), 2002-2015, 2017, 2021
- SPIE Medical Imaging, continually since 2009
- Symposium on Biomedical Engineering, Bangkok, Thailand, 2009

Workshop Program Committees

Note: Listed in alphabetical order; recurring services for workshops held in conjunction with the annual conference of the Medical Image Computing and Computer Assisted Intervention Society, the premiere event of my field.

- Clinical Image-based Procedures: From Planning to Intervention, 2012, 2013
- Medical Imaging & Augmented Reality in Computer-Aided Surgery (MIAR / AMI-ARCS), 2009, 2010, 2013
- Medical Imaging and Augmented Reality (MIAR), 2010, 2008, 2006
- Modeling and Monitoring of Computer Assisted Interventions (M2CAI), 2009

Curriculum Vitae

- Point of Care Ultrasound (POCUS), continually since 2017

Workshop Chairing

- Interventional X-ray Guidance, held in conjunction with Medical Image Computing and Computer Assisted Interventions (MICCAI), 2009
- Segmentation in Magnetic Resonance Imagery Workshop and Challenge, held in conjunction with Medical Image Computing and Computer Assisted Interventions (MICCAI), 2009
- Surgical Robotics, held in conjunction w/ IEEE International Conference on Robotics and Automation (ICRA), 2009

Tutorial Chairing

Note: Tutorials pertaining to Medical Image Computing and Computer-Assisted Intervention, hosted by leading international conferences

- Hosted by Computer Assisted Radiology and Surgery in 2017, 2018, 2019
- Hosted by World Congress on Medical Physics and Biomedical Engineering in 2015
- Hosted by IEEE Engineering in Medicine and Biology Society (EMBS) in 2014
- Hosted by International Conference on Applied Bionics and Biomechanics (ICABB) in 2010
- Hosted by Medical Image Computing and Computer Assisted Interventions (MICCAI) in 2006, 2007, 2009, 2010, 2017, 2018
- Hosted by IEEE International Conference on Robotics and Automation (ICRA) in 2007
- Hosted by IEEE International Conference on Robotics and Automation (ICRA) in 2007
- Hosted by the International Conference on Computer Assisted radiology and Surgery (CARS) in 2018, 2019 (scheduled)

Journal Reviewing (recurring)

- Brachytherapy – since 2006
- IEEE Transactions on Medical Imaging – since 2004
- IEEE Transactions on Robotics and Automation – since 2004
- IEEE Transactions on Biomedical Engineering – since 2004-2010 (Associate Editor since 2010)
- IEEE Sensors – since 2013
- Journal of Medical Physics – reviewer since 2002; associate editor in 2007, 2008
- Medical & Biological Engineering & Computing – since 2006
- Medical Image Analysis – since 2007 (Editorial Board / AE since 2008)
- International Journal of Robotics Research – since 2008
- Robotica – since 2009
- International Journal of Computer Assisted Radiology and Surgery – since 2011
- International Journal of Medical Robotics and Computer Assisted Surgery – since 2015
- Machine Vision and Applications – since 2004
- Surgical Endoscopy – since 2013

Conference Reviewing (recurring)

Note: Ad-hoc reviews

- IEEE Engineering in Medicine and Biology Society Conference (EMBS)
- IEEE International Conference on Robotics and Automation (ICRA)
- IEEE International Conference on Intelligent Robots and Systems (IROS)
- IEEE International Symposium on Biomedical Imaging (ISBI)
- IEEE International Conference on Biomedical Robotics and Biomechatronics (BIOROB)

Grant Proposal Reviewing (recurring)*Canada*

- Canadian Institutes of Health Research (CIHR), Member of the College of Reviewers (since 2017)
- Natural Science and Engineering Research Council, Canada (since 2005)
- Canada Foundation for Innovation, Canada (since 2003)
- Canada Council for the Arts, Canada (since 2003)
- Canadian Cancer Society Research Institute (since 2012)
- The Physicians' Services Incorporated Foundation, Canada (since 2010)

USA

- National Institutes of Health, USA (since 2002)
- Center for Integration of Medicine and Innovative Technology, USA (2005, 2006)
- Desphande Center, Massachusetts Institute of Technology, USA (2006)

Europe

- Austrian Science Fund, Austria (since 2008)
- Austrian Central Bank (since 2008)
- Swiss National Science Foundation, Switzerland (since 2004)
- Cancer Research UK (since 2015)
- Engineering and Physical Sciences Research Council of the United Kingdom (since 2018)
- Dutch Cancer Society (since 2016)
- Dutch Technology Foundation (since 2016)

Book Proposal Reviews (recurring)

- Taylor & Francis Group LLC (2009, 2011)
- Elsevier

Professional Memberships

- IEEE, Engineering in Medicine and Biology – Member 2004, Senior Member 2012, Fellow 2016
- Medical Image Computing and Computer Aided Intervention (MICCAI) Society – charter member, Fellow 2011
- American Association of Physicists in Medicine (AAPM) – member since 1996
- Association for Computing Machinery (ACM) – member since 2016
- International Society for Optics and Photonics (SPIE) – life member

TEACHING**Queen's University (2007-)**

Curriculum Vitae

- CISC-881 Computer-Assisted Interventional Oncology Systems and Applications (Graduate, W08, W09, F09, W13)
- CISC-472 Medical Informatics (Undergraduate, W10, W16, W18, W19)
- CISC-330 Computer-Integrated Surgery (Undergraduate, F08-F09, F11-18, F20-21)
- COMP-329 Introduction to Computer-Integrated Surgery (Undergraduate, F13- F14)
- COMP-230 Introduction to Computer-Integrated Surgery (Undergraduate, F08 - F09)

The Johns Hopkins University (1999-2007)

- JHU-600.145 Introduction to Computer-Integrated Surgery (Undergraduate, 1999-2005)
- JHU-600.245 Foundations of Computer-Integrated Surgery (Undergraduate, 2006-2007)
- JHU-600.745 Graduate Seminars in Computer-Integrated Surgery (Graduate, 2005-2007)

ACADEMIC SUPERVISION AND MENTORING

Awards and Fellowships for Students and Trainees Supervised

Best Paper Awards

1. Laura Connolly, Best Student Paper, The IEEE International Conference on Autonomous Systems (IEEE ICAS 2021, Montréal, Québec, Canada on August 11-13, 2021).
2. Alice Santilli, Best Bench to Bedside Award, runner up, International Conference on Information Processing in Computer-Assisted Interventions, 2021, Munich, Germany
3. Alice Santilli, Best Short Presentation, Annual Symposium of Imaging Network of Ontario, 2021
4. Laura Connolly, Best Short Presentation, Annual Symposium of Imaging Network of Ontario, 2021
5. Zoe Hu, Best Radiologist-in-Training Research Project Oral Presentation Award, Annual Scientific Meeting of the Canadian Association of Radiologists, 2021
6. Olivia O'Driscoll, Runner-up Best Paper Award in Image-Guided Procedures, SPIE Medical Imaging 2021.
7. Olivia O'Driscoll, Finalist for the Robert F. Wagner All Conference Best Student Paper Award at SPIE Medical Imaging 2021.
8. Alice Santilli, Best Paper in Bench to Bedside, *The 11th International Conference on Information Processing in Computer-Assisted Interventions*, June 23-24, 2020, Munich, Germany, 2020
9. Alice Santilli, Best Oral Presentation Award, *18th Annual Imaging Network of Ontario Symposium*, 2020
10. Natasja Janssen, Young Investigator Award, Annual Congress in Clinical Mass Spectrometry, 2020
11. Amoon Jamzad, Second Place Poster Award, FEAS Research Symposium, Queen's University, 2019
12. Harry Brastianos, The Book Prize, Annual Scientific Meeting of the Canadian Association of Radiation Oncology, 2019
13. Mark Asselin, Honorary Mention for Best Paper and Presentation Award, The 17th Symposium of the Imaging Network of Ontario, 2019
14. Sean Xia, short-listed for the Award for Best Paper in Anesthesia Education and/or Simulation, Annual Meeting of the Canadian Anesthesiologists' Society, 2018
15. Caitlin Yeo, Best Poster, William Ersil Resident Research Day in Surgery, Queen's University, 2018

Curriculum Vitae

16. Caitlin Yeo, Best Paper in General Surgery, William Ersil Resident Research Day in Surgery, Queen's University, 2018
17. Sachin Pasricha, Best Non-Resident Paper in Orthopedics, William Ersil Resident Research Day in Surgery, Queen's University, 2018
18. Rebecca Hisey, Honorable Mention (*i.e.* 2nd Place) Poster Award, International Society for Optics and Photonics (SPIE) Medical Imaging, 2018
19. Regina Leung, Best Abstract in Digital Medicine & Wearable Technology at Artificial Intelligence in Medicine (AIMed), December 11-14, 2017, Laguna Niguel, CA, 2017
20. Harry Brastianos, Best Resident Oral Presentation In Brachytherapy, Annual Meeting of the Canadian Association of Radiation Oncology, Sep 13-16, Toronto, 2017
21. Anna Ilina, 3rd Place Poster Presentation Award, The 12th Canadian Undergraduate Conference on Healthcare, November 2016
22. Gabrielle Gauvin, Winner of the Best Abstract Presentation, 22nd Annual Scientific Meeting, Canadian Society of Surgical Oncology (CSSO). Toronto, ON, 2016
23. Margaret Hess, Best Poster Award, OCAIRO Consortium, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON
24. Amani Ibrahim, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON. Best Oral Presentation Award
25. Amani Ibrahim, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON. Summa Cum Laude Award
26. Margaret Hess, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON. Summa Cum Laude Award
27. Tamas Ungi, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON., Summa Cum Laude Award
28. Elodie Lugez, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Magna Cum Laude Award
29. Vinyas Harish, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Magna Cum Laude Award
30. Margaret Hess, Runner-up Poster Award, International Society for Optics and Photonics (SPIE) Medical Imaging, 2016
31. Vinyas Harish, Best Poster Presentation Award, The 11th Canadian Undergraduate Conference on Healthcare, 2015
32. Tamas Ungi, Best Paper Award of the International Society for Computer Aided Surgery, presented at the 29th International Congress of Computer Assisted Radiology and Surgery, Jun 24-27, Barcelona, Spain, 2015
33. Csaba Pinter, Finalist in the IOMP 2015 Young Investigator Competition (1 of the 7 finalists from over 1,600 submissions), IUPESM World Congress on Medical Physics & Biomedical Engineering, Toronto, June 7-12, 2015
34. Margaret Hess, *13th Imaging Network of Ontario Symposium*, Cancer Imaging, Second Place Poster Award, 2015

Curriculum Vitae

35. Gabrielle Gauvin, Canadian Association of General Surgeons Research Corner Highlight, 2015
36. Kaci Carter, Best Poster Award, Queen's Computing Graduate Conference, 2015
37. Margaret Hess, Grand Prize in the healthcare research competition oral presentations of the Canadian Undergraduate Conference on Healthcare, held on November 15-16, 2014.
38. Gabrielle Gauvin, Best Poster Award, Canadian Surgery Forum, Vancouver, Canada, Sept 17-21, 2014
39. Tamas Ungi, 12th Imaging Network of Ontario Symposium, Cancer Imaging, Third Place Poster Award, 2014
40. Manjunath Anand, Best Poster Award, Graduate Computing Society Conference, Queen's University, Kingston, 2013
41. Laura Bartha, 11th Imaging Network of Ontario Symposium, Cancer Imaging, Second Place Poster Award, 2013
42. Matthew Holden, 11th Imaging Network of Ontario Symposium, Cancer Imaging, Third Place Poster Award, 2013
43. Tamas Ungi, 11th Imaging Network of Ontario Symposium, Cancer Imaging, First Place Poster Award, 2013
44. Ehsan Dehghan, Honorable Mention for Young Scientist Award, Medical Image Computing and Computer Assisted Interventions (MICCAI), 2011
45. Mohammad Peikari, International Society for Optics and Photonics (SPIE) Medical Imaging, Finalist for Michael B. Merickel Student Paper Award, 2011
46. Mohammad Peikari, Finalist for IEEE Graduate Research Excellence Award, Kingston Chapter, 2011
47. Tamas Ungi, 9th Imaging Network Ontario Symposium, Toronto, Cancer Imaging, Third Place Poster Award, 2011
48. Lauren Gordon, Best Undergraduate Poster Award, Fifth Canadian Student Conference on Biomedical Computing, Waterloo, ON, 2010
49. Ehsan Dehghan, Young Scientist Award, Medical Image Computing and Computer Assisted Interventions (MICCAI), 2010
50. Zarah Karim-Aghaloo, International Society for Optics and Photonics (SPIE) Medical Imaging Conference on Visualization, Image-guided Procedures and Modeling, 2nd Place Poster Award, 2009
51. Pezhman Foroughi, International Society for Optics and Photonics (SPIE) Medical Imaging Conference on Ultrasonic Imaging and Signal Processing, Best Student Paper, 2009
52. Pezhman Foroughi, International Society for Optics and Photonics (SPIE) Medical Imaging Conference on Ultrasonic Imaging and Signal Processing, Cum Laude Poster Award, 2009
53. Pezhman Foroughi, International Society for Optics and Photonics (SPIE) Medical Imaging, Imaging Michael B. Merickel Student Paper Award Runner-up, 2009
54. Andrew Lang, International Society for Optics and Photonics (SPIE) Medical Imaging Conference on Ultrasonic Imaging and Signal Processing, 2nd Place Poster Award, 2009

