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ezine ifssh

CONNECTING OUR GLOBAL HAND SURGERY FAMILY

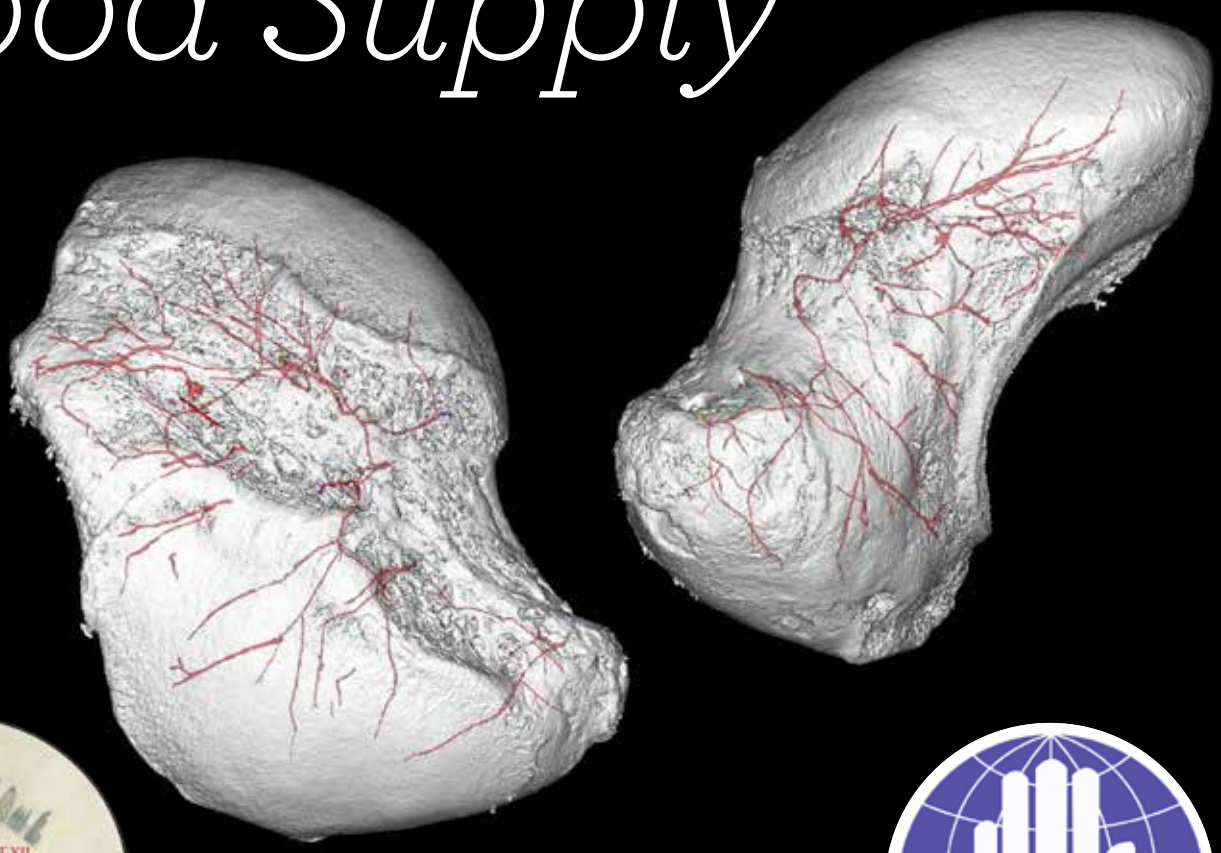
HAND THERAPY

THE UPLOAD ON REHAB MINDER
EXERCISE PRESCRIPTION

SPECIAL FEATURE

TERMINOLOGY FOR HAND SURGERY:
DIGITS, THUMB, FINGERS,
NAMES & NUMBERS

3-D Intra-osseous Blood Supply



IFSSH XV & IFSHT XII
LONDON 2022

INTERNATIONAL FEDERATION OF SOCIETIES FOR SURGERY OF THE HAND

UPCOMING EVENTS | MEMBER SOCIETY NEWS | RESEARCH ROUNDUP

contents

Is it true and correct?

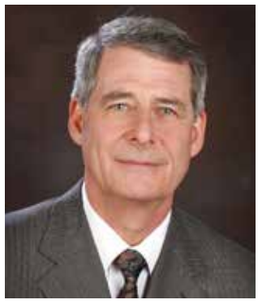
Verbal intelligent language may have started about 500,000 years ago based on the emergence of the FOXP2 gene which was instrumental in the development of the correct neural connections as well as motor and sensory anatomical formation required for speech. After speech, our ancestors around 100,000 years ago, developed the cognitive ability to record communication in various forms. This physical recording of knowledge became possible by 'converting' sound into abstract symbols, which led to an exponential growth of collective, cumulative and lasting knowledge. With the birth of the Internet all this accumulated knowledge has become potentially available to every single person in our world. However, the correctness of this recorded knowledge is increasingly being questioned. Misinformation, false and misleading data, half-truths and fake statements are rife. This causes uncertainty in the factual correctness of all we read, hear and see. Unfortunately the same applies in medicine.

How do we separate the wheat from the chaff?
Many "fact check" websites are available to help us differentiate between fact and fiction.
This is certainly helpful, but to check all the information we receive becomes practically impossible because we are constantly bombarded by large amounts of information on a daily basis. For this reason we have to be analytical about any information before accepting it as factual. It is also prudent never to take anything for granted. Do not be the first to jump onto the band wagon of new ideas, techniques, or suggestions. Sales talk is designed to convince, regardless of its truth.

Take care to notice which words and phrases are used to convey a story or presentation. Subtle nuances can be very convincing. (see Editorial "Watch your language" IFSSH Ezine August 2018 #31) With much effort, the IFSSH has compiled a Hand Surgery Terminology list which is freely available on the IFSSH website. (www.ifssh.info) Hence the Special Feature and one of the Research Roundup reports in this issue of the Ezine.

Professional jargon is essential to capture and simplify the meaning of concepts, but we must take responsibility to use terminology correctly when we speak and write. It is also only right to be meticulous and true when we communicate.

Best wishes for a good year!
Ulrich



Ulrich Mennen
Editor: IFSSH Ezine
Past President: IFSSH

Women in Surgery of the Hand – WISH

PAST, PRESENT AND THE FUTURE

For the first time, during the IFSSH/ IFSHT Congress in Berlin in June last year, a session concerning "Women in Hand Surgery" took place. Female hand surgeons from all over the world presented their professional careers and gave impressions about hand surgery development especially for women in their countries.

The speakers were:
- Eva-Maria Baur, Germany, organizer of the panel
- Nicola Borisch, Germany
- Caroline Leclercq, France
- Violeta Ley, Argentina
- Ann Van Heest, USA
- Jin Zhu, China
- Miryam Obdeijn, Netherlands
- Mireia Esplugas, Spain
- Roshanak Moradi, Iran
- Margareta Arianni, Indonesia
- Josephine Wing-Yuk Ip, Hong Kong
- Avanthi Mandaleson, Australia
- Ann Nachemson, Sweden

Nicola Borisch mentioned at the beginning of the panel discussion the gender gap in the German Medical Universities. Nearly 70% of medical students are female, but only 20% of the professors are female. This proportion is even lower in the surgical disciplines. What happens to the female physicians after graduation? The so called "leaky pipeline" occurs during the transition from postdoctoral qualification to professorship. Academic qualifications in Germany are closely connected to leadership positions. Therefore, few women reach leadership positions. This phenomenon was also addressed by other female speakers.