Curriculum Vitae

55. Maria Ayad, International Society for Optics and Photonics (SPIE) Medical Imaging Conference on Visualization, Image-guided Procedures and Modeling, Best Student Paper, 2009
56. Maria Ayad, International Society for Optics and Photonics (SPIE) Medical Imaging, Finalist for Michael B. Merickel Student Paper Award, 2009
57. Jonathan Fiene, Best Paper, 2nd Place, Image Analysis Journal on Medical Image Computing and Computer Assisted Intervention, 2008
58. Ameet K. Jain, International Society for Optics and Photonics (SPIE) Medical Imaging, 2nd Place Poster Award, 2008
59. Zarah Karim-Aghaloo, Best Poster Award, 7th Imaging Symposium of the Imaging Network of Ontario, 2008
60. Ameet K. Jain, International Society for Optics and Photonics (SPIE) Medical Imaging, Cum Laude Poster Award, 2007
61. Emad M. Bector, International Society for Optics and Photonics (SPIE) Medical Imaging, Conference on Ultrasonic Imaging and Signal Processing, 2nd Place Poster Award, 2006
62. Gregory S. Fischer, Cum Laude Poster Award, Sixth Interventional MRI Symposium, Leipzig, 2006
63. Ameet K. Jain, International Society for Optics and Photonics (SPIE) Medical Imaging, Michael B. Merickel Student Paper Award, 2005
64. Emad M. Bector, International Society for Optics and Photonics (SPIE) Medical Imaging, Conference on Ultrasonic Imaging and Signal Processing, 2nd Place Poster Award, 2003

Thesis Awards

1. Laura Connolly, 2nd Place, 3-Minute Thesis (3MT) Competition, Queen's University, 2021
2. Zachary Baum, Distinguished Masters Thesis Award of the Queen's University School of Computing, 2020
3. Alice Santilli, Winner of 3-Minute Thesis (3MT) Competition, Queen's University, 2020
4. Amani Ibrahim, Runner-up for 3-Minute Thesis (3MT) Competition, Queen's University, 2017
5. Matthew Holden, 2015 Distinguished Masters Thesis Award of the Queen's University School of Computing for his thesis entitled Linear Object Registration for Image-guided Interventions, April 8, 2015
6. Ameet K. Jain, Johns Hopkins Nominee for National CGS/UMI Distinguished Dissertation Award, 2008
7. Ameet K. Jain, Johns Hopkins Computer Science Department's Nominee for ACM Dissertation Award, 2008
8. Paweena U-Thainual, National Outstanding Student Award, Ministry of Science and Technology, Thailand, 2008
9. Siddharth Vikal, Best Master's Thesis Award, Faculty of Medicine, RWTH Aachen, 2008

Research Awards

1. Hillary Lia, Finalist, Outstanding Undergraduate Researcher Award, Computing Research Association, 2017

Curriculum Vitae

2. Matthew Holden, Outstanding Doctoral Research Award, Queen's School of Computing, 2017
3. Zachary Baum, National Finalist for Sunnybrook Undergraduate Research Award, 2017
4. Emily Heffernan, Google Lime Scholar Award, 2016
5. Vinyas Harish, National Finalist for Sunnybrook Undergraduate Research Award, 2016
6. Amélie Meyer, Région Alsace Award for Outstanding Graduate Research Internship, Région Alsace, France, 2015
7. Tamas Ungi, Outstanding Research Award, Queen's University, School of Computing, 2013
8. Mattea Welch, Runner-Up for Outstanding Undergraduate Researcher Award, Computing Research Association, 2013
9. Eric Moul, Finalist for Outstanding Undergraduate Researcher Award, Computing Research Association, 2013
10. Eric Moul, Finalist for Sunnybrook Undergraduate Research Award, 2012
11. Thomas Kurian Chen, Finalist for IEEE Graduate Research Excellence Award, Kingston Chapter, 2011
12. Laura Bartha, Finalist for Computing Research Association's Outstanding Undergraduate Researcher Award, 2011
13. Gregory S. Fischer, Student Employee of the Year, Runner-up, Johns Hopkins University, 2007
14. Ameet K. Jain, Student Employee of the Year, Johns Hopkins University, 2005
15. Ameet K. Jain, Student Employee of the Year, State of Maryland, 2005

Research Fellowships and Scholarships Supervised

1. Kristof Moga, MITACS Globalink Research Award, 2022
2. Renzo Aro Pellan, MITACS Accelerate Award, 2022
3. David Morton, Ontario Graduate Scholarship (OGS), 2021-2022
4. Colton Barr, MITACS Global Experience Award, 2021
5. Laura Connolly, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada, 2021-2022
6. Elizabeth Klosa, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2021
7. Ngoc Nguyen, Undergraduate Research Award, School of Computing, Queen's Univ, 2021
8. Catie Austin, Undergraduate Research Award, School of Computing, Queen's Univ, 2021
9. Rising Star Postdoctoral Fellow Award, Ontario's Cancer Imaging Consortium, 2021
10. Rebecca Hisey, Queen Elizabeth II Graduate Scholarships in Science and Technology, 2020-21
11. Colton Barr, MITACS Rapid Response Training Award, 2020
12. Mark Asselin, Ontario Graduate Scholarship, Canada, 2020-2021
13. Zoe Hu, William Samuel Thomas Connell Studentship Award, Queen's University, 2020
14. Aquila Akingbade, Mach-Gaensslen Foundation of Canada Studentship Award, 2020

Curriculum Vitae

15. Colton Barr, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada, 2020-2021
16. Josh Ehrlich, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada, 2020-2021
17. Laura Connolly, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2020
18. Julia Wiercigroch, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2020
19. Josh Ehrlich, Arthur B. McDonald Prize for Academic Excellence from the School of Graduate Studies, Queen's University, 2020-21 (declined)
20. Colton Barr, Arthur B. McDonald Prize for Academic Excellence from the School of Graduate Studies, Queen's University, 2020-21 (declined)
21. Laura Connolly, MITACS Globalink Award, 2020 (deferred to 2021)
22. Phoenix Wilkie, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2020 (declined)
23. Catherine Wu, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2020
24. Mark Asselin, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada, 2019-2020
25. Mark Asselin, Arthur B. McDonald Prize for Academic Excellence from the School of Graduate Studies, Queen's University, 2019-20 (declined)
26. Grace Pigeau, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2019
27. Evan Lusty, Clinical Simulation Centre Summer Simulation Research Grant, Queen's Univ. 2019
28. Jonathan Cook, William Samuel Thomas Connell Memorial Studentship (UGME Summer Studentship - Department of Surgery, Queen's University, 2019
29. Colton Barr, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2019
30. Victoria Wu, CIHR Summer Student Fellowship, 2019
31. Victoria Wu, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2019 (declined)
32. Julia Wiercigroch, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2019
33. Laura Connolly, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2019
34. Lauren Yates, Undergraduate Research Grant, Queen's University, Canada, School of Computing, 2019
35. Charilaos Brastianos, the Susan Elizabeth Phillips Scholarship in Medicine for the 2018-19
36. Zachary Baum, Doctoral Fellowship, Natural Sciences and Engineering Research Council, Canada, 2019/2020

Curriculum Vitae

37. Zachary Baum, 2019-20 Arthur B. McDonald Prize for Academic Excellence from the School of Graduate Studies, Queen's University 2019/2020 (declined)
38. Matthew Holden, NSERC Post Doctoral Fellowship, 2019/2021
39. Thomas Vaughan, Walter C. Sumner Foundation Fellowship, 2018/2019
40. Natasja Janssen, Queen's Research Opportunity Post Doctoral Research Fellowship, 2018/2019
41. Hejie Cui, MITACS Globalink Research Internship, 2018
42. Rachael House, Ontario Graduate Fellowship 2018/2019
43. Zachary Baum, Ontario Graduate Fellowship 2018/2019
44. Grace Underwood, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada, 2018-2019
45. Rebecca Hisey, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada, 2018-2019
46. Sachin Vidur Pasricha, Kingston Resuscitation Institute Summer Studentship, 2018
47. Hillary Lia, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2018
48. Shaun Lund, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2018
49. Mark Asselin, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2018
50. Jacob Laframboise, Queen's High School Internships in Computing, 2018
51. Sydney Perrin, Queen's High School Internships in Computing, 2018
52. Emily Rae, James H. Rattray Memorial Scholarship, Faculty of Engineering and Applied Science, Queen's University, 2017/2018
53. Thomas Vaughan, Ontario Graduate Fellowship 2017/2018
54. Matthew Holden, Walter C. Sumner Foundation Fellowship, Canada, 2017/2018
55. Justine Ring, McLaughlin Summer Research Studentship, School of Medicine, Queen's Univ. 2017
56. Regina Leung, the Great West Life Summer Research Studentship, School of Medicine, Queen's Univ. 2017
57. Nicole Morse, Canada Graduate Scholarships-Master's Program, The Canadian Institutes of Health Research (CIHR) 2017-2018
58. Rachael House, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada (NSERC) 2017-2018
59. Zachary Baum, Canada Graduate Scholarships-Master's Program, Natural Sciences and Engineering Research Council of Canada (NSERC) 2017-2018
60. Rachael House, Academic Excellence Award of the Queen's School of Graduate Studies, 2017-2018 (Declined)

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61. Zachary Baum, Academic Excellence Award of the Queen's School of Graduate Studies, 2017-2018 (Declined)
62. Matthew Holden, Link Foundation Fellowship in Modeling, Simulation, and Training, 2017-2018
63. Zachary Baum, Queen's School of Computing Undergraduate Research Fellowship, 2017
64. Grace Underwood, Queen's School of Computing Undergraduate Research Fellowship, 2017
65. Zachary Baum, Academic Excellence Award of the Queen's School of Graduate Studies, 2017-2018
66. Hillary Lia, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2017
67. Emily Rae, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2017
68. Anna Ilina, Ontario Baden-Württemberg Summer Research Fellowship, 2017
69. Rachael House, Ontario Baden-Württemberg Summer Research Fellowship, 2017
70. Eden Bibic, Queen's University Internships in Computing, 2016
71. Aidan Baksh, Summer Internship in Surgery, Queen's University, 2016
72. Matthew Holden, Walter C. Summer Foundation Fellowship, Canada, 2016/2017
73. Matthew Holden, Rennes Metropole Grant, France, 2015
74. Jennifer Andrea, Ontario Graduate Fellowship, 2015-2016
75. Kyle Sunderland, Ontario Graduate Fellowship, 2015-2016
76. Mark Schumacher, Ontario Graduate Fellowship, 2015-2016
77. Matthew Lougheed, Ontario Graduate Fellowship, 2015-2016
78. Matthew Holden, Mitacs Graduate Research Award-Campus France Award, 2015
79. Reza Tabanfar, Queen's University School of Medicine Summer Studentship, 2015
80. Margaret Hess, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2015
81. Emily Heffernan, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2015
82. Aidan Baksh, Queen's University Internships in Computing, 2015
83. Jennifer Andrea, Ontario Graduate Fellowship, 2014-2015
84. Kaci Carter, Ontario Graduate Fellowship, 2014-2015
85. Andrew MacDonald, William Connell Studentship, Department of Surgery, Queen's University, 2014
86. Thomas Vaughan, Alexander Graham Bell Canada Graduate Scholarship, Doctoral Level, Natural Sciences and Engineering Research Council, Canada, 2014-2017
87. Matthew Stephen Holden, Alexander Graham Bell Canada Graduate Scholarship, Doctoral Level, Natural Sciences and Engineering Research Council, Canada, 2014-2017

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88. Jennifer Andrea, Ontario Baden-Württemberg Summer Research Fellowship, 2014
89. Mark Schumacher, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2014
90. Kyle Sutherland, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2014
91. Elodie Lugez, NSERC CREATE Graduate Fellowship in Joint Health Research, 2014-2015
92. Ryan Anderson, NSERC CREATE Graduate Fellowship in Joint Health Research, 2014-2015
93. Reza Seifabadi, Joseph E. Robert, Jr. Fellowship in Pediatric Surgical Innovation, Sheikh Zayed Institute for Pediatric Surgical Innovation at the Children's National Hospital in Washington, DC, 2013
94. Simon Kotwicz, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2013
95. Ryan Walsh, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2013
96. Eric Moul, Mobility, Musculoskeletal Health & Arthritis Award, Canadian Institutes of Health Research, Canada, 2013
97. Matthew Holden, Ontario Graduate Scholarship, Canada, 2013-2014
98. Ian Cumming, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2013
99. Jennifer Andrea, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2013
100. Eric Moul, Cameron Applied Science Scholarship, Queen's University, 2012
101. Eric Moul, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2012
102. Mattea Welch, Undergraduate Student Research Award (USRA), Natural Sciences & Engineering Research Council, Canada, 2012
103. Mattea Welch, NSERC CREATE Internship in Joint Health Research, 2012 (declined for a concurrent award)
104. Laura Bartha, NSERC CREATE Fellowship in Joint Health Research, 2011-2012
105. Laura Bartha, Ontario – Baden Württemberg Summer Research Fellowship, 2011
106. Alexandra Pompeu-Robinson, Ontario Graduate Scholarship, 2011
107. Eric Moul, Cameron Applied Science Scholarship, Queen's University, 2011
108. Eric Moul, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2011
109. Thomas Kurian Chen, Accelerate Fellowship, Mathematics of Information Technology and Complex Systems, 2011
110. Helen Xu, Ontario Graduate Scholarship, Canada, 2011-2012
111. Matthew Holden, NSERC CREATE Internship in Joint Health Research, 2011