Caroline Leclerq reported on the history of women in surgery.

Avanthi Mandelson, vice president of the Australia Orthopaedic Association, AOA, presented their concept of the professional society: the "strategic diversity plan". The goals of the plan should be achieved by 2023. The plan aims to establish a culture of inclusion for anybody to pursue a career in orthopaedics in order to provide full orthopaedic services to all Australians.

Sabine Schicke, a journalist and coach, moderated the discussion at the end of the session. The comments and questions from the auditorium were very versatile, partly very positive but also critical.

Over all there was a very positive response concerning this session.

The aim now is to encourage more female students to become hand surgeons internationally. A network has been initiated called "WISH" – Woman in Surgery of the Hand

Power in diversity!

reference: Intercongress

Authors:
Eva-Maria Baur,
Nicola Borisch,
Wiebke Hülsemann,
Isabella Mehling

Message from Secretary-General

I hope all of you and your family have a happy, healthy and prosperous New Year.

The year 2019 provided us with good memorable events including the 14th Triennial Congress in Berlin, the sponsorship of six educational programmes worth over US$ 50,000, and the election of the Executive Committee members.

In 2020, the Executive Committee is going to expand the financial support for the education of young hand surgeons in less favourable environments, invite new Member Societies to the IFSSH, revise the bylaws fit to the increasing size of the Federation and its future, and prepare the 15th IFSSH Congress and 12th IFSHT Congress which will be held in London in June 2022.

Best wishes to all,

Goo Hyun Baek
Secretary-General, IFSSH
Email: secretary@ifssh.info

IFSSH Educational Sponsorship
The IFSSH Committee for Educational Sponsorship received a high number of applications throughout 2019. These encompass a variety of courses, projects and initiatives and we have been delighted to fund proposals that incorporate the regions of Europe, Africa, Asia-Pacific, North America and South America in just one year!

The following proposals have been successful in their application for IFSSH support in the past 12 months:

- **2nd International Symposium on Surgery of the Spastic Upper Limb, Venice**
  Following the successful meeting in 2017, the organisers proposed a second course to be held in Venice, April 5th - 6th 2019. Recognising the extent of international participation in the first symposium and the relevance of the specialty topic, the IFSSH provided US$7500 with a portion of this to be allocated to reducing registration costs for participants from developing nations.
  251 participants from 38 countries attended this meeting, learning from 48 faculty members from 15 countries. The IFSSH support allowed the organisers to afford a congress facility to accommodate this increased participation, to waive the registration fees of the faculty and support three speakers and, as requested, to sponsor the registration of six participants from low income countries.

- **IFSSH Triennial Congress Assistance Grants: Berlin Congress, June 2019**
  IFSSH funds (up to US$20,000) are available to the local congress host to select/award registration support to triennial congress attendees. The German organisers undertook this process and advised that 18 registrations were sponsored. These surgeons, at various stages in their training and careers, came from Kazakhstan, Romania, India, Russia, USA, Nepal, Philippines, Ukraine, Bangladesh, Venezuela, Peru, Argentina and Egypt. This support reached US$20,000 in total and will be reimbursed to the local organisers by the IFSSH.

- **Surgical Workshop: Kenya, January 2020**
  With the endorsement of the American Society for Surgery of the Hand, a proposal was forwarded to the IFSSH requesting financial assistance for a one-day workshop in Kenya. The suggested workshop - "Managing upper extremity surgery in and out of theatre with surgeon provided tumescent local anesthesia" - is to be held in Nairobi by Dr Don Lalonde in January 2020. Professor Pankaj Jani, the President of COSECSA the College of Surgeons of Eastern, Central, and South Africa will facilitate invitations to the program directors and trainers from the 24 COSECSA accredited hospitals in Kenya. The aim is to have local participants attend this course to learn of methods that may optimize their available surgical options within their hospitals.
  Professor Jani and Dr Lalonde requested financial support to help approximately 50 attendees with travel and accommodation (approximately $200 each); the instructors will cover their own expenses. The IFSSH has approved a grant of US$10,000 to support the attendance of local attendees at this course.

- **Developing Country Registration Grant: APFSSH Congress, Melbourne, March 2020**
  The Asian-Pacific Federation of Societies for Surgery of the Hand will conduct the 2020 meeting in Melbourne, Australia - March 11-14, 2020. The congress has established a scheme for fee-paying registrants to donate to a programme that will reduce registration rates for those from developing countries. Dr Tony Berger approached the IFSSH for additional funding to sponsor such registrants to attend. The IFSSH has approved a grant of US$10,000 to be allocated to this programme.

- **Congress support: Colombian-Venezuelan Combined Congress, Cúcuta, November 2020**
  The Colombian Society for Surgery of the Hand (ASOCIMANO) hosted a bi-national meeting with the Venezuelan Society for Surgery of the Hand and Upper Limb (SVCMRMS) in late 2018. This was funded by ASOCIMANO and successfully attracted a high number of Colombian and Venezuelan surgeons. A full report is available in the Ezine - https://ifssh.info/pdf/issue-36-november-2019.pdf. In 2019, ASOCIMANO members agreed to support their Venezuelan colleagues again and proposed another combined congress for November 2020. This will be held in Cúcuta again as it is a convenient city for both groups. The Colombian Society requested financial support from the IFSSH, to share the deficit incurred by providing gratis attendance to the Venezuelan colleagues. The Executive Committee has approved a grant of US$2,500 to support the 2020 combined ASOCIMANO/SVCMRMS congress.

In addition to these projects, the IFSSH also awarded its first IFSSH Harold Kleinert Visiting Professorship. The Visiting Professorship was established by the IFSSH to support the visit of an eminent hand surgeon to a hand surgery centre for multiple days, during which the professor would lecture as well as engage in a selection of practical exercises, journal clubs and undertake surgery.

- **FSSH Harold Kleinert Visiting Professorship: Dr Steven Moran, March 2020**
  In March 2020, the 12th Congress of the Asian-Pacific Federation of Societies for Surgery of the Hand (APFSSH) and 8th Congress of the Asian-Pacific Federation of Societies for Hand Therapy

(APFSHT) will be held in Melbourne, Australia. This meeting is being organised in conjunction with the Australian Hand Surgery Society and the New Zealand Hand Surgery Society and their respective hand therapy colleagues, as well as the Asia-Pacific Wrist Association.
Dr Steven Moran will lecture extensively at the APFSSH Congress. He will also teach orthopaedic and plastic surgery trainees at the preceding 2020 Australian Hand Surgery Society Registrar Course. Following the APFSSH Congress he will travel to Sydney for a scientific meeting of the New South Wales Hand Surgery Association. During this Visiting Professorship, Dr Moran will be involved in the further education of participants of numerous nationalities with varied experience and training levels. The IFSSH Executive Committee is pleased to honour Dr Steven Moran with the title of "IFSSH Harold Kleinert Visiting Professor".

The IFSSH Executive congratulate the successful applicants and thank all involved for continuing to support hand surgery education worldwide.
If your society is planning education programmes and needs support to fulfil the goals, please consider if it may be appropriate to submit a request to the IFSSH. The full guidelines and reports of sponsored programmes are available via https://ifssh.info/educational_sponsorship.php.