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112. Helen Xu, RS McLaughlin graduate Fellowship, Queen's University, 2010-2011
113. Eric Moul, Cameron Applied Science Scholarship, Queen's University, 2010
114. Eric Moul, Undergraduate Student Research Award (USRA), Natural Sciences and Engineering Research Council, Canada, 2010
115. Ehsan Dehghan, Ontario Ministry of Research and Innovation, Postdoc Fellowship, 2009-2011
116. Pezhman Foroughi, U.S. Department of Defense Predoctoral Traineeship Award, 2010-2012
117. Lauren Gordon, Ontario Graduate Scholarship, 2009
118. Pascal Fallavollita, Ontario Ministry of Research and Innovation, Postdoc Fellowship, 2009-2011
119. Shachar Avni, Ontario Graduate Scholarship, 2009
120. Hassan Rivaz, U.S. Department of Defense Predoctoral Traineeship Award, 2009-2011
121. Hassan Rivaz, Link Fellowship, 2008-2009
122. Maria Ayad, U.S. National Science Foundation Graduate Fellowship, 2008-2011
123. Gregory S. Fischer, Student Employee of the Year, Runner-up, Johns Hopkins University, 2007
124. Gregory S. Fischer U.S. Department of Defense Predoctoral Traineeship Award, 2006-2008
125. Ameet K. Jain, U.S. Department of Defense Pre-doctoral Traineeship Award, 2005-2007
126. Emad M. Boctor, Siemens Corporate Research Fellowship, 2004
127. Emad M. Boctor, International Society for Optics and Photonics (SPIE) Fellowship, 2003

Travel Awards for Trainees

1. Rebecca Hisey, International Society for Computer Aided Surgery Fellowship, 2020
2. Laura Connolly, International Society for Optics and Photonics (SPIE) Conference Travel Grant, 2020
3. Grace Pigeau, International Society for Optics and Photonics (SPIE) Conference Travel Grant, 2020
4. Jacob Laframboise, International Society for Optics and Photonics (SPIE) Conference Travel Grant, 2020
5. Natasja Janssen, School of Graduate Studies, Queens's University, Postdoctoral Travel Award, 2020
6. Thomas Vaughan, International Society for Computer Aided Surgery Fellowship, 2016
7. Thomas Vaughan, Graduate Travel Award, Queen's School of Computing, 2016
8. Christina Yan, International Society for Optics and Photonics (SPIE) Medical Imaging Conference Travel Fellowship, 2016
9. Vinyas Harish, International Society for Optics and Photonics (SPIE) Medical Imaging Conference Travel Fellowship, 2016
10. Kyle Sunderland, Graduate Travel Award, School of Computing, Queen's University, 2015/2016
11. Matthew Holden, International Society for Computer Aided Surgery Fellowship, 2015
12. Tamas Ungi, Post Doctoral Travel Award, Queen's University, 2015
13. Margaret Hess, International Society for Optics and Photonics (SPIE) Medical Imaging Conference Travel Fellowship, 2015

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14. Manjunath Anand, Graduate Travel Award, Department of Mechanical and Materials Engineering, Queen's University, 2014
15. Ryan Anderson, Graduate Travel Award, Department of Electrical and Computer Engineering, Queen's University, 2014
16. Matthew S. Holden, Graduate Travel Award, School of Computing, Queen's University, 2014
17. Franklin King, Graduate Travel Award, School of Computing, Queen's University, 2014
18. Helen Xu, International Society for Computer Aided Surgery Fellowship, 2013
19. Guillermo Carbajal, International Society for Computer Aided Surgery Fellowship, 2013
20. Manjunath Anand, Conference Travel Award for The Hamlyn Symposium, Queen's University, Dept. of Mechanical and Materials Engineering, 2013
21. Manjunath Anand, The Hamlyn Symposium Student Travel Award, Hamlyn Center of Medical Robotics, Imperial College, London, UK, 2013
22. Hossein Sadjadi, Graduate Travel Award, Dept. of Electrical and Computer Engineering, Queen's University, 2012
23. Lauren Gordon, ACM's Women in Computing Scholarship, 2012
24. Matthew Stephen Holden, International Society for Optics and Photonics (SPIE) Medical Imaging Conference Travel Award, 2012
25. Paweena U-Thainual, International Society of Computer Assisted Surgery Travel Award, 2012
26. Reza Seifabadi, Graduate Travel Award, Dept. of Mechanical and Material Engineering, Queen's University, 2012
27. Tamas Ungi, Dean's Travel Award, Queen's University, 2012
28. Yashar Madjidi, Graduate Dean's Travel Grant for Doctoral Field Research, Queen's University, 2012
29. Alexandra Pompeu-Robinson, ACM-W Scholarship Award for Attendance at Research Conferences, 2011
30. Reza Seifabadi, Graduate Dean's Travel Grant for Doctoral Field Research, Queen's University, 2011
31. Tamas Ungi, Dean's Travel Award, Queen's University, 2011
32. Helen Xu, Scholarship to São Paulo Advanced School of Computing Summer School, 2010
33. Helen Xu, Graduate Travel Award, School Computing, Queen's University, 2010
34. Narges Ahmidi, MICCAI Society Student Travel Award, 2010
35. Reza Seifabadi, Scholarship to the North American Summer School on Surgical Robotics and Simulation, 2010
36. Pascal Fallavollita, Dean's Travel Award, Queen's University, 2010
37. Maria Ayad, International Society for Optics and Photonics (SPIE) Medical Imaging Conference Travel Award, 2009
38. Paweena U-Thainual, Conference Travel Award to IEEE Robotics in Biology, 2009
39. Junghoon Lee, Student Travel Award, MICCAI, 2009
40. Hassan Rivaz, Student Travel Award, MICCAI, 2009
41. Ameet K. Jain, Student Travel Award, MICCAI, 2007
42. Axel Krieger, Student Travel Award, MICCAI, 2007

Trainees and Students Supervised and Mentored

Name	Degree & Field	Year	Role	Subject	Position (last known)
POSTDOCTORAL FELLOWS SUPERVISED					
1. Leah Groves	PhD in CS	2021-Present	Co-supervisor Mousavi	POCUS intervention systems for global deployment	Queen's University
2. Renzo Aro Phellan	PhD in CS	2021-Present	Supervisor	Ultrasound-based scoliosis measurement	Queen's University
3. Jessica Rodgers	PhD in BME	2021-Present	Co-supervisor Mousavi	Real-time tissue analysis in navigated surgeries	Queen's University
4. M Kaufmann	PhD in Chem.	2015-present	Co-supervisor JR Rudan	Mass spectrometry tissue analysis	Queen's University
5. Natasha Janssen	PhD in BME	2018-2020	Supervisor	Breast conserving surgery navigation	Clinical Scientist, ScreenPoint Medical Nijmegen, The Netherlands
6. Zsuzsanna Keri	MD	2013-2018	Co-supervisor P Mousavi	Computer-assisted medical training	Nursing School, St. Lawrence College, Kingston ON
7. Hossein Sadjadi	PhD in ECE	2014-2016	Co-supervisor	Sensor fusion in surgical navigation	Engineering Lead, Active Safety and Autonomous Driving Division, General Motors, Toronto, Canada
8. Padina Pezeshki	PhD in BME	2014-2015	Co-supervisor JR Rudan	Real-time tissue analysis in navigated surgery	Senior Clinical Research Specialist, Medtronic, USA
9. Tamas Ungi	MD/PhD	2009-2016	Supervisor	Image guided interventions	Senior Research Scientist, Adjunct Assistant Professor Queen's University
10. Caitlin Yeo	MD	2013-2014	Co-supervisor JC Engel	Computer-assisted medical training	Fellow in Endocrine Surgery and Surgical Oncology at Alberta Health Services Calgary, Alberta, Canada
11. Ehsan Dehghan	PhD in ECE	2009-2012	Co-supervisor JL Prince	Image-guided prostate brachytherapy	Research Staff Member, IBM Research, San Jose, CA
12. Pascal Fallavollita	PhD in CS	2008-2010	Supervisor	Image-guided prostate brachytherapy	Associate Professor, University of Ottawa
13. Sang-Eun Song	PhD in ME	2008-2010	Co-supervisor Whitcomb	MRI guided robotic prostate intervention	Associate Professor, University of Central Florida, USA
14. Elvis Chen	PhD in CS	2008-2009	Co-supervisor P Mousavi, P Abolmaesumi	Ultrasound guided spinal needle puncture	Assistant Professor, Department of Electrical and Computer Engineering, Western University
15. Mohammad Aboofazeli	PhD in ECE	2008-2009	Co-supervisor P Mousavi, P Abolmaesumi	Ultrasound guidance for needle steering in soft tissues	Lecturer, Vancouver Community College, Vancouver, Canada
16. Jacob Boisvert	PhD in CS	2007-2008	Co-supervisor P Mousavi, P Abolmaesumi	Percutaneous US guided spinal pain management	Senior Research Scientist National Research Council, Canada

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
17. Christopher Kennedy	PhD in ME	2005-2006	Co-supervisor P Kazanzides	A needle-positioning robot for prostate brachytherapy	Clinical Medical Physicist, Adjunct Assistant Professor, University of Pennsylvania, Philadelphia, USA
18. Cristian Labat	PhD in CS	2006-2007	Co-supervisor JL Prince	3D reconstruction of brachytherapy seeds	Research Scientist French National Petroleum Institute, Paris, France
19. Jonathan Fiene	PhD in ME	2006-2007	Supervisor	Robotic assistance for ultrasound guided prostate brachytherapy	ZWE Robotics Leader, Max Planck Institute for Intelligent Systems, Germany
20. Michelle deOliveira	MD	2006-2007	Co-supervisor M Choti	Abdominal interventions with augmented reality image overlay guidance	Assistant Professor and Attending Surgeon, FACS, University Hospital Zurich, Switzerland
21. Alexandre Krupa	PhD in ECE	2005-2006	Supervisor	Ultrasound guidance and servo control of surgical robots	Senior Research Scientist INRIA / IRISA, Rennes Cedex, France
22. You Zhou	PhD in ME	2005-2006	Co-supervisor G Chirikjian	Ultrasound & fluoroscopy image fusion in prostate cancer brachytherapy	Associate Professor, State University of New York Polytechnic Institute, USA
23. Herve Mathieu	PhD in ECE	2001-2002	Supervisor	Robot controller for percutaneous therapy systems	Senior Research Scientist, Head of Experimentation and Software Development, INRIA, Bordeaux, France
24. Atilla Tanacs	PhD in CS	2000-2002	Supervisor	Visualization and planning software for image guided interventions	Assistant Professor, University of Szeged, Hungary
PHD STUDENTS SUPERVISED IN THESIS					
1. Flourish Adebayo	PhD in CS	2022-present	Supervisor	AI methods for metabolomic tissue analytics	PhD Student, Queen's University
2. Rebecca Hisey	PhD in CS	2019-present	Co-supervisor T Ungi	Surgical workflow analysis	PhD Student, Queen's University
3. Paula Nasute	PhD in PATH	2019-present	Co-supervisor D Berman	Breast cancer surgery outcome analysis	PhD Student, Queen's University
4. Laura Connolly	PhD in ECE	2022-current	Co-Supervisor	Robotic breast conserving surgery	PhD Student Queen's University
5. Csaba Pinter	PhD in CS	2014-2019	Supervisor	SlicerRT open-source platform for radiation therapy research	Research Scientist Universidad de Las Palmas de Gran Canaria, Spain
6. Matthew Holden	PhD in CS	2014-2018	Supervisor	Workflow segmentation in percutaneous interventions	Assistant Professor, Carlton University, Canada
7. Thomas Vaughan	PhD in CS	2010-2018	Supervisor	Computational methods for breast cancer surgery and brachytherapy guidance	Assistant Research Officer, National Research Council, Canada
8. Yashar Madjidi	PhD in ME	2010-2017	Co-Supervisor	Robotic gynecological brachytherapy intervention	Innovation Ambassador, Kinova Inc, Canada
9. Elodie Lugez	PhD in CS	2014-2016	Co-supervisor S Akl	Advanced electromagnetic tracking in surgical navigation	Assistant Professor (tenure track), Ryerson University, Canada
10. Hossein Sadjadi	PhD in ECE	2010-2014	Co-supervisor Hastrudi-Zaad	Sensor fusion techniques in surgical navigation	Research Engineer, General Motors, Toronto, Canada
11. Helen Xu	PhD in CS	2010-2014	Supervisor	Target motion analysis for MRI-guided robotic prostate biopsy	Senior Scientist, EZRA Imaging, New York, USA

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
12. Paweena U-Thainual	PhD in ME	2008-2013	Supervisor	MR image overlay: an augmented reality system for needle placement	Senior Project Manager, Thailand Center of Excellence for Life Sciences, Bangkok, Thailand
13. Reza Seifabadi	PhD in ME	2009-2013	Supervisor	MRI-guided teleoperation, prostate cancer biopsy and therapy	Senior Research Fellow United States National Institutes of Health, National Cancer Institute
14. Pezman Foroughi	PhD in CS	2006-2012	Co-supervisor	Ultrasound elastography guidance, cancer therapy	Research Engineer, Clear Guide Medical Systems, Baltimore, USA
15. Hassan Rivaz	PhD in CS	2006-2010	Co-supervisor	Ultrasonic measurements for intervention and diagnosis	Associate Professor, Concordia University, Montreal, Canada
16. Gregory Fischer	PhD in CS	2002-2008	Supervisor	Enabling technologies for MRI-guided interventions	William Smith Dean's Professor in Mechanical Engineering, Worcester Polytechnic Institute, USA
17. Ameet Jain	PhD in CS	2003-2007	Supervisor	Intraoperative dosimetry, prostate brachytherapy	Innovation Program Director, Philips Research North America
18. Emad Bector	PhD in CS	2001-2006	Supervisor	Ultrasound imaging, computer-assisted intervention	Assistant Professor, Johns Hopkins University, Baltimore, USA
19. Sheng Xu	PhD in CS	2001-2006	Supervisor	Organ motion compensation, computer assisted surgery	Head Scientist, U.S. National Institutes of Health, Bethesda, USA
PHD STUDENTS SUPERVISED IN RESEARCH					
1. Thomas Chen	PhD in CS	2010-2012	Supervisor	Ultrasound system calibration	Engineering Scientist Analogic Corporation Vancouver, Canada
2. Maria Ayad	PhD in CS	2006-2009	Co-supervisor	Intraoperative dosimetry, prostate brachytherapy	Graduated from the Johns Hopkins University, USA
3. Narges Ahmidi	PhD in CS	2008-2011	Supervisor	Gesture recognition and skill evaluation	Research Group Leader, Institute of Computational Biology at the German Research Center for Environmental Health, Munich, Germany
4. Mhommamad Hefny	PhD in CS	2008-2009	Supervisor	Quantification of edema, brachytherapy implants	Senior Data Scientist, Deke, Collingwood, Canada
5. Xiaofeng Liu	PhD in CS	2006-2009	Supervisor	Prostate implant reconstruction with discrete tomography	Research Scientist General Electric Global Research, Niskayuna
6. Gouthami Chintalapani	PhD in CS	2006-2009	Supervisor	Implant reconstruction and C-arm calibration, prostate brachytherapy	Research Scientist Siemens Corporate Research, Princeton
7. Axel Krieger	PhD in ME	2004-2008	Co-supervisor	Robot-assisted MR guided prostate interventions	Assistant Professor, Johns Hopkins University, Baltimore, MD, USA