Future Meetings
A detailed list of national and regional hand surgery meetings is available on the IFSSH website. The triennial IFSSH Congresses are as follows:

XVth IFSSH – XIIth IFSHT Congress – London, United Kingdrom
27th June - 1st July, 2022 (to be confirmed)

XVIth IFSSH – XIIIth IFSHT Congress – Washington D.C., USA
29th March - 3rd April, 2025

February 2020
ifsht International Federation of Societies for Hand Therapy
To provide global networking and educational opportunities to develop and enhance the practice of hand therapy
UPDATE
www.ifsht.org | info@ifsht.org
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SPOTLIGHT ON ITALIAN ASSOCIATION OF HAND REHABILITATION

The Italian Association of Hand Rehabilitation (AIRM), established in 1985, has 140 members with many newly qualified therapists joining in recent years. The annual national congress, held in collaboration with the Italian Society for Surgery of the Hand, is one of the scientific opportunities the AIRM offers every year. Other opportunities include at least one advanced course with an international speaker and one intermediate course consisting of workshops or mentoring sessions between new and more experienced

AIRM Executive Committee 2019-2022 (L to R): Ilaria Saroglia, Davide Giulian (President), Manuela Morin (Treasurer), Stefania Paparo (Secretary), Francesco Romagnoli, Claudia Viganoni, and Davide Zanin.

therapists in the field..
In April 2020, Gwendolyn van Strien will present an advanced course as invited international speaker in Bologna. The annual congress for 2020 will be held in Ancona in October. The AIRM welcomes therapists from other countries to Italy and offers scholarships for members of the society to present research outputs at congresses abroad. The AIRM website is **www.riabilitazionemano.org/.**

12TH APFSSH/8TH APFSHT MELBOURNE, AUSTRALIA

The triennial combined Asia Pacific Hand Surgery and Hand Therapy conference will be held in Melbourne, Australia from the 11th to the 14th of March 2020. This joint meeting showcases five combined sessions with a line-up of international experts on current hand surgery and therapy research. This is the biggest hand surgery/ therapy conference of the Asia-Pacific and as such, it will highlight the region's knowledge as well as invited international perspectives. Judy Colditz

is the keynote speaker for the hand therapy aspect of the conference. She will be joined by a number of invited speakers including Dr Emily Ho from Canada and Dr Aviva Wolff from the United States of America. Two social functions also provide networking opportunities with therapists and surgeons from around the globe. Sign up at: **apfssh2020.org** to learn more about what you will experience in Melbourne March 2020. APFSSH and APFSHT look forward to seeing you in Melbourne!

NEW IFSHT CORRESPONDING MEMBER: ETHIOPIA

The IFSHT welcomes Dheeraj Lamba as the new corresponding representative from Ethiopia, Africa. Dr. Lamba is an Associate Professor in the Faculty of Physiotherapy at the Institute of Health at Jimma University. Ethiopia is the third corresponding member of the IFSHT from the African continent (in addition to Ghana and Zimbabwe) and the 11th from around the world.

Dr. Dheeraj Lamba

IFSSH EZINE

The quarterly IFSSH Ezine electronic publication includes a hand therapy contribution by Debbie Larson, (UK) entitled **Mindfulness, Health Coaching and Hand Therapy**. Please send contributions for the EZINE to **informationofficer@ifsht.org.**

For hand therapy educational events, go to **www.ifsht.org/page/nationalinternational-education-events.**

Brij Bhushan Joshi
(1928-2009)

Brij Bhushan Joshi was born on 22 August 1928 in Karnal (Haryana) in the northern part of India. He passed the MB.BS. degree from Grant Medical College in Bombay in 1950 and went on to be the first recipient of a Master's degree in Orhtopaedics from the University of Bombay in 1954. Following a general orthopaedic assignment at Irwin Hospital in New Delhi, Joshi returned to Bombay as the Head of the Orthopaedic Department in the M.G.M. Hospital in 1962.

The M.G.M. Hospital is the main hospital for insured state employees. Here Prof. Joshi had to treat a steady stream of hand injuries sustained by industrial workers, many serious and complicated. He developed a dedicated hand ward. When he did not find a solution for a specific case in the literature, he invented one that worked! The sheer simplicity of some of his inventions bears testimony to his inventive mind. The numerous economical and simple hand splints that he fashioned out of scrap material and the percutaneous technique he described for the fixation of fractures of the proximal phalanx of the fingers in 1975 exemplify this.

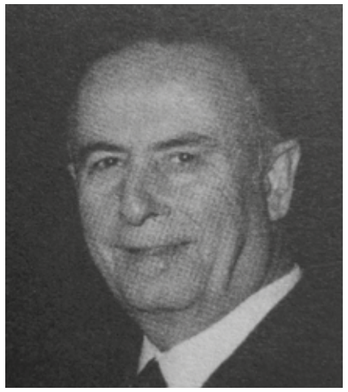
On his first tour abroad to Britain, in 1974, he presented many exciting new sensory flaps for the hand. He developed the Joshi External Stabilization System or JESS. This versatile system made the treatment of many diverse conditions of the hand more effective while reducing the morbidity considerably. JESS spilled over into the foot when Prof. Joshi evolved a special frame for the correction of Congenital Talipes Equino Varus.

His experience and skill has been reflected in the many chapters he has written in international text books. He has authored many original papers on hand surgery in leading journals. Besides this, he also has to his credit manuals on the JESS fixator applications in hand, wrist, skeletal trauma and foot conditions.

Prof. Joshi was Past President of the Indian Hand Society as well as the Indian Orthopaedic Association, and has held offices and memberships in a number of national and international associations. Awards and recognition for his work are numerous including the Indian Council of Medical Research Award (1986) and "A Best Citizen of India Award" in 1998.

He was fondly known as Prof. BB Joshi, and was married to Dr. Prabha, who had her own career as the head of the Central Government Health Scheme. They have two daughters and one son. He passed away on 8 June 2009. Prof. Brij Bhushan Joshi was recognised as "Pioneer of Hand Surgery" by the IFSSH at it's Eighth Congress in Istanbul, Turkey on 10 June 2001.

Anastasios Giannikas
Greece (1929 – 2012)



Anastasios Giannikas was born on 18 February 1929 in Trikala, Thessaly-Greece. He received his medical training at the Medical School of Athens University, and graduated in 1954. He continued his training in Orthopaedic Surgery at the same university. Soon afterwards he became a Fellow of R G Pulvertaft at the Derbyshire Royal Infirmary in Britain from 1960 to 1962.

He returned to Greece to establish the first Hand Clinic at the University of Athens. In 1964 Giannikas was elected Associate Professor of Orthopaedics. He headed the Hand Surgery Clinic in the Department of Orthopaedic Surgery from 1963 to 1985.

Prof. Giannikas founded the Hellenic Society for Surgery of the Hand and was its President from 1983 to 1985. He was also a co-founder of the East Mediterranean Hand Club. He was member of the International College of Surgeons, the British Orthopaedic Association, the Hellenic Society of Orthopaedic Surgery and Traumatology, as well as SICOT.

He was married to Lisa, and they had four children. He died on10 January 2012.

Anastasios Giannikas was honoured as "Pioneer of Hand Surgery" at The Eighth Congress of the IFSSH in Istanbul, Turkey, June 2001

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Terminology for hand surgery: digits, thumb, fingers, names & numbers

The correct use of terminology improves accurate documentation and reporting of hand problems and treatment. It also avoids errors in clinical practice. The European Journal of Hand Surgery has a policy on the correct use of terminology in hand surgery, which follows the International Federation of Societies for Surgery of the Hand Terminology for Hand Surgery (2001). Here we would like to highlight the correct use of terminology relevant to the digits of the hand, discuss some possible exceptions and mention different usages in some geographical locations..

General rule: Use of names rather than numbers to indicate the digits of a hand

The preferred (correct) terminology for the digits of a hand without loss of digits or congenital deficiencies is the use of names rather than numbers: the thumb, index finger, middle (long) finger, ring finger, and little (small) finger. Long and small are preferred to middle and little in speech, as middle and little may be confused with each other when transcribing dictation or using speech recognition. The metacarpals are referred to as the metacarpal of each digit, for example the thumb metacarpal. The use of numbers may lead to confusion. Phalanges are referred to as the proximal, intermediate (middle) and distal phalanges (or proximal and distal in the thumb). The use of terminology such as 'the first phalanx of the second finger' should be avoided, because it will inevitably result in confusion.

However, there are potential problems even with this "correct" terminology. The middle finger is not the "middle" finger; it is the "middle" digit. It is necessary for all to appreciate the difference in meaning between the words, "digit" and "finger". There are five of the former and four of the latter. The middle finger is the third digit but the second finger. It is intuitively obvious that the middle finger is not the middle of four fingers but is the middle of five digits. In this instance, we can explain the terminology by saying that it is the finger which is situated in the middle (centre) of the hand, and hence is the middle finger.

So, despite some difficulties with the use of names, there is more room for confusion when numbers are used.

Possible exceptions: terminology for hands with finger loss or congenital deficiencies

Given this preference for the use of names, there are some other problems which may arise from a determination to always use names rather than numbers. Reality demands that we are all aware of exceptions and allowances that may be appropriate from time to time.

Hand surgeons deal with injured hands with finger loss or shortening and with congenital deficiencies. Naming may become challenging or confusing in these circumstances. The long finger may not be the longest. The "middle" finger may be just that in a three-fingered hand, but it may be the middle finger that is missing. In ulnar longitudinal deficiencies, it may not be possible to determine which finger(s) is missing and which remain. If, indeed, the little finger is missing, is the ulnar digit the ring finger? Why is the "index" finger often the longest in this condition? Is it, in fact, the middle finger? In a hand which has undergone pollicization with transfer of the index finger for thumb function, is the middle finger now an index finger? It usually is the longest finger. Maybe a number is more accurate as it becomes the first finger. It certainly becomes the "pointer" (indicis) for that hand. For these conditions, we can appreciate that naming becomes more difficult.

Problems may also arise when considering multiple digits. I (the lead author, MT) have no problem with the terminology "three-fingered hand" and would prefer this to an attempt to maintain a descriptive terminology using names, particularly when I do not know which finger is which. Fingers one, two and three seem to be a reasonable description. Similarly, "the metacarpophalangeal joints of all four fingers" rather than "the metacarpophalangeal joints of index, middle, ring and little fingers" is, for me, acceptable; as is the term "ulnar two digits". All use numbers. All are correct. Nor do I have any great problem in using the term "rays" in the context of, for example, the metacarpal of the first (or thumb) ray, but I understand that some do.

For people of Asian heritage: understanding the differences between "thumb", "fingers", and "digits"

The difference in definitions of "digit" and "finger" has to be emphasised. There is no word for digit in those languages based on Chinese characters. They refer to five fingers (not five digits), of which the thumb is the "thumb finger", just as they refer to five toes. Many of Asian heritage are unaware that English speakers refer to the thumb and four fingers, and express surprise when they are informed that it is incorrect English to say: "five fingers", unless of course when referring to a "five-fingered hand", another congenital condition which creates difficulties for precise and consistent terminology.

To help Asian authors understand the correct uses, a simple English sentence is illustrative: "One hand has five digits, that is, one thumb and four fingers," though this sentence may not have Chinese or Japanese translation!

In summary, the preferred terminology for the digits of the hand without loss of digits or congenital deficiencies uses names rather than numbers. In the appropriate context, the use of numbers for digits or fingers may be acceptable. Some may consider that the second sentence creates a conflict with the first. It does not. Exceptions may confirm the rule. Definitions are vital; as is an understanding that many do not speak English as a first language.

References

International Federation of Societies for Surgery of the Hand Terminology for hand surgery, 2001. http://www.ifssh.info.terminology_hand_surgery.php

Michael Tonkin
Geoffrey Hooper
Jin Bo Tang

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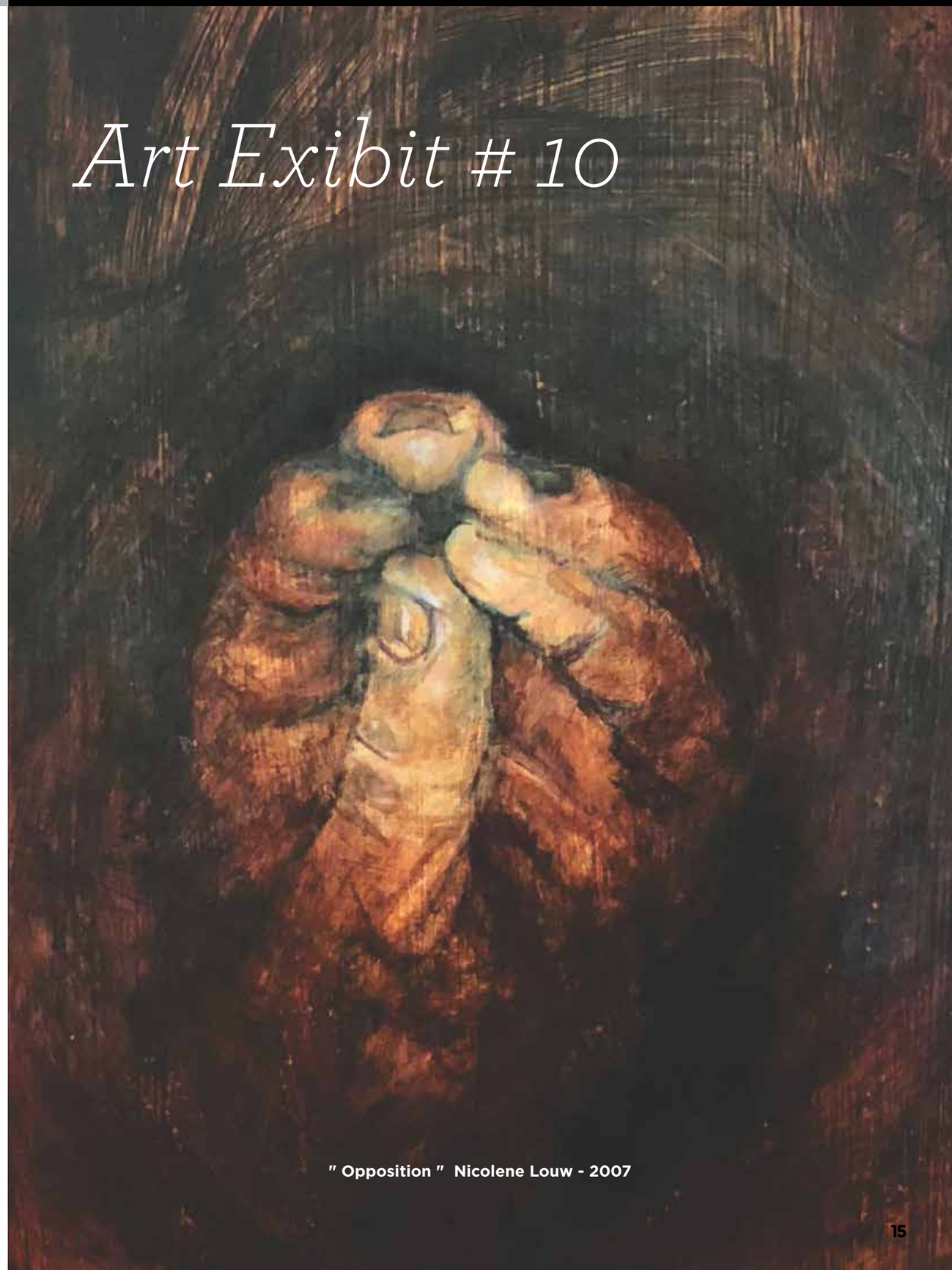