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
8. Yu Zhou	PhD in ME	2004-2005	Co-supervisor	Registration of ultrasound to fluoroscopy, prostate brachytherapy	Associate Professor, State University of New York Polytechnic Institute, USA
9. Sangyoon Lee	PhD in ME	2001-2002	Co-supervisor	Image registration for surgical robots	Associate Professor, Konkuk University Seoul, South Korea
MSC STUDENTS SUPERVISED IN THESIS					
1. Andrew Morton	MSc in ECE	2021-present	Co-Supervisor	Robot-assisted breast cancer surgery	MSc Student Queen's University
2. Ayesha Naeem Syeda	MSc in CS	2021-present	Co-Supervisor	Computer assisted medical interventions	MSc Student Queen's University
3. Colton Barr	MSc in CS	2020-present	Supervisor	Webcam tracking for surgery	MSc Student Queen's University
4. Joshua Ehrlich	MSc in CS	2020-current	Supervisor	Navigated iKnife	MSc Student Queen's University
5. Mark Asselin	MSc in CS	2020-present	Supervisor	Computer assisted intervention systems development	CEO Pixel Medical Inc, Canada, MSc Student Queen's University
6. Laura Connolly	MSc in ECE	2020-2022	Co-Supervisor	Robotic breast conserving surgery	PhD Student Queen's University
7. Alice Santilli	MSc in CS	2019-2021	Co-Supervisor	Metabolomic tissue analysis	Research Assistant, Memorial Sloan Kettering Cancer Center, NY, USA
8. Abigael Schoneville	MSc in CS	2020-present	Supervisor	Computer assisted intervention systems development	MSc Student Queen's University
9. Rebecca Hisey	MSc in CS	2017-2019	Supervisor	Software for quantitative medical skill assessment	PhD Student Queen's University
10. Zachary Baum	MSc in CS	2017-2019	Supervisor	US-guided scoliosis assessment	PhD Student, University College, London, UK
11. Grace Underwood	MSc in CS	2017-2019	Supervisor	Vertebral cancer ablation planning and guidance	Master's of Physiotherapy Candidate at University of Toronto, Canada
12. Racheal House	MSc in CS	2017-2019	Supervisor	Surface analysis for breast reconstruction surgery planning	I/T Consultant, IBM Research, Canada
13. Paola Nasute	MSc in Pathology	2017-2018	Co-supervisor	Breast cancer surgery outcome analysis	PhD Student Queen's University
14. Matthew Loughheed	MSc in CS	2014-2019 (NF)	Supervisor	Contour interpolation in radiation therapy planning students	CAS Research Scientist, IBM Canada Software Lab, Canada
15. Benjamin Church	MSc in CS	2015-2017	Co-Supervisor	Ultrasound image processing for scoliosis measurement	Process Engineer / Safety Coordinator - Ingenia Polymers, Canada
16. Kyle Sunderland	MSc in CS	2015-2017	Supervisor	Fractional Labelmap Representation of Anatomical Structures	Research Engineer Queen's University, Canada
17. Amani Ibrahim	MSc in CS	2015-2016	Supervisor	Planning software for craniofacial surgery	Senior Software Engineer Nomis Solutions, Toronto, Canada
18. Jennifer Andrea	MSc in CS	2014-2016	Supervisor	Treatment plan similarity computation	Software Engineer at SoundHound Inc. Toronto, Ontario, Canada
19. Kaci Carter	MASc in ECE	2014-2015	Co-supervisor	Tool-mounted surgical display device	Clinical Resident in Family Medicine, Queen's University, Canada

Name	Degree & Field	Year	Role	Subject	Position (last known)
20. Nisrin Abou-Seido	MSc in CS	2013-2015	Co-supervisor	Data management workflow and architecture for simulation-based medical training	Software Engineer General Dynamics Mission Systems, Ottawa, ON
21. Franklin King	MSc in CS	2013-2015	Supervisor	Interface development for image guided intervention	Research Engineer Harvard Brigham and Women's Hospital
22. Ryan Anderson	MASc in ECE	2013-2015	Co-supervisor	Magnetometer tracking for 3D Ultrasound reconstruction	Staff Engineer Aversan Inc., Mississauga, Canada
23. Manjunath Anand	MASc in ME	2013-2014	Supervisor	Mobile image overlay surgical navigation	CEO, CleanSlate UV, Toronto, Canada
24. Yu Qi	MEng in ECE	2013-2014	Co-supervisor	Electromagnetic instrument tracking	Associate Systems Engineer, Cisco Systems, Inc, Toronto, ON
25. Matthew Holden	MSc in CS	2012-2014	Supervisor	Mathematical modeling of percutaneous interventions	Assistant Professor, Carlton University, Ottawa, Canada
26. Laura Bartha	MSc in CS	2011-2013	Supervisor	Real-time ultrasound simulation for surgical training	Instructor, Juno College of Technology, Toronto, ON
27. Thomas Wolff	MSc in BME	2011-2012	Co-supervisor	C-arm pose tracking with tilt sensor accelerometer	Research Assistant Institute of Business Management, Logistics and Production, Technical Univ. of Munich, Germany
28. Lauren Gordon	MSc in CS	2010-2011	Co-supervisor	Needle tract reconstruction, prostate brachytherapy	Clinical Fellow in Vascular Surgery, University of Toronto
29. Mark Wu	MSc in CS	2010-2011	Co-supervisor	Tissue ablation monitoring, ultrasound time series	Clinical Resident in Radiology, The Ottawa Hospital, Canada
30. Hamid Peikari	MSc in CS	2009-2011	Supervisor	Validation platform for Ultrasound-based monitoring of thermal ablation	Application Developer, Nexient, Canada
31. Mohammed Peikari	MSc in CS	2009-2011	Supervisor	Ultrasound beam-width profiling	Data Scientist, Univ. Health Network, Toronto, Canada
32. Alexandra Pompeu-Robinson	MSc in CS	2009-2011	Supervisor	Catheter guidance for breast brachytherapy	Software Engineer Perimeter Medical Imaging, Toronto, Canada
33. Victor Grzeda	MASc in ECE	2008-2010	Supervisor	C-arm encoding with accelerometers	Software Developer DreamQii Inc, Toronto, Canada
34. Hadi Tadayyon	MSc in ECE	2008-2010	Supervisor	Motion tracking, MR-guided prostate biopsy	Data Scientist McMillan, Toronto, Canada
35. Helen Xu	MSc in CS	2008-2009	Supervisor	Robotic prostate biopsy error analysis	Senior Scientist, EZRA Imaging, New York, USA
36. Andrew Lang	MASc in ECE	2008-2009	Co-supervisor	Speckle-tracked freehand 3D ultrasound through the use of sensor fusion	Received PhD from Johns Hopkins University, USA
37. Zarah Karim-Aghaloo	MASc in CS	2007-2008	Co-supervisor	Registration of ultrasound to fluoroscopy (RUF), prostate brachytherapy	Research Scientist at NeuroRx Research Montreal, Quebec, Canada
38. Siddarth Vikal	MSc in BME	2005-2006	Supervisor	Treatment planning for MR-guided robotic prostate biopsy	Research Scientist Leica Ltd, Switzerland
39. Ryan Kon	MSc in CS	2004-2005	Supervisor	Hidden seed reconstruction from C-arm images, brachytherapy	Medical Doctor, Senior Analyst, St. Jude Medical Dallas Fort Worth, TX,

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
40. Karsten Seidl	MSc in ECE	2004-2005	Co-supervisor	Optical measurement of needle insertion depth	Received PhD; Research Engineer, Engineer at Bosch Healthcare Solutions GmbH, Germany
41. Jacob Kemper	MSc in ME	2004-2005	Co-supervisor	Transrectal stabilizing sheath and fiducial carrier for prostate brachytherapy	Product Development Eng. Stryker Osteosynthesis Kiel, Germany
42. Jack Li	MSc in ME	2003-2004	Co-supervisor	Image-guided robot system for measurement, biopsy and injection, rodents	Research Engineer Boston Scientific Corporation
43. Anand Viswanathan	MSc in CS	2002-2004	Supervisor	A software framework for image-guided therapy applications	Medical Doctor, Internal Medicine, Stony Brook, New York
44. Chad Schneider	MSc in ME	2002-2004	Co-supervisor	Systems for robotic needle insertion and tool-tissue interaction modeling	Senior Design Engineer Key Technologies, Inc Baltimore, MD
MSC STUDENTS SUPERVISED IN RESEARCH					
1. Nicole Kitner	MS Dipl.	2021-present	Co-supervisor	Catheter segmentation in ultrasound for high dose rate brachytherapy of the prostate	Biomedical Computing Diploma Student at Queen's University
2. Chris Yeung	MS Dipl.	2021-present	Co-supervisor	Real-time tumor segmentation in ultrasound in breast conserving surgery	Biomedical Computing Diploma Student at Queen's University
3. Henry Lee	MS Dipl.	2021-present	Co-supervisor	Computation skill assessment in cataract surgery training	Biomedical Computing Diploma Student at Queen's University
4. Alec Robinson	MSc in CS	2015-2016	Supervisor	Radiotherapy software development	Data/Software Engineer at Crater Labs Inc., Canada
5. Amalie Meyer	Visiting MSc in CS	2014	Supervisor	Live ultrasound volume reconstruction using scout scanning	Telecom Physique Strasbourg, University of Strasbourg, France
6. Alexander Boucharin	Visiting MSc in CS	2011	Supervisor	Brachytherapy system calibration	Scientific Programmer Uppsala University, Sweden
7. Guillermo Carbajal	Visiting MSc in ECE	2012-2013	Supervisor	Tracked ultrasound systems calibration	Instructor, Inst de Ingeniería Eléctrica Universidad de la República Montevideo, Uruguay
8. Thomas Vaughan	MSc in CS	2012-2014	Supervisor	Ultrasound volume reconstruction	Assistant Research Officer, National Research Council, Canada
9. Sachar Avni	MSc in CS	2008-2010	Supervisor	Modeling of the targeting error, image-guided prostate biopsy	3D CAD Tools Developer ThreeDify Inc, Ottawa, ON
10. Sean Gill	MSc in CS	2008-2010	Supervisor	Slice to volume registration of prostate MR Images	Received JD UofT Associate Gowling WLG Canada
11. Sahar Ghanavati	MASc in ECE	2008-2010	Co-supervisor	Atlas based ultrasound navigation, the hip	Software Developer Nemaris, Inc
12. Siavash Khallaghi	MASc in ECE	2008-2010	Co-supervisor	Atlas based ultrasound navigation, the spine	Machine Learning Scientist and Software Developer Copyants, Vancouver, BC
MEDICAL STUDENTS SUPERVISED IN RESEARCH					

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
1. Zoe Hu	Medicine	2019-current	Co-supervisor	HDR brachytherapy catheter localization with deep learning	Medical Student Queen's University
2. Aquila Akingbade	Medicine	2019-current	Co-supervisor	Enabling technologies for HDR brachytherapy	Medical Student Queen's University
3. Evan Lusty	Medicine	2019	Co-supervisor	Radiation therapy of skin cancer target localization with optical surface scanning	Medical Student Queen's University
4. Kaci Carter	Medicine	2016, 2017, 2018	Supervisor	Computer-assisted surgery	Resident in Family Medicine, Queen's University
5. Sachin Pasricha	Medicine	2018-2019	Co-supervisor	Computer-assisted medical training	Medical Resident University of Toronto
6. Justine Ring	Medicine	2017-2018	Co-supervisor	Computer-assisted medical training – open surgery	Resident, Plastic and Reconstructive Surgery, University of Manitoba - Winnipeg, Manitoba
7. Regina Leung	Medicine	2017-2018	Co-supervisor	Computer-assisted medical training with holography	Medical Resident University of Toronto
8. Sean Xia	Medicine	2017-2018	Co-supervisor	Computer-assisted medical training – central line placement	Clinical Resident, McMaster University
9. Reza Tabanfar	Medicine	2015	Co-supervisor	US-guided scoliosis measurement	Reza Tabanfar - Resident Physician - University of Calgary
10. Andrew Macdonald	Medicine	2014-2015	Co-supervisor	Computer-assisted liver resection planning	Medical Student Queen's University
11. Derek Sargent	Medicine	2011-2012	Co-supervisor	Perk Station: image-guided percutaneous surgery training system	Received MD; Clinical Resident at Queen's University
12. Caitlin Yeo	Medicine	2010-2011	Co-supervisor	Perk Station: image-guided percutaneous surgery training system	Fellow in Endocrine Surgery and Surgical Oncology at Alberta Health Services, Calgary, Alberta, Canada
CLINICAL RESIDENTS AND FELLOWS SUPERVISED IN RESEARCH					
1. Sarah Ryan	Internal Medicine	2021-present	Supervisor	Computer-assisted medical interventional training	Clinical Resident in Internal Medicine, Queen's University
2. Caitlin Yeo	General Surgery	2014-2019	Co-supervisor	Liver surgery navigation	v Fellow in Endocrine Surgery and Surgical Oncology at Alberta Health Services, Calgary, Alberta, Canada
3. Harry Brastianos	Oncology	2014-2021	Co-supervisor	Breast brachytherapy navigation	Clinical Fellow at Mayo Clinic, Rochester, MN
4. Gabrielle Gauvin	General Surgery	2014-2017	Co-supervisor	Breast surgery navigation	Clinical Fellow Univ Pennsylvania, USA
UNDERGRADUATE STUDENTS SUPERVISED IN THESIS AND/OR RESEARCH					
1. Mackenzie Sharp	BSc in CS	2021 - present	Co-Supervisor P Mousavi	Mass spectrometry tissue characterization in surgery	Undergrad Student, Queen's University
2. Keiran Barr	BSc in CS	2021 - present	Supervisor	Surgical navigation	Undergrad Student, Queen's University

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
3. Ngoc Nguyen	BSc in CS	2021	Supervisor	Surgical workflow segmentation	Undergrad Student, Queen's University
4. Catie Austin	BSc in CS	2021 - present	Supervisor	Surgical workflow segmentation	Undergrad Student, Queen's University
5. Elizabeth Klosa	BSc in CS	2021 - present	Supervisor	Surgical workflow segmentation	Undergrad Student, Queen's University
6. Catharine Wu	BSc in CS	2019 - present	Co-Supervisor P Mousavi	CT-based anatomical atlas for nephrostomy simulator	Undergrad Student, Queen's University
7. Lauren Yates	BSc in CS	2019 - 2020	Co-Supervisor P Mousavi	Optimized planning for multi-parametric tissue scanning	Research Software Developer at Sunnybrook Research Institute Toronto, Ontario, Canada
8. Colton Barr	BSc in CS	2019 - 2020	Supervisor	Neurosurgical guidance with patient projected images	MSc Student, Queen's University
9. Grace Pigeau	BSc in CS	2019 - 2020	Co-Supervisor T Ungi	Simulated ultrasound with deep neural networks	MSc Student, McGill's University
10. Jacob Laframboise	BSc in CS	2018 - 2020	Supervisor	Computational analysis of CT colonography	Undergrad Student, Queen's University
11. Victoria Wu	BSc in CS	2018 - 2020	Co-Supervisor P Mousavi	Deep learning segmentation of skeletal ultrasound	Data Scientist Microsoft Corp, USA
12. S Choueib	BSc in CS	2018 - 2019	Supervisor	Computer assisted intervention training systems	MSc Student, Queen's University
13. J Wiercigroch	BSc in ENG	2018-2021	Co-Supervisor Hashtrudi-Zaad	Development of an MR-guided needle insertion guidance device	Undergrad Student, Queen's University
14. L Connolly	BSc in ECE	2018 - 2020	Co-Supervisor P Mousavi	Robot-assisted optical tissue spectrometry testbed	MSc Student, Queen's University
15. Abigael Schonewille	BSc in CS	2019	Co-Supervisor T Ungi	Skull ultrasound registration for neurosurgery navigation	MSc Student, Queen's University
16. Alice Santilli	BSc in CS	2019	Co-Supervisor P Mousavi	Radiofrequency ablation planner system development	Research Assistant, Memorial Sloan Kettering Cancer Center, New York, USA
17. Anna Ilina	BSc in CS	2017-2018	Supervisor	Ortho-voltage radiation therapy treatment planning system	Software Engineer at Greybox Solutions Montreal, Quebec, Canada
18. Mohammad Rashid	BSc in CS	2019	Supervisor	Slicer Virtual Reality software platform developments	Software Developer at Bell Canada, Hamilton, Ontario, Canada
19. Shaun Lund	BSc in CS	2018	Supervisor	Computational musculoskeletal ultrasound	Unknown
20. Jonah Eisen	BSc in CS	2018	Supervisor	Deep learning for surgical tool detection in webcam imagery	Received BSc from Queen's University
21. Mark Asselin	BSc in CS	2018 - 2019	Supervisor	Software platform for US guided interventions	CEO Pixel Medical Inc, Canada, MSc Student Queen's University

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
22. Hillary Lia	BSc in CS	2016-2019	Supervisor	Quantitative medical skill assessment	MD-PhD Student, Univ of Toronto, Canada
23. Christina Yan	BSc in CS	2015-2019	Supervisor	, Ultrasound guided scoliosis monitoring, Endoscopic vein harvesting training system	Medical Student, Univ of Ottawa, Canada
24. Vinith Suriyakumar	BSc in CS	2017-2019	Co-Supervisor	Prostate CT/MR registration with deep learning methods	Research Intern at Google Incoming PhD Student at MIT, USA
25. Helie Cui	BSc in CS	2018	Supervisor	Deep learning recognition in surgical tools in video streams	PhD Student, Emory Univ, Atlanta, USA
26. Emily Rae	BSc in ECE	2017-2018	Co-supervisor	Holographic surgical guidance	Biomedical Engineer at Flosonics Medical Toronto, Canada
27. Rebecca Hisey	BSc in CS	2017	Co-supervisor	Quantitative medical skill assessment	PhD Student Queen's University
28. Brian Travers	BSc in CS	2017	Supervisor	US guided scoliosis measurement	Unknown
29. Zachary Baum	BSc in CS	2015-2017	Supervisor	Mobile image overlay surgical guidance	PhD Student, University College, London, UK
30. Grace Underwood	BSc in CS	2016-2017	Supervisor	Ultrasound imaging of the skull	Master's of Physiotherapy Candidate at University of Toronto, Canada
31. Rachael House	BSc in CS	2016-2017	Co-supervisor	Visualization module for breast cancer surgery navigation	I/T Consultant, IBM Research, Canada
32. Nicolle Morse	BSc in LISC	2016-2017	Co-supervisor	DESI analysis of breast cancer	Associate, HTA and Clinical Evaluation at PDCI Market Access Inc. Ottawa, Ontario, Canada
33. V Suriyakumar	BSc in CS	2016-2017	Supervisor	Development of software modules in SlicerRT	Research Intern at Google Incoming PhD Student at MIT, USA
34. Vinyas Harish	BSc in CS	2014-2017	Supervisor	Image guided therapy system based on SlicerIGT	MD/PhD student, University of Toronto
35. Annika Mair	BSc in CS	2016	Supervisor	Development of image guided intervention software modules in SlicerIGT	Undergraduate Student Queen's University
36. Rene Xu	BSc in CS	2015-2016	Supervisor	Image-guided intervention	IT Consultant at Netlight, Munich, Germany
37. Kyle McNeil	BSc in CS	2015-2016	Supervisor	Image-guided intervention	Graduated from MSc Queen's University
38. Bence Linder	BSc in CS	2015	Supervisor	Path planning for neurosurgical robots	Software Developer at IBI Group, Toronto, Canada
39. Emily Heffernan	BSc in ECE	2015	Co-supervisor E. Morin	Visual feedback methods in surgical navigation	PhD Student Queen's University
40. Margaret Hess	BSc in LISC	2014-2015	Co-supervisor J. Drake	Segmentation of clot in MRI following HiFU ablation	MD, Resident in Family Medicine, University of Toronto

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Name	Degree & Field	Year	Role	Subject	Position (last known)
41. Kyle Sunderland	BSc in CS	2014-2015	Supervisor	Reconstruction of surfaces from planar contours through contour interpolation	Research Software Engineer, Queen's University
42. Mark Schumacher	BSc in CS	2014-2015	Supervisor	Patient-specific brachytherapy catheter moulds	Android Mobile Developer Scotiabank
43. Sean MacGregor	BSc in Physics	2013-2014	Co-supervisor L. J. Schreiner	Catheter tracking in prostate brachytherapy	Master of Education student at Queen's University
44. Matthew Lougheed	BSc in CS	2014	Supervisor	Bone segmentation in ultrasound	CAS Research Scientist, IBM Canada Software Lab, Canada
45. Buyong Woo	BSc in CS	2014	Supervisor	Organ contour interpolation for radiotherapy planning	MSc Student, Konkuk University, Soeul, Korea
46. Marie Soehl	BSc in ECE	2013-2015	Supervisor	Calibration with phantom built from Lego® bricks	Solution Specialist-Data Sciences SAS, Toronto, ON
47. Jennifer Andrea	BSc in CS	2013-2014	Supervisor	User interface for gel dosimetry in radiotherapy	Software Engineer at SoundHound Inc. Toronto, Ontario, Canada
48. Ian Cumming	BSc in Eng Phys.	2013	Supervisor	Patient-specific surface applicators for brachytherapy	Test Development Analyst at RTINGS.com Montreal, Quebec, Canada
49. Simon Kotwicz	BSc in CS	2013	Supervisor	Touch-free surgical navigation interface	Software Engineer at IBM, Canada
50. Franklin King	BSc in CS	2013	Supervisor	Transformation visualization in 3D Slicer	Research Engineer Harvard Brigham and Women's Hospital
51. Ryan Walsh	BSc in ECE	2013	Supervisor	Development of phantom built from Lego® bricks	Electrical Engineer at Hepburn Engineering Inc. Toronto, Ontario, Canada
52. Mattea Welch	BSc in CS	2012-2013	Supervisor	Workflow implementation for gel dosimetry	Staff Medical Physicist, Received PhD Medical Biophysics, University of Toronto
53. Eric Moulton	BSc in ECE	2012-2013	Supervisor	Image computing methods for percutaneous needle insertion	Ph.D. Candidate, Harvard and MIT
54. Collene Ogilvie	BSc in ME	2012-2013	Supervisor	Field linearity of electromagnetic trackers	MASc Graduate, UBC
55. Cara Martin	BSc in ME	2012-2013	Supervisor	Prostate brachytherapy system calibration	Medical Student University of Exeter, UK
56. Thomas Law	BSc in ME	2012-2013	Supervisor	Prostate brachytherapy system calibration	Junior Analyst - Registrant Oversight at Alberta Securities Commission Calgary, Alberta, Canada
57. Thomas Vandersleen	BSc in ME	2012-2013	Supervisor	Prostate brachytherapy system calibration	Staff Engineer Avestin Inc, Ottawa, ON
58. Jesse Lu	BSc in CS	2012	Supervisor	Percutaneous Needle Insertion Tutoring	Medical Student University of Toronto

Name	Degree & Field	Year	Role	Subject	Position (last known)
59. Irene Ayukawa	BSc in CS	2012	Co-supervisor	Percutaneous Needle Insertion Guidance	English Teacher Osaka, Japan
60. Thomas Vaughan	BSc in CS	2011-2012	Supervisor	Ultrasound volume reconstruction	Assistant Research Officer, National Research Council, Canada
61. Matthew Holden	BSc in CS	2011-2012	Supervisor	Mathematical modeling of percutaneous interventions	Assistant Professor Carlton University, Ottawa, Canada
62. Laura Bartha	BSc in CS	2010-2011	Supervisor	Feature segmentation, noisy ultrasound images	Received MSc Software Engineer Synaptive Medical Inc Toronto, ON
63. Lauren Gordon	BSc in Life Sciences	2009-2010	Supervisor	Needle tract reconstruction, prostate brachytherapy	Clinical Fellow in Vascular Surgery, University of Toronto
64. Mark Wu	BSc in CS	2009-2010	Supervisor	Dosimetry error analysis, dynamic prostate brachytherapy	Clinical Resident in Radiology University of Ottawa
65. Jena Hall	BSc in Life Sciences	2009-2010	Supervisor	Experimental validation platform for ultrasound based ablation monitoring	Clinical Resident in Gynecology Queen's University
66. Marton Kelemen	BSc in ECE	2009-2010	Co-supervisor T. Haidegger	Treatment planning & visualization for HDR brachytherapy	Received MSc from the Technical University of Budapest, Hungary
67. James Gray	BSc in CS	2009	Supervisor	In vitro studies for thermal ablation monitoring	Medical Doctor University of Albany, USA
68. Alexandra Pompeu-Robinson	BSc in CS	2009	Supervisor	In vitro studies for thermal ablation monitoring	Software Engineer, Perimeter Medical, Toronto, Canada
69. Joshua Marble	BSc in CS	2009	Supervisor	In vitro studies for thermal ablation monitoring	Received MSc from Queen's University, Canada
70. Eva Dyer	BSc in ECE	2006	Supervisor	Comparison of needle-insertion techniques	Assistant Professor (tenure track), Emory University, Atlanta, USA
71. Nicha Chitphakdithai	BSc in BME	2005-2006	Supervisor	Parametric modeling of C-arm fluoroscope distortion	Assistant Professor, Yale University
72. Michael An	BSc in BME	2005-2006	Supervisor	Assessing the need for C-arm calibration	Received PhD from Yale University, USA
73. David Burkhardt	BSc in Math	2005	Supervisor	Reconstruction of C-arm pose from a single ellipse	Computational Biologist and Biophysicist, GRAIL Inc., Menlo Park, CA, USA
74. Daniel Schlattman	BSc in ECE	2005	Supervisor	Image overlay guidance, MR arthrography	Chief Operating Officer Infinite Biomedical Technologies Baltimore, MD
75. Alexander Yeung	BSc in ME	2003	Supervisor	Ultrasound-guided liver ablation	Operations Program Manager OptiMedica Corporation Santa Clara, CA