" Opposition " Nicolene Louw - 2007

The Upload on Rehab Minder Exercise Prescription Apps Software

Carmel R. Bain BAppSc(OT),
Perth, Australia
carmel@rehabminder.com

Rehab Minder Hand Therapy App had an extraordinary conception. In 2012, I found myself on the opposite side of the therapy table than what I was used to. I was working part-time in hand therapy, a mother of two young children, and a physiotherapy patient for a chronic condition. As health professionals we assume that we would be outstanding patients but in my case adherence to a home program was inconsistent. It was difficult to superimpose a home program on top of the daily life demands. What I really wanted was an app on my phone to remind me of my exercises and when to do them. It struck me - my physiotherapist was asking me to do exercises a few times a day, yet often we are asking our patients to attempt hourly exercises. Surely hand therapy patients would want such an app to assist them in adhering to a home program too. So, I started designing it.

The first dedicated hand therapy exercise prescription software was built following a 14 month collaboration with an app development company. Rehab Minder was released on the

App Store in May 2013 (see figure 1). The design elements from the perspective of a therapist were to have a quick set up, and adjustable parameters for the exercises. Any extra instructions could be typed in. From the perspective of being a patient, I wanted the reminders, the exercises demonstrated, and to have a record of my adherence so I could feedback to my therapist with some accuracy.

Some of the technical decisions for the app were influenced by where I live. Perth, Western Australia is one of the most isolated cities on the planet. Our state is over a million square miles (2.6 million square kilometers) and the healthcare services in Perth have to cater for rural and remote patients. We have a good Patient Assisted Travel Scheme but attendance to therapy can be affected by the geographical context. Mining and resources are major industries with a large fly-in fly-out workforce.

When designing Rehab Minder, it needed to be a tool that could work anywhere, anytime without telephone network or Wi-Fi connection. This could be achieved with a native app platform. The intention was to build it for iOS (Apple iPhone) first and then Android.

Figure 1: Images from Rehab Minder iOS app. Movement is demonstrated with GIF images rather than video to keep the storage size of the app low

Research was undertaken to consider the efficacy of Apps used in healthcare. Do they promote behavior change and adherence to therapy? O'Brien (2012) in his editorial on improving adherence to hand therapy exercise programs highlighted that education in a consultation alone does not translate to the patient recalling instructions. Adherence can be optimised by teaching the patient to use alarms and timers (Radomski, 2011) . Systematic reviews by Free et al. (2013) and Mosa et al. (2012) on mobile healthcare applications provided validation that apps were an emerging and useful tool for enhancing patient care and education. Even though the technology was relatively new, healthcare apps had already shown a benefit in smoking cessation, medication management, diabetes, chronic disease management, and short-term benefits for physical activity interventions (Free et al., 2013; Mosa et al., 2012; Zeng et al., 2016).

Prior to healthcare apps there had been studies undertaken on the use of video and DVD to enhance home exercise programs with high patient satisfaction and self-reported adherence (Kahlil et al., 2012; Kingston et al., 2009). Reo and Mercer (2004) concluded that live and video modelling of exercises is more effective than handouts for achieving performance accuracy in an exercise program.

By 2014, Rehab Minder was ready for an upgraded version. More exercises were added, including dynamic stabilising exercises for wrist and thumb, taking the count to 343 elbow, wrist and hand exercises. The app installation was also split into two stages for a few reasons. It would be quicker to install, not require Wi-Fi to download, and the patient could get started with a limited version of the app with only active range of motion (AROM) exercises. The second installation of the app was for the remaining therapeutic content: non-exercise therapy, passive ROM, active-assisted ROM, and resisted exercises. A summary of the program is able to be emailed to the practitioner for easy documentation.

Native Apps and Cloud-based Apps

Technology in healthcare is an evolving space. By 2017, cloud-based software was extensively available. Native apps (a software program that is developed on a particular platform) are reliable and 'owned' by the patient but cloud-based or web-based apps allow more content, function and communication between the practitioner and patient. Rehab Minder partnered with physiotherapy-built software, TrackActive, so that the specialist hand and upper limb content could be provided as a more progressive exercise prescription tool (figure 2).

Figure 2: Rehab Minder partners with cloud-based software TrackActive in 2017

The advantages of cloud-based software for practitioners includes the functionality, which can be seen in figures 3, 4 and 5, to:

- Access their clinic database over any internet connection
- Curate the database of exercises from the Rehab
- Minder Hand & Upper Limb (H&UL) content and the physiotherapy TrackActive content
- Add or edit any exercises with text, still images and video
- Utilise templates of condition-specific exercises or create new templates
- Offer free app, printout or email of home exercise programs (HEPs) to patients

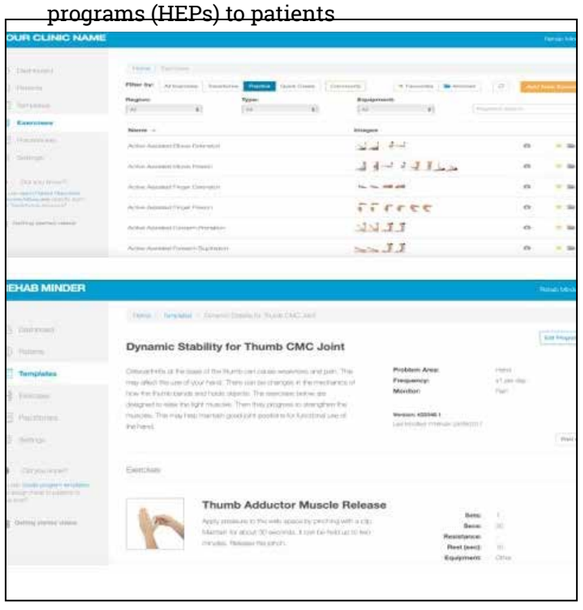

Figure 3: Screenshots of the hand practitioners TrackActive database.