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
76. Keenan Wyrobek	BSc in ME	2002-2003	Supervisor	Registration of ultrasound to fluoroscopy	Founder Zipline, CTO and Product Architect San Francisco CA, USA
77. Richard Wiard	BSc in ME	2002-2003	Co-supervisor Iulian Iordachita	Motorized needle driver for soft tissue	Consultant, Genentech Biotechnology South San Francisco, California
78. Tabish Mustafa	BSc in ME	2002-2003	Supervisor	Registration of ultrasound to fluoroscopy	Director of Interaction Design, Intuitive Surgical Systems, USA
79. Monica Lopez-Gonzalez	BSc in BME	2001	Supervisor	Stereotactic radiosurgery planning	Senior Lecturer, Department of Cognitive Science, Johns Hopkins School of Medicine, Baltimore, USA
UNDERGRADUATE STUDENTS SUPERVISED SENIOR HONOR'S PROJECT					
1. Rayan Shaikli	BSc in CS	2021	Supervisor	Fluoroscopy reconstruction of AVM for radiosurgery	Received BSc Queen's University
2. Andrew Ma	BSc in CS	2021	Supervisor	Fluoroscopy reconstruction of AVM for radiosurgery	Received BSc Queen's University
3. Abigael Schonewille	BSc in CS	2019	Co-supervisor w/ T Ungi	CT/US registration of the skull for neurosurgical navigation	MSc Student Queen's University
4. Amani Ibrahim	BSc in CS	2014-2015	Co-supervisor	Integration of 3D surface scanner with SlicerIGT surgical navigation platform	Senior Software Engineer Nomis Solutions, Toronto, Canada
5. Jacob Andreou	BSc in CS	2014-2015	Supervisor	Integration of Google Glass with SlicerIGT surgical navigation platform	Product Designer Snapchat Inc., Venice, CA
6. Jennifer Clarke	BSc in CS	2009	Supervisor	Fluoroscopy Reconstruction for Stereotactic Radiosurgery	SCADA Design Consultant, CH2M Hill, Toronto, ON
7. Joshua Fletcher	BSc in CS	2009	Supervisor	Kinematic modeling of C-arm from position measurement	Business Technology Consultant, Deloitte, Toronto
8. Simon Curtis	BSc in CS	2009	Supervisor	Kinematic modeling of C-arm from position measurement	Executive Vice President, Antibe Therapeutics Inc
9. Kendrick Wang	BSc in CS	2009	Supervisor	Statistical anatomical atlas of the lumbar spine	Staff Physician and Clinical Instructor Vancouver, British Columbia, Canada
10. Sarah Lyman	BSc in CS	2009	Supervisor	Statistical anatomical atlas of the lumbar spine	Systems Programmer Canada Revenue Agency, Ottawa, Canada
11. Jerome Lazizzera	BSc in CS	2009	Supervisor	Statistical anatomical atlas of the lumbar spine	Senior Software Developer JSI Telecom, Ottawa, Canada

Name	Degree & Field	Year	Role	Subject	Position (last known)
12. Nabish Chowdhury	BSc in CS	2009	Supervisor	Head fixation system for stereotactic neurosurgery	Manager of Professional Services, Symphony Health Solutions
13. Thomas Yang	BSc in CS	2009	Supervisor	Head fixation system for stereotactic neurosurgery	Received BSc from Queen's University
14. Rares Crisan	BSc in CS	2009	Supervisor	Head fixation system for stereotactic neurosurgery	EIR at GGV Capital Toronto, Ontario, Canada
HIGH SCHOL INTERNS SUPERVISED IN PUBLISHED RESEARCH					
1. Olivia O'Driscoll	HS	2018 - current	Supervisor	Medical image labeling for deep learning applications	High School Student Leahurst College, Kingston
2. Kieran Barr	HS	2018 – 2021	Supervisor	Image segmentation for CT colonography	Undergraduate Student Queen's University
3. Ciara Rose McGarry	HS	2019	Supervisor	Outreach activities in computer-integrated surgery	Undergraduate Student University of Toronto
4. Lydia Elbatarny	HS	2018 – 2019	Supervisor	Outreach activities in computer-integrated surgery	Undergraduate in Computing, Queen's University
5. Jacob LaFamboise	HS	2018	Supervisor	Computer-assisted surgery planning	Undergraduate in Computing, Queen's University
6. Sidney Perrin	HS	2018	Supervisor	Computer-assisted surgery planning	Undergraduate student, University of Toronto
7. Joshua Sequillion	HS	2017	Supervisor	Computer-assisted colonography	Undergraduate student, Queen's University
8. Eden Bibic	HS	2016	Supervisor	Rapid prototyping of sensor adapters for surgical navigation	Undergraduate student, University of Waterloo
9. Aidan Baksh	HS	2015, 2016	Supervisor	Computer-assisted pericardiocentesis training	Undergraduate student, Vanderbilt University, USA
10. Christina Wamsley	HS	2005	Supervisor	Augmented reality image overlay guidance, musculoskeletal surgery	Medical Doctor, Wight State University
RESEARCH STAFF SUPERVISED					
1. Kyle Sunderland	MSc	2017-present	Supervisor	Image-guided surgery systems	Research Engineer Queen's University, Canada
2. Tamas Ungi	MD, PhD	2016-present	Supervisor	Image-guided surgery systems	Senior Research Scientist, Adjunct Assistant Professor Queen's University
3. Csaba Pinter	MSc	2010-2020	Supervisor	Image-guided surgery systems	Research Scientist Universidad de Las Palmas de Gran Canaria, Spain
4. Andras Lasso	PhD	2009-present	Supervisor	Image-guided surgery systems	Sr Research Scientist Queen's University, Canada

Curriculum Vitae

Name	Degree & Field	Year	Role	Subject	Position (last known)
5. Jamie Garcia Guevara	MSc	2014-2015	Supervisor	Image-guided surgery systems	Research Scientist, University of Strasbourg, France
6. A Rankin	MSc	2012-2014	Supervisor	Image-guided surgery systems	Research Engineer Western University, Canada
7. Tamas Heffter	MSc	2010-2013	Supervisor	Image-guided surgery systems	Consulting Software Engineer Acoustic Medsystems, Champaign, USA
8. Siddarth Vikal	MSc	2008-2009	Supervisor	Image-guided surgery systems	Research Scientist Leica Ltd, Switzerland
9. David Gobbi	PhD	2007-2008	Supervisor	Image-guided surgery systems	Research Scientist Seaman Family MR Research Center, University of Calgary, Alberta
10. Iulian Iordachita	PhD	2002-2007	Supervisor	Image-guided surgery systems	Research Professor, Johns Hopkins University
11. Csaba Csoma	MSc	2002-2006	Supervisor	Image-guided surgery systems	Senior Software Engineer Siemens Medical Systems, San Francisco
12. Kenneth Koontz	MSc	2000-2002	Supervisor	Image-guided surgery systems	Research Engineer Johns Hopkins University, Applied Physics Labs, Baltimore, MD
13. Anton Deguet	MSc	2001-2007	Supervisor	Image-guided surgery systems	Research Engineer Johns Hopkins University Baltimore, USA
14. Emese Balogh	MSc	2003-2004	Supervisor	Visualization and planning software for MRI-guided prostate interventions	Senior Software Engineer Autonomous Driving, TTTech Auto, Munich, Germany

PUBLICATIONS**Books**

Total number of chapter downloads >4.3 Million (2020/09/01)

1. Kevin S. Zhou, Daniel Rueckert, Gabor Fichtinger (eds). *The Handbook of Medical Image Computing and Computer Assisted Intervention (MICCAI)*, Elsevier, 2019. Hardcover ISBN: 9780128161760, eBook ISBN: 9780128165867
2. Frangi, A.F., Schnabel, J.A., Davatzikos, C., López Alberola, C., Fichtinger, G. (Eds.) *Medical Image Computing and Computer Assisted Intervention – MICCAI 2018*, 21st International Conference, Granada, Spain, September 16-20, 2018, Proceedings, Part 1,2,3,4. *Lecture Notes in Computer Science (LNCS) Volumes 11070, 11071, 11072, 11073*. Springer [[DOI](#)]
3. MJ Cardoso, T Arbel, JMRS Tavares, S Aylward, S Li, E Boctor, G Fichtinger, K Cleary, B Freeman, L Kohli, DS Kane, M Oetgen, S Pujol (Eds). *Imaging for Patient-Customized Simulations and Systems for Point-of-Care Ultrasound, International Workshops, BIVPCS 2017 and POCUS 2017, Held in Conjunction with MICCAI 2017, Québec City, QC, Canada, September 14, 2017, Proceedings, Lecture Notes in Computer Science (10549)*, Springer Berlin Heidelberg, 2017 [[DOI](#)]
4. D Barratt, S Cotin, G Fichtinger, P Jannin, N Navab (Eds). *4th Information Processing in Computer-Assisted Interventions – IPCAI 2013, Lecture Notes in Computer Science*, 7915: 111 pp, Springer Berlin Heidelberg, 2013. [[DOI](#)]
5. G Fichtinger, A Martel, T Peters (Eds). *14th Medical Image Computing and Computer-Assisted Intervention – MICCAI 2011, Lecture Notes in Computer Science*, 6891, 6892. 6893: 2,038 pp, Springer Berlin Heidelberg, 2011. [[DOI 6891](#)] [[DOI 6892](#)] [[DOI 6893](#)]
6. D Metaxas, L Axel, G Fichtinger, G Szekely (Eds). *11th Medical Image Computing and Computer-Assisted Intervention – MICCAI 2008, Lecture Notes in Computer Science*, 5241,5242:1075,1075 pp, Springer Berlin Heidelberg, 2008. [[DOI 5241](#)] [[DOI 5242](#)]

Book Chapters

Note: Students and trainees supervised and mentored by Gabor Fichtinger are marked with *

1. Elvis C.S. Chen, Andras Lasso, Gabor Fichtinger, External tracking devices and tracked tool calibration. *The Handbook of Medical Image Computing and Computer Assisted Intervention (MICCAI)*, In Kevin S. Zhou, Daniel Rueckert, Gabor Fichtinger (eds). Elsevier, 2019. Hardcover ISBN: 9780128161760, eBook ISBN: 9780128165867
2. Tamas Ungi, Matthew Holden*, Boris Zevin, Gabor Fichtinger. Interventional procedures training. *The Handbook of Medical Image Computing and Computer Assisted Intervention (MICCAI)*, In Kevin S. Zhou, Daniel Rueckert, Gabor Fichtinger (eds). Elsevier, 2019. Hardcover ISBN: 9780128161760, eBook ISBN: 9780128165867
3. G Carbajal*, A Gomez, G Fichtinger, T Ungi*. Portable Optically Tracked Ultrasound System for Scoliosis Measurement, *Recent Advances in Computational Methods and Clinical Applications for Spine Imaging Lecture Notes in Computational Vision and Biomechanics*, 20: 37-46, J Yao, B Glocker, T Klinder, S Li (Eds), Springer International Publishing, 2015. [[DOI](#)]
4. T Ungi*, A Lasso G Fichtinger. Tracked Ultrasound in Navigated Spine Interventions, *Spine Imaging and Image Analysis Part III*, 18:469-494, S Li, J Yao (Eds), Springer International Publishing, 2015. [[DOI](#)]
5. E Dehghan*, Nl Kuo, A Deguet, Y Le, E Armour, EC Burdette, DY Song, G Fichtinger, JL Prince, J Lee. Ultrasound-Fluoroscopy Registration for Intraoperative Dynamic Dosimetry in Prostate

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- Brachytherapy, *Abdomen and Thoracic Imaging: An Engineering and Clinical Perspective*, 587-621, AS El-Baz, L Saba, J Suri (Eds), Springer US, 2014. [DOI]
6. CMC Tempany, G Fichtinger. MR Imaging and the Biopsy of Prostate Cancer, *Intraoperative Imaging and Image Guided Therapy*, 739-756, FA Jolesz (Ed), Springer New York, 2014. [DOI]
 7. NJ Cowan, K Goldberg, GS Chirikjian, G Fichtinger, R Alterovitz, KB Reed, V Kallem, W Park, S Misra, AM Okamura. Robotic Needle Steering: Design, Modeling, Planning, and Image Guidance, *Surgical Robotics – Systems Applications and Visions*, 557-582, J Rosen, B Hannaford, RM Satava (Eds), Springer US, 2011. [DOI]
 8. D Metaxas, L Axel, G Fichtinger, G Szekely. Preface, *11th Medical Image Computing and Computer-Assisted Intervention – MICCAI 2008, Lecture Notes in Computer Science*, 5241, pp V-VII, Springer Berlin Heidelberg, 2008. [DOI]
 9. RH Taylor, A Menciassi, G Fichtinger, P Dario. Medical Robotics and Systems, *Handbook of Robotics Part F*, 1199-1222, B Siciliano, O Khatib (Eds), Springer Berlin Heidelberg, 2008. [DOI] [Winner of the PROSE Awards of the American Association of Publishers, Professional and Scholarly Publishing Division in 2008 (the PROSE Awards is also called the Oscar of Publishers); The 4th most downloaded English language book among all Springer books in 2011; The most downloaded engineering book among all Springer books in 2011.] Second Edition 2016 [DOI]
 10. J Kettenbach, G Kronreif, A Melzer, G Fichtinger, D Stoianovici, K Cleary. Ultrasound-, CT- and MR-guided Robot-assisted Interventions, *Image Processing in Radiology – Current Applications*, 393-409, E Neri, D Caramella, C Bartolozzi (Eds), Springer Berlin Heidelberg, 2008. [DOI]

Journal Articles

Note: Students and trainees supervised and mentored by Gabor Fichtinger are marked with *

1. Z Hu*, T Ungi, CJ Engel, D Jabs, G Fichtinger. Tumour Segmentation in Breast-Conserving Surgery Navigation. *International Journal of Computer Assisted Radiology and Surgery*. (in review)
2. F Fooladgar, A Jamzad*, L Connolly*, A Santilli*, M Kaufmann*, K Ren, P Abolmaesumi, JR Rudan, D McKay, G Fichtinger, P Mousavi. Uncertainty estimation for margin detection in cancer surgery using mass spectrometry. *International Journal of Computer Assisted Radiology and Surgery*. (in review)
3. A Akingbade*, H Brastianos*, T Ungi, N Janssen*, C Joshi, C Pinter*, A Lasso, G Fichtinger, T Hanna. Technical Note: Technical Feasibility of Delineating Treatment Volumes in Non-Melanoma Skin Cancer using Three-Dimensional (3D) Surface Imaging (3DSI). *Clinical and Translational Radiation Oncology* (in review)
4. L Maier-Hein, M Eisenmann, D Sarikaya, K März, T Collins, A Malpani, J Fallert, H Feussner, S Giannarou, P Mascagni, H Nakawala, A Park, C Pugh, D Stoyanov, SS Vedula, BP Müller, K Cleary, G Fichtinger, G Forestier, B Gibaud, T Grantcharov, M Hashizume, H Kenngot, R Kikinis, L Mündermann, N Navab, S Onogur, R Sznitman, RH Taylor, MD Tizabi, M, Wagner, GD Hager, T Neumuth, N Padoy, P Jannin, S Speidel. Surgical Data Science - from Concepts to Clinical Translation. *Medical Image Analysis*, February 2022 [DOI]
5. Meredith Poole, Tamas Ungi, Gabor Fichtinger, Boris Zevin. Training in soft-tissue resection using real-time visual computer navigation feedback from the Surgery Tutor: A randomized controlled trial. *Surgery*, Available online December 27, 2021 [DOI]

Curriculum Vitae

6. AM.L Santilli*, K Ren, R Oleschuk, M Kaufmann*, J Rudan, G Fichtinger, P Mousavi. Application of Intraoperative Mass Spectrometry and Data Analytics for Oncological Margin Detection, A Review. *IEEE Transactions on Biomedical Engineering*, 2022 Jan 4; Online ahead of print. [[DOI](#)]
7. L Connolly*, A Jamzad*, M Kaufmann*, CE Farquharson, K Ren, JF Rudan, G Fichtinger, P Mousavi. Combined mass spectrometry and histopathology imaging for perioperative tissue assessment in cancer surgery. *Journal of Imaging*, 2021, 7(10), 203 [[DOI](#)]
8. R Hisey*, D Camire, J Erb, D Howes, G Fichtinger. System for central venous catheterization training using computer vision-based workflow feedback. *IEEE Transactions on Biomedical Engineering*, 2021 Nov 2, Online ahead of print [[DOI](#)]
9. Fichtinger G, Mousavi P, Ungi T, Fenster A, Abolmaesumi P, Kronreif G, Ruiz-Alzola J, Ndoye A, Diao B, Kikinis R. Design of an Ultrasound-Navigated Prostate Cancer Biopsy System for Nationwide Implementation in Senegal. *Journal of Imaging*. 2021; 7(8):154. [[DOI](#)]
10. A Cianciulli, A Lasso, C Pinter, GS Ching, RM Ghosh, T Chen, C Herz, C Vigil, S Drouin, LS Rogers, MD Quartermain, DM Biko, KK Whitehead, G Fichtinger, MJ Gillespie, MA Jolley. Simulation of Delivery of Clip-based Therapies within Multimodality Images to Facilitate Pre-Procedural Planning. *Journal of the American Society of Echocardiography*, Epub July 14, 2021. [[DOI](#)]
11. Herz C, Cianciulli A, Ching S, Vigil C, Lasso A, Nam HH, Drouin S, Biko DM, Gillespie MJ, Fichtinger G, Jolley MA. Open-Source Tool Kit for Interactive Planning of Transcatheter Mitral Valve Replacement Using Multimodality Imaging. *Journal of the American Society of Echocardiography*. Epub April 02, 2021 (2021) [[DOI](#)]
12. A Santilli*, A Jamzad, A Sedghi, M Kaufmann, K Logan, J Wallis, KYM Ren, N Janssen*, S Merchant, CJ Engel, D McKay, S Varma, A Wang, G Fichtinger, JF Rudan, P Mousavi. Domain Adaptation and Self-Supervised Learning for Surgical Margin Detection, *International Journal of Computer Assisted Radiology and Surgery*, 16, 861–869 (2021) [[DOI](#)] **[RUNNER UP FOR BEST PAPER AWARD IN BENCH TO BEDSIDE]**
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 49. H Brastianos*, T Vaughan*, N Janssen*, T Ungi, A Lasso, M Westerland, J Gooding, M Korzeniowski, G Fichtinger, C Falkson. Reconstruction of Catheter Paths in Breast Brachytherapy. Annual Scientific Meeting of the Canadian Association of Radiation Oncology, Oct. 2-5, Halifax, Canada, 2019 [**THE BOOK PRIZE AWARD**]
 50. CP Joshi, IH Lai, X Mei, C Pinter*, T Hanna, G Fichtinger, LJ Schreiner, Monte Carlo modeling and validation of an orthovoltage radiation therapy unit for treatment planning of superficial lesions. The 24th International Conference on Medical Physics, Santiago, Chile in September 8-11, 2019

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55. SV Pasricha*, Z Keri*, MS Holden*, G Fichtinger Developing a simulation curriculum to teach medical students to perform an ultrasound-guided needle insertion. Canadian Conference on Medical Education April 13-16, 2019, Niagara Falls, Ontario, Canada
56. M Lemke, H Lia*, A Gabinet-Equihua, G Sheahan, A Winthrop, S Mann, G Fichtinger, B Zevin. Resource optimization in proficiency-based suture skills training. Canadian Conference on Medical Education, Niagara Falls, Ontario, April 13-16, 2019
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69. CT Yeo*, J Ring*, MS Holden*, T Ungi, G Fichtinger, B Zevin. Validation of Surgery Tutor for Assessment of Technical Proficiency in Soft-Tissue Tumour Resection. Canadian Surgery Forum, St John's, NF, Canada, September 13-15, 2018
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83. CT Yeo*, J Ring*, MS Holden*, T Ungi, G Fichtinger, B Zevin. Surgery Tutor – An Open Source Platform for Assessment of Technical Proficiency: A Validation Study in a Simulated Setting, American College of Surgeons' 2018 Annual ACS Surgical Simulation Summit: An International Multi-Professional Meeting (March 16-17, 2018, Chicago, IL, USA
84. R Leung*, A Lasso, MS Holden*, G Fichtinger, B Zevin, Exploration using holographic hands as a modality for skills training in medicine. Artificial Intelligence in Medicine (AIMed), December 11-14, 2017, Laguna Niguel, CA, USA **[BEST ABSTRACT AWARD IN DIGITAL MEDICINE & WEARABLE TECHNOLOGY]** [[Online](#)]
85. R McGraw, Z Keri*, N Rocca, T Chaplin, L Rang, M Jaeger, M Holden*, G Fichtinger. Using cognitive load theory to guide simulation-based ultrasound guided internal jugular catheterization training: once is not enough. Simulation Summit of The Royal College of Physicians and Surgeons of Canada, November 1-2, 2017, Quebec City, Canada.
86. C Yeo*, A MacDonald, T Ungi, A Lasso, G Fichtinger, S Nanji. 3D Segmentation as a Surgical Planning Tool for Residents in Liver Resection Surgery, *International Conference on Residency Education (ICRE)*, Oct 19-21 2017, Quebec City, QC, Canada
87. C Yeo*, A MacDonald, T Ungi, A Lasso, G Fichtinger, S Nanji, 3D Segmentation as a Surgical Planning Tool for Residents in Liver Resection Surgery, *Canadian Surgery Forum*, Sep 14-16, 2017, Victoria, BC, Canada. Abstract in *Canadian Journal of Surgery* 60, no. 4 (2017): S148
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91. G Sharp, C Pinter*, G Fichtinger. Open Source Proton Treatment Planning in 3D Slicer: Status Update, *56th Annual Conference of the Particle Therapy Co-operative Group*, May 8-13 2017, Yokohama, Japan.
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94. G Gauvin*, T Ungi, A Lasso, CT Yeo*, G Fichtinger, D Jabs, R Walker, S Merchant, JF Rudan, CJ Engel. Electromagnetic Navigation Technology in Breast-conserving Surgery: A Novel Method Providing Real-time Feedback Intraoperatively, *Society of Surgical Oncology (SSO)*, Mar 15-18 2017, Seattle, WA, USA.
95. T Vaughan*, HC Brastianos*, A Lasso, T Ungi, CB Falkson, G Fichtinger. Electromagnetically-generated Catheter Paths for Breast Brachytherapy, *15th Imaging Network of Ontario Symposium*, Mar 15-16 2017, London, ON, Canada.
96. E Bibic*, Z Baum*, V Harish*, T Ungi, A Lasso, G Fichtinger. PLUS Model Catalog: A Library of 3D-printed Medical Tools, *15th Imaging Network of Ontario Symposium*, Mar 15-16 2017, London, ON, Canada.
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101. R House*, A Lasso, G Martou, JF Rudan, G Fichtinger, Validation of Breast Volume Measurement using 3D Surface Scanner, *15th Imaging Network of Ontario Symposium*, Mar 15-16 2017, London, ON, Canada.
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109. A Lasso, T Ungi, L Chen, J Tokuda, G Fichtinger. Time Sequence Recording for Navigated Medical Procedures, *9th National Image-Guided Therapy Workshop*, Mar 14-15 2017, Bethesda, MD, USA.
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111. N Morse, M Kaufmann*, K Ren, K Carter*, S Chitayat, G Fichtinger, Z Takats, JF Rudan, DM Berman, S Varma. Simulated Breast Cancer Resection Margin Assessment using Desorption Electrospray Ionization (DESI) Mass Spectrometry Imaging (MSI) with Histology Correlation, *The Association for Mass Spectrometry: Applications to the Clinical Laboratory*, Jan 22-26 2017, Palm Springs, CA, USA.
112. N Morse, M Kaufmann*, K Ren, K Carter*, S Chitayat, G Fichtinger, Z Takats, JF Rudan, DM Berman, S Varma. Ability of Desorption Electrospray Ionization (DESI) Mass Spectrometry Imaging (MSI) to Discriminate between Tumor and Non-neoplastic Tissue in Resection Specimens from Multiple Organs, *The Association for Mass Spectrometry: Applications to the Clinical Laboratory*, Jan 22-26 2017, Palm Springs, CA, USA.
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116. HC Brastianos*, T Vaughan*, A Lasso, M Westerland, J Gooding, G Fichtinger, CB Falkson. Electromagnetic Tracking for Catheter Insertion Guidance for HDR Breast Brachytherapy: Demonstration of Concept in Phantoms, *Canadian Association of Radiation Oncology (CARO) Annual Scientific Meeting*, Sep 14-17 2016, Banff, AB, Canada.
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120. G Gauvin*, T Ungi*, CT Yeo, A Lasso, JF Rudan, R Walker, G Fichtinger, CJ Engel. Real-time Electromagnetic Navigation in Breast-Conserving Surgery: Clinical Feasibility Study on Palpable Tumors, *22nd Annual Scientific Meeting, Canadian Society of Surgical Oncology (CSSO)*, Apr 29 2016, Toronto, ON, Canada. Abstract in *Can J Surg*, Vol. 59 (3 Suppl 4) June 2016 [**BEST ABSTRACT PRESENTATION AWARD**].
121. T Ungi*, G Gauvin*, CT Yeo*, A Lasso, JF Rudan, CJ Engel, Gabor Fichtinger. NaviKnife: Electromagnetically Navigated Breast Conserving Surgery, *Cancer Care Ontario Research Day*, MaRS Discovery District, Apr 18 2016, Toronto, ON, Canada.
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123. HC Brastianos*, T Vaughan*, A Lasso, M Westerland, J Gooding, G Fichtinger, CB Falkson. Electromagnetic tracking for catheter insertion guidance for HDR breast brachytherapy: demonstration of concept. *Cancer Care Ontario Research Day*, MaRS Discovery District, Apr 18 2016, Toronto, ON, Canada.
124. M Hess*, K Eastwood, B Linder*, V Bodani, A Lasso, T Looi, G Fichtinger, J Drake. Virtual design of patient specific neuroendoscopic tools for pineal region masses, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada. [**SUMMA CUM LAUDE AWARD**]

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125. E Lugez*, H Sadjadi*, CP Joshi, SG Akl, G Fichtinger. Enhanced electromagnetic catheter tracking with application in high-dose-rate brachytherapy, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada. [**MAGNA CUM LAUDE AWARD**]
126. T Vaughan*, HC Brastianos, A Lasso, M Westerland, T **Ungi**, CB Falkson, Fichtinger G. Electromagnetically-guided catheter insertions in breast phantoms for brachytherapy, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada.
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129. MS Holden*, M Woodcroft, T Chaplin, L Rang, M Jaeger, N Rocca, RC McGraw, G Fichtinger, T Ungi* Central venous catheterization curriculum development via objective performance metrics, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada. [**CUM LAUDE AWARD**]
130. C Yan*, R Tabanfar*, M Kempston, DP Borschneck, T Ungi*, G Fichtinger. Portable ultrasound imaging in scoliosis monitoring, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada.
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133. V Harish*, A Baksh*, T Ungi*, A Lasso, Z Baum*, G Gauvin*, CJ Engel, JF Rudan, G Fichtinger. Monitoring electromagnetic tracking error in computer navigated breast cancer surgery, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada. [**MAGNA CUM LAUDE AWARD**]
134. A Baksh*, V Harish*, T Ungi*, R Pal, G Fichtinger. An inexpensive system for competency-based pericardiocentesis training, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada.
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138. KM Alexander, C Pinter*, G Fichtinger, LJ Schreiner. Validation of 3D Slicer based gel dosimetry analysis, *14th Imaging Network Ontario Symposium*, Mar 30-31 2016, Toronto, ON, Canada.
139. G Gauvin*, T Ungi*, A Lasso, R Walker, JF Rudan, G Fichtinger, CJ Engel. Breast-conserving surgery using real-time electromagnetic navigation: safety and feasibility study on palpable tumors, *9th NCIGT and NIH Image Guided Therapy Workshop*, Bethesda, MD, USA Mar 15-16, 2016.