For patients the benefits include:

- Photos or video footage of their exercises being demonstrated
- Clearly see variables like frequency of exercise, weight to use, and number of repetitions
- Setting own reminder times on the app
- Ability to log exercise completion and record symptom levels
- Ability to write and save comments to discuss with practitioner at next consultation
- Having the contact details of their treating clinic

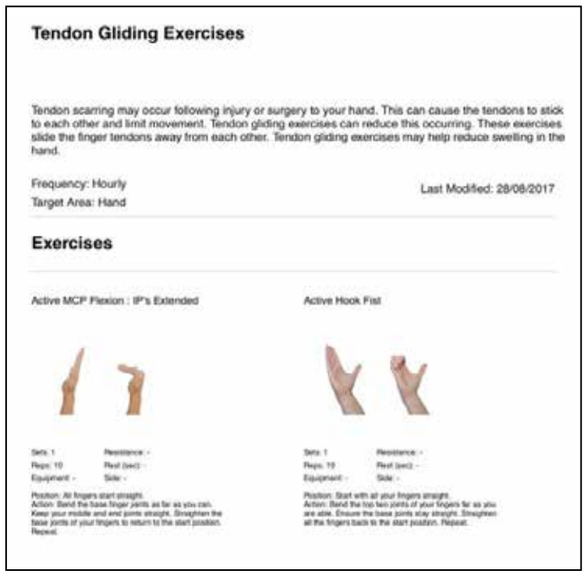

Figure 4: Section of a template PDF from TrackActive

Figure 5: Screenshots of TrackActive patient app. attached to their exercises.

The readability of the Rehab Minder H&UL content within TrackActive is ≤ US grade 8 based on the U.S National Institutes of Medicine (2019) and other national healthcare organisations recommendations (Badarudeen & Sabharwal 2010). The language is English, however practitioners are able to edit or add any content in their own language. Additions or edits of exercises can be shared to other TrackActive subscribing clinics.

Latest Updates

Lin et al. (2019) published 11 best practice recommendations for care in musculoskeletal pain (figure 6). Patient-centred care and the evaluation of progress using standardised outcome measures are part of those recommendations. Finding out what is a priority for the patient can be quantified on the app using the electronic Patient Specific Functional Scale (Stratford, 1995). A battery of Patient Reported Outcome Measures (PROMs) has also been added for body regions including the Disabilities of the Arm Shoulder and Hand (DASH) (Hudak et al., 1996), QuickDASH (Beaton et al., 2005) and the Upper Limb Functional Index (Gabel et al., 2006).

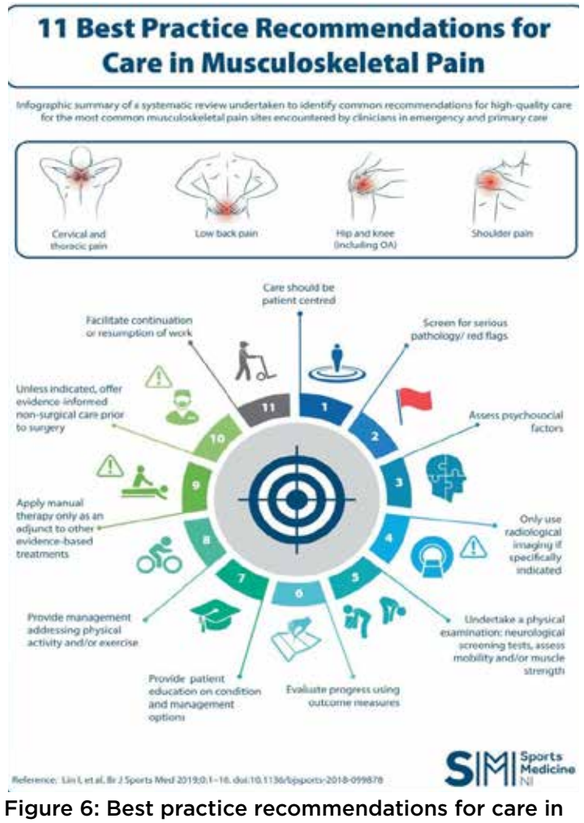

Figure 6: Best practice recommendations for care in musculoskeletal pain.

The Örebro Musculoskeletal Screening Questionnaire (Gabel et al., 2012) in short form is also included. These PROMs are scored, recorded and re-administered within the secure software. The patient can complete these in the clinic, or via link that is emailed.

Since 2017, more research on electronic health has become available. A randomised trial of using an app with remote support does achieve better outcome than paper handouts alone for people with musculoskeletal conditions (Lambert, 2017). Ouegnin and Valdes (2019) reported 69% of patients in a convenience sample preferred HEPs in video format compared to paper. Providing HEPs in electronic format reduces barriers to program adherence. Programs can't get lost, alarms and reminders are built in, and the capability of the patient to review exercise demonstrations are easy to access.

A survey of Certified Hand Therapists in the USA reported more than 93.2% rated a clinical app with HEPs as moderately to extremely important, figure 7 (Short, 2018).

In addition to the Rehab Minder iOS app, there are two other native exercise prescription apps available to hand practitioners. Physiotherapist Laura Edwards (née Parker) developed the CORE Hand iOS app at the Pulvertaft Hand Unit in Derby, UK. Chelsea & Westminster Hospital, also in the UK, launched a hand therapy app in 2017.

Functional exercise prescription is the backbone of a patients' recovery and follows client-centered treatment. With the past decade of App and cloud-based software development, we now have more tools that we can utilise to benefit the workflow of practitioners and the adherence of patients to therapy.

The TrackActive software offers a free 30 day trial at www.trackactive.co

To request the Rehab Minder H&UL therapy module email support@trackactive.co and identify yourself as a hand practitioner. Should you take on a subscription to TrackActive a 50% discount will be applied to your account for the first 6 months. During signup, apply the coupon code RehabMinder50 to have this discount automatically added to your account.

These instructions can also be found at https://www.trackactive.co/trackactive-rehabminder/

The Rehab Minder iOS app can be found at https://apps.

Preferential components to be included in a potential clinical app

In your work as a CHT, please rate the following components of a potential electronic application that you would find beneficial in the clinic based on level of importance:

Answer options	Extremely important	Very important	Moderately important	Slightly important	Not important	Response count
Home program accountability/reminder tracking	74 (22.2%)	103 (30.9%)	98 (29.4%)	40 (12.0%)	18 (5.4%)	333
Home program illustrations and video demonstrations	169 (50.0%)	103 (30.5%)	43 (12.7%)	12 (3.6%)	11 (3.3%)	338
Evidence-based and best practice resources	151 (44.8%)	106 (31.5%)	64 (19.0%)	14 (4.2%)	2 (0.6%)	337
Special tests (ie, Froment's test, Finkelstein's test, etc.)	85 (25.1%)	103 (30.4%)	90 (26.6%)	41 (12.1%)	20 (5.9%)	339
Conservative protocols	81 (24.2%)	102 (30.5%)	104 (31.0%)	31 (9.3%)	17 (5.1%)	335
Postoperative protocols	122 (36.4%)	107 (31.4%)	74 (22.1%)	26 (7.8%)	6 (1.8%)	335
Custom orthosis demonstrations	67 (20.0%)	90 (26.9%)	84 (25.1%)	64 (19.1%)	30 (9.0%)	335
Functional outcome measures (eg, DASH)	111 (32.9%)	126 (37.4%)	58 (17.2%)	35 (10.4%)	7 (2.1%)	337
ROM norms	52 (15.7%)	75 (22.6%)	95 (28.6%)	72 (21.7%)	38 (11.5%)	332
Standardized assessment norms (eg, 9-Hole Peg Test)	57 (16.9%)	107 (31.7%)	100 (29.6%)	56 (16.6%)	18 (5.3%)	338
Answered question						**339**
Skipped question						**2**

CHT = certified hand therapists; DASH = Disabilities of the Arm, Shoulder and Hand questionnaire; ROM = range of motion.

Figure 7: Taken from Short N, LaRowe J, Treherne T, Francis O, Garau C, Schutt M, Wei CY. Exploring the needs of certified hand therapists regarding electronic applications. Journal of Hand Therapy. 2018, 31: 52-8.

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Research Roundup

THE OUTCOME OF BONE GRAFT SURGERY FOR NONUNION OF FRACTURES OF THE SCAPHOID.

Ammori MB, Elvey M, Mahmoud SS, Nicholls AJ, Robinson S, Rowan C, Spence S, Wade RG, Karantana A, the British Society for Surgery of the Hand Scaphoid Nonunion Group, Davis TRC.

J Hand Surg Eur Vol. 2019; 44; 676–684. Full article available for free download - https://journals.sagepub.com/doi/full/10.1177/1753193419841278

1. What were your main reasons for writing this article?

There were two main reasons.

a. We wanted to investigate whether the success rate (union rate) after scaphoid nonunion surgery in the United Kingdom matched the high success rates reported in peer-reviewed journals. We had wondered whether the published success rates were artificially higher than those normally achieved due to publication bias (researchers only wishing to report their outcomes if their results are good).

b. We had previously completed a systematic review of peer-reviewed papers reporting the outcome of scaphoid fracture non-union surgery1. This revealed a lack of standardisation between studies on the:

- definition of a scaphoid fracture nonunion (as opposed to delayed union);
- definition of union after non-union surgery;
- length of follow-up;
- lack of data regarding potential confounding factors such as:

- interval between the acute fracture and the nonunion surgery and;
- smoking status.

This made it impossible to draw any firm conclusions on whether variations in treatment (i.e. vascularised versus non-vascularised bone graft; distal radius or iliac crest non-vascularised bone graft) influence the optimum of scaphoid fracture non-union surgery.

2. What are the most interesting/important results and conclusions of your article?

TThe results of our paper need to be treated with caution. Although the number of scaphoid fracture non-unions reported was large, the data was collected retrospectively from the notes and we only had adequate data on 462 out of 806 cases. However the data from the 462 cases allowed a detailed analysis of the impact of various factors on the outcome of the non-union surgery. The important finding was that two factors which were beyond the influence of the surgeon, namely:

1. smoking and;
2. time interval between the acute scaphoid fracture and the scaphoid fracture non-union surgery;

appeared the most important determinants of the outcome of the scaphoid fracture non-union surgery. Thus there remains uncertainty whether any one type of bone graft or any one type of fixation device is superior to another. However it should be stressed that none of our cases were randomly allocated to one specific treatment and the choice of treatment was probably determined on an individual basis by the characteristics of the non-union. Not all non-unions are the same.

3. What should all hand surgeons (and or hand therapists) reading your article understand about the findings of your research?

Health professionals treating scaphoid fracture non-unions should stress to their patients that:

1. smoking does appear to be a significant determinant of outcome. However we do not know how long one would have to stop smoking to remove the deleterious effect of smoking on the outcome of surgery;
2. leaving a scaphoid fracture non-unions untreated for a year or two, to allow patients to achieve some short-term work or social goals, is not advisable.

4. Will you be conducting further research/publishing further work on this topic? If so, what will it entail??

We intend to continue our studies of the outcome of scaphoid fracture nonunion surgery but have not yet decided on specific research questions to address. We are holding a research forum in December at which interested UK surgeons, trial methodologists and statisticians will discuss and prioritise potential research questions and consider the feasibility of performing large multicentre prospective studies to address them. Such studies are necessary to improve the outcome of scaphoid nonunion surgery.

Perhaps the most important conclusions of the present study is that future studies must:

1. consider and adjust for confounding factors, mainly smoking status and the time delay from the acute fracture to the surgery for the scaphoid fracture non-union.
2. consider how should union after scaphoid fracture non-union surgery is determined. This is highlighted by the significant number of cases in our study where, with the length of follow-up available and the radiological imaging possible, the treating surgeons were uncertain whether the scaphoid fracture non-union had united or the non-union persisted. Future research on scaphoid fracture non-union surgery probably requires CT scans at a specific post-operative time point to determine union status, but even then it may not always be possible to say whether a scaphoid fracture nonunion has “definitely united” or has “definitely not united”.

Tim Davis*
Consultant Hand Surgeon
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Nottingham
UK
*on behalf of the British Society for Surgery of the Hand Scaphoid Nonunion Group.

Reference

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THE VASCULAR ANATOMY OF THE SCAPHOID: NEW DISCOVERIES USING MICRO-COMPUTED TOMOGRAPHY IMAGING

Mohamed Morsy, M. Diya Sabbagh, Nick A. van Alphen, Alexis T. Laungani, Assaf Kadar, Steven L. Moran

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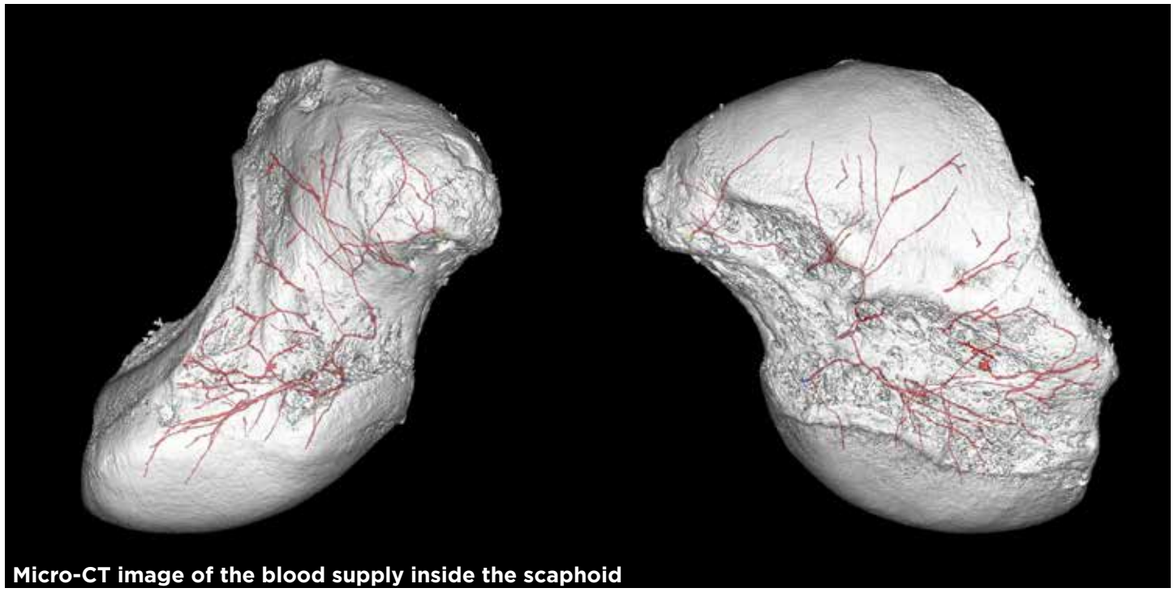

Micro-CT image of the blood supply inside the scaphoid

1. What were your main reasons for writing this article?
Although the vascular anatomy of carpal bones has been extensively studied in the past, it remains a topic of great interest to hand surgeons. Since the monumental publications of Gelberman, there has been substantial advancement in imaging technology with both MRI and micro-computed tomography (micro-CT). Although studies utilizing the Spalteholz technique have stood the test of time, they provide primarily two-dimensional imaging. To overcome these shortcomings, more recent studies have used micro-CT techniques to visualize the intraosseous vascular network.
This technology can provide accurate three-dimensional information that was not possible with more classic techniques. The image resolution of micro-CT can allow for imaging of structures of 1-2µm. In addition, newer low viscosity radiopaque substances can fill the interosseous microvasculature. Using this technology, measurements can be made that were not previously possible such as vessel diameters, length and volume measurements. All of this can be obtained without alteration of the internal bony architecture that could occur with the previous decalcification techniques.