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141. RC McGraw, Zs Keri*, T Chaplin, C McKaigney, A Hall, L Rang, M Jaeger, D Messenger, D Redfearn, C Davison, G Fichtinger, T Ungi*, CT Yeo*. Development and Evaluation of a Simulation-based Competency Curriculum for Ultrasound Guided Central Venous Catheterization, *Royal College International Conference on Residency Education (ICRE)*, Vancouver, BC, Canada, Oct 23-24 2015.
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145. M Hess*, DP Borschneck, G Fichtinger, T Ungi*. Comparison of Ultrasound Systems in Scoliosis Measurement, *IUPESM World Congress on Medical Physics and Biomedical Engineering*, p 469, Toronto, ON, Canada, Jun 2015.
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148. S MacGregor*, CP Joshi, A Lasso, C Shenfield, LJ Schreiner, G Fichtinger. Investigation of Electromagnetic Catheter Tracking Approach for Spatial Reconstruction of Implant Geometry in High Dose Rate Brachytherapy of Prostate Cancer, *IUPESM World Congress on Medical Physics and Biomedical Engineering*, p 10, Toronto, ON, Canada, Jun 2015.
149. J Andrea*, C Pinter*, G Fichtinger. Measuring Radiation Treatment Plan Similarity in the Cloud, *IUPESM World Congress on Medical Physics and Biomedical Engineering*, p 378, Toronto, ON, Canada, Jun 2015.
150. M. Hess*, T. Looi, A. Lasso, G Fichtinger, J. Drake, Open Source Software for Intracranial Blood Clot Measurement, *13th Imaging Network of Ontario Symposium*, p 46, London, ON, Mar 2015.
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152. K Carter*, A Lasso, T Ungi*, E Morin, G Fichtinger. Visual Feedback Mounted on Surgical Tool, *13th Imaging Network of Ontario Symposium*, p 37, London, ON, Mar 2015.
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156. DR Marker, P U-Thainual*, T Ungi*, AJ Flammang, G Fichtinger, II Iordachita, JA Carrino, J Fritz. MR-guided Perineural Injections of the Ganglion Impar, *Society of Interventional Radiology Annual Scientific Meeting (SIR), Journal of Vascular and Interventional Radiology*, 26(2):S21-22, Atlanta, GA, Feb 2015.
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PATENTS AND INVENTIONS

*Note: Students supervised and mentored by Gabor Fichtinger are marked with **

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 23. M Asselin*, G Fichtinger, Spatio-Temporal Localization for Mass Spectrometry Sample Analysis, U.S. Patent Application No.: 16/906,045, Canadian Patent Application No.: 3,084,416, Filed 19 June 2020
 24. G Fichtinger, G Kronreif, T Ungi. Lump Tracker: implantable electromagnetic soft tissue tracking device. Invention Disclosure, Queen's University, July 2, 2021

INVITED TALKS

Note: Titles are omitted; all talks pertain to Medical Image Computing, Computer Assisted Interventions and Computer-Integrated Surgery

1. Invited Speaker, Grand Rounds on Oncology, Queen's University, Jan 13, 2022
2. Invited Speaker, Workshop on Sustainable Development in Africa, Las Palmas Spain, Jan 23, 2020
3. Invited Speaker, Workshop on Neuroimaging, Tenerife, Spain, Jan 18, 2020
4. Invited Speaker, Workshop on neuroimaging, Perk Tutor: free open-source platform for ultrasound-guided needle intervention training. Nouakchott, Mauritania, Jan 14, 2020
5. Colloquium, Obuda University, Hungary Jan 7, 2020
6. Colloquium, Hebrew University, Jerusalem, Dec 15, 2019
7. Invited Speaker, Annual Meeting of the International Society for Medical Innovation and Technology, 2019, October 10, 2019, Heilbronn, Germany
8. Invited Speaker, Summer School on Surgical and Interventional Engineering, Kings College, London, June 24-25, 2019
9. Colloquium, Department of Psychology, Queen's University, Jan 11, 2019
10. Colloquium, University of Innsbruck, Austria, Dec 3, 2018
11. Invited Speaker: International Symposium on Medical Robotics (ISMR), Atlanta, USA, March 2, 2018
12. Inauguration Lecture to Research Professorship, Medical University of Vienna, Austria, Dec 6, 2017
13. Colloquium, Austrian Center of Medical Innovation and Technology, Wiener Neustadt, Austria, Dec 5, 2017

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14. Colloquium, University of Waterloo, Canada, Nov 28, 2017
15. Invited speaker, Workshop on Point of Care Ultrasound (POCUS) in conjunction with MICCAI 2017, Quebec City, Canada, Sep 14, 2017
16. Colloquium, Obuda University, Hungary, July 10, 2017
17. Invited speaker, Medical Image Computing and Computer Assisted Intervention Conference Program Planning and Scientific Workshop, Quebec City, Canada, May 12-13, 2017
18. Colloquium / NSERC CREATE Lecture, McGill University, Oct 31, 2015
19. Keynote, The Charles Sorbie Department of Surgery Research Day, Apr 17, 2015
20. Plenary, 2014 Techna Symposium, Toronto, Canada, Oct 31, 2014
21. Keynote, Computational Biomechanics for Medicine Workshop, in conjunction with Medical Image Computing and Computer Assisted Interventions (MICCAI), Sep 14, 2014
22. Colloquium, Club of Canadian Graduate Students at MIT, Massachusetts Institute of Technology, Cambridge, MA, Sep 15, 2014
23. Keynote, Hamlyn Symposium on Medical Robotics Workshop, London, UK, Jul 15, 2014
24. Colloquium, Children's National Hospital, Washington, DC, USA, Jul 8, 2014
25. Colloquium, Philips Research North America, Briarcliff Manor, NY, Jul 3, 2014
26. Colloquium, Medical School of Vienna, Wien, Austria, Jun 5, 2014
27. Colloquium, Austrian Center of Medical Innovation and Technology, Wiener Neustadt, Austria, Jun 3, 2014
28. IEEE Distinguished Lecture, Obuda University, Budapest, Hungary, May 28, 2014
29. IEEE Distinguished Lecture, Western University, London, ON, Apr 16, 2014
30. Colloquium, U.S. National Cancer Institute, National Institutes of Health, United States, Bethesda, MD, Jul 8, 2013
31. Plenary, Sixth Image-guided Therapy Workshop sponsored by the National Center for Image Guided Therapy (Mar 21-23, 2013)
32. Colloquium, Biomedical Imaging Research Centre (BIRC), Western University, London, ON (Mar 18, 2013)
33. Plenary, Fifth Image-guided Therapy Workshop of National Center for Image Guided Therapy, Sep 21, 2012
34. Plenary Lecture, 3rd North American Summer School on Image Guided Interventions, Surgical Robotics and Simulation, Aug 15, 2012
35. Colloquium, Department of Electrical and Computer Engineering, University of Toronto, May 15, 2012
36. Colloquium, Department of Electrical and Computer Engineering, University of Toronto, May 15, 2012
37. Colloquium, Techna Center Rounds, Techna Institute, University of Toronto, Apr 26, 2012
38. Colloquium Series (2 parts) , European Union Marie Curie Initial Training Network, Medical Imaging Using Bio-inspired and Soft Computing, Parma, Italy, Feb 21-22, 2012
39. Plenary, National Alliance for Medical Image Computing, Annual Meeting, Salt Lake City, 2012
40. Tutorial, MICCAI, Tutorial on Image-guided Intervention, Toronto, Sep 18, 2011

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41. Colloquium Series (3 parts), Workshop on Computer Integrated Surgery, Budapest, Hungary, Jun 18-19, 2011
42. Colloquium Series (4 parts), Scuola Superiore Sant'Anna in Pisa, Italy, Jun 13-14, 2011
43. Colloquium, Sapientia University, Târgu Mures, Romania, Apr 22, 2011
44. Colloquium, Oxford University, Oxford, UK, Feb 11, 2011
45. Colloquium, University City London, London, UK, Feb 9, 2011
46. Colloquium, University of Applied Sciences, Vienna, Austria, Nov 17, 2010
47. Colloquium, Medical University of Vienna, Department of Medical Physics, Vienna, Austria, Nov 16, 2010
48. Colloquium, Budapest Technical University, Faculty of Electrical Engineering, Nov 8, 2010
49. Tutorial, International Conference on Applied Bionics and Biomechanics, Venice, Oct 14, 2010
50. Symposium, Annual Meeting of the German Society of Medical Physics, Freiburg, Germany, Sept 30, 2010
51. Colloquium, National Children's Hospital, Washington, DC, Jun 3 2010
52. Colloquium, University of British Columbia, Vancouver, BC, May 15, 2010
53. Keynote, Annual Meeting of the Queen's University Cancer Research Institute, Jun 15, 2009
54. Colloquium, Princess Margaret Hospital, Toronto, May 2009
55. Plenary, the Hamlyn Symposium on Medical Robotics, Imperial College London, May 19, 2009
56. Colloquium Series (3 parts), IEEE-NSF Winter School on Medical Robotics and Computer Assisted Interventions, Baltimore, MD, Jan 12-16, 2009
57. Keynote, International workshop on Needle Steering, held in conjunction with Medical Image Computing and Computer Assisted Intervention, New York, Sep 6, 2008
58. Colloquium, Sapientia University, Târgu Mures, Romania, Aug 22, 2008
59. Keynote, Medical Robotics Symposium, Mahidol University, Bangkok, Thailand, Jun 10, 2008
60. Colloquium Series (4 parts) on Computer-Assisted Surgery, Mahidol University, Bangkok, Thailand, Jun 2008
61. Symposium, Frontiers of Image-guided Oncology: Research and Development Strategies for the Future. Annual Meeting of the Society of Interventional Radiology, Washington, DC, Mar 20, 2008
62. Colloquium, Albert Szentgyörgyi Medical University, Szeged, Hungary, 2008
63. Keynote, Imaging Network of Ontario (ImNO) Symposium, Toronto, Mar 6, 2007
64. Colloquium, Computer and Electrical Engineering, Queen's University, Kingston, Nov 2007
65. Colloquium, Human Mobility research Center, Queen's University, Kingston, Nov 2007
66. Plenary, AdMeTech Image guided minimally invasive diagnosis and treatment of prostate cancer, Washington DC, 2007
67. Colloquium, Vienna General Hospital, Austria, Aug 16, 2007
68. Symposium, Annual Meeting of the American Brachytherapy Society, Chicago, 2007
69. Symposium, IEEE International Symposium on Biomedical Imaging, 2007
70. Tutorial, IEEE International Conference on Robotics and Automation, Rome, 2007
71. Colloquium, Albert Szentgyörgyi Medical University, Szeged, Hungary, 2007

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72. Keynote, International Symposium on Biomedical Engineering, Bangkok, Thailand, Nov 8-10, 2006
73. Symposium, Annual Meeting of the Radiological Society of North America, Chicago, 2006
74. Colloquium, Mahidol University, Bangkok, Thailand, Nov 7, 2006
75. Symposium, Open System Architecture for Image-guided Therapy, Oct 19-20, 2006, Rockville, USA
76. Symposium, Joint Imaging/Therapy Symposium at the Conference of American Association of Physicists in Medicine, 2006 (Abstract in Medical Physics, 33(6), page 2198)
77. Symposium, Annual Meeting of the Radiological Society of North America, Chicago, 2005
78. Plenary, AdMeTech Image guided minimally invasive diagnosis and treatment of prostate cancer, Washington DC, 2005
79. Colloquium, Queen's University, Kingston, ON, 2005
80. Colloquium, Canadian Surgical Technologies & Advanced Robotics, University of Western Ontario, London, ON, 2005
81. Colloquium, Robarts Research Institute, London, ON, 2005
82. Colloquium, Albert Szentgyörgyi Medical University, Szeged, Hungary, 2005
83. Plenary, International Workshop on Augmented Environments for Medical Imaging and Computer-Aided Surgery, in conjunction to MICCAI, Rennes, France, 2004
84. Plenary, Annual Meeting of IEEE/EMBS, Bio-Robotics Workshop, San Francisco, Sep 1, 2004
85. Keynote, Reality-Based Modeling of Tissues for Simulation and Robot-Assisted Surgery workshop at IEEE International Conference on Intelligent Robots and Systems (IROS), Las Vegas, 2003
86. Colloquium in the Distinguished Seminar Series, Queen's University, School of Computing, 2003
87. Colloquium, Vienna General Hospital, Austria, 2003
88. Colloquium, Memorial Sloan Kettering Cancer Center, 2003
89. Colloquium, National Institutes of Health, Radiation Oncology, Bethesda, MD, 2002
90. Colloquium, Albert Szentgyörgyi Medical University, Szeged, Hungary, 2002
91. Keynote, Applied Imagery Pattern Recognition Workshop, Washington DC, 2001
92. Plenary talk, Innovative Solutions for Prostate Cancer Care, San Diego, 2001
93. Colloquium, Albert Szentgyörgyi Medical University, Szeged, Hungary, 2001
94. Plenary, American Association of Physicists in Medicine, Annual Mid-Atlantic Chapter Conference, 2000
95. Colloquium, George Washington University, 2000
96. Colloquium, Albert Szentgyörgyi Medical University, Szeged, Hungary, 1999
97. Colloquium, National Oncology Institute, Budapest, Hungary, 1998
98. Colloquium, Medical University of Pécs Hungary, 1998
99. Colloquium, Semmelweiss Medical University, Budapest Hungary, 1998
100. Colloquium, Albert Szentgyörgyi Medical University, Szeged, Hungary, 1998