This new information can be utilized to update our understanding of avascular necrosis and its etiology, as well as to describe safe zones for surgical intervention and instrumentation of these bones. A more thorough understanding of the intricacies of the carpal bone vascular system may have wide spread ramifications on bone pathology, fracture fixation, and surgical intervention.

2. What are the most interesting/important results and conclusions of your article?
This study identifies two distinct types of scaphoid morphology with one of them having a less robust bold blood supply, which may prove to be related to development of nonunion, AVN or Preiser's disease.

3. What should all hand surgeons (and or hand therapists) reading your article understand about the findings of your research?
All scaphoid specimens studied received vascular inflow from the dorsal ridge forming a vascular network that supplied an average of 83% of the bone's volume. This network was supplemented in 4 specimens with volar vessels entering at the waist. Another vascular network was identified, created by vessels entering volarly at the tubercle, which supplied the remainder of the scaphoid. One specimen did not receive any vessels at the tubercle.

With regards to screw placement, screws placed in the central axis were the least disruptive to the internal vascularity, followed by the antegrade (dorsal) insertion axis. Two morphological bone types were identified; type I or full scaphoids and type II or slender scaphoids. Type I possessed a more robust internal vascular network than type II scaphoids

4. Will you be conducting further research/publishing further work on this topic? If so, what will it entail??
We continue to evaluate the blood supply of the carpus. We have previously examined the blood supply to the lunate and capitate using similar technology. We would like to further examine the remaining carpal bones. In addition we will be performing clinical studies to see if scaphoid shape is linked to Preiser's disease or the risk of developing AVN or nonunion.

As technology continues to advance, we would believe that someday there will be a means of real time evaluation of carpal bone vascularity; thus one could identify early evidence of AVN, identify scaphoid fractures which would benefit from vascularized bone grafts and limit the potential for blood vessel injury following hardware placement. Until that time, surgeons will need to rely on their knowledge of anatomy and remember the most common patterns of carpal blood flow in order to minimize nutrient vessel injury and maximize carpal bone healing potential.

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Member Society News

CANADIAN SOCIETY FOR SURGERY OF THE HAND

On June 25th, 2019, the Canadian Society for Surgery of the Hand (CSSH) held its annual meeting in St. John's Newfoundland. This represents the fourth meeting since the rebirth of the CSSH, formally known as MANUS. The meeting was a resounding success; there is a clear and keen interest in hand surgery happening in Canada, reflected by the rapidly growing attendance to our yearly meeting.

The meeting was attended by over 100 surgeons, fellows, and residents from across the country. The scientific program reflected the breadth of experience and knowledge in hand surgery flourishing across Canada. There were many engaging presentations on clinical pearls and surgical techniques as well as talks on patient-reported outcomes and ways to improve and integrate research projects into your hand surgery practice. Several lectures were given regarding the use of local anaesthetics and peripheral nerve blocks for wide awake hand surgery.
Canada continues to advance and lead this field and this was reflected in many of the presentations at the meeting.

A notable highlight included a history of CSSH/ MANUS provided by Dr Bowen Vaughan. Our program featured high quality presentations from several residents and fellows, demonstrating a bright future ahead for hand surgery in Canada with many young leaders emerging in the field.
This year we introduced a hand surgery scholarship to support a graduating resident pursuing a fellowship in hand surgery. Paladin Labs Inc. supported this award that was presented to Dr Blair Peters from the University of Manitoba. Dr Peters is the first recipient of this prestigious award. We thank Paladin Labs for their support of the academic pursuits of our graduating residents and look forward to applications for next year's scholarship. There will be a presentation at next year's meeting reflecting the lessons learned during fellowship from our scholarship recipient.

It is with gratitude that we thank our executive committee for all their hard work putting together a successful and fun meeting. This includes our president, Dr Donald Lalonde, our president elect, Dr Avi Islur and the rest of our executive; Drs Heather Baltzer, David Tang and Paul Binhammer. We also express gratitude to our meeting sponsors, Paladin Labs, ConMed, Axo- gen and Stryker.

We expanded our CSSH board this year and are excited to welcome our new board members: Drs Kevin Cheung, Josh Gillis, Ruby Grewal, Barbara Jemec, Aaron Knox, Blair Peters, Dominique Tremblay and Kevin Zuo.

Next year, our annual meeting will take place in Quebec City on Tuesday 16 June, the day before the Canadian Society of Plastic Surgeons meeting. Search our website at https://www.c- ssh-sccm.com/ for registration and details. We look forward to an even greater program jam packed with clinical pearls and expert guest lectures and panels. With our new board members and fresh ideas, this meeting is sure to be fun and innovative. Don't miss this opportunity to visit Canada!

Blair Peters
Fellow - Hand, Peripheral Nerve, Microsurgery
Washington University in St Louis USA.
blairpeters01@gmail.com

Dr Donald Lalonde (President of CSSH) with Dr Leif Sigurdson at the annual meeting of the Canadian Society for Surgery of the Hand in St. John's, Newfoundland, 2019

CSSH Vice President, Dr David Tang with meeting attendees at the CSSH Meeting in St. John's. Newfoundland, 2019

One of the many great talks on wide awake hand surgery at the CSSH meeting in St. John's, Newfoundland, 2019.

JAPANESE SOCIETY FOR SURGERY OF THE HAND (JSSH)

1) President's greetings
The JSSH is one of the oldest hand surgery societies in the world and one of the eight founding member societies of the IFSSH. Our society has contributed internationally to the development of hand surgery, and intends to do even more. The photo includes the members of the present board of directors. (President: Prof. Hiroyuki Kato of Shinshu University).

2) Foundation and development of the JSSH
The JSSH was founded in 1957, with 50 participants attending the 1st annual meeting later that year. The annual JSSH Meeting is held every year in April. Through the tireless efforts of many senior hand surgeon pioneers, the JSSH has now grown to 3,545 regular members, approximately 13% of whom are plastic surgeons.

As the Society grew over the decades, a stronger administration system was needed to properly manage it. Prof. Tamai of Nara Medical University was elected the first President of the JSSH in 1999, with the position being inherited by eight hand surgeons after him. The JSSH organizational structure consists of the president, two vice presidents, nine directors, two auditors, and 249 representatives. The congress president, elected every year, is entrusted with the management of the annual meeting.

The JSSH established the National Board System of Hand Surgery in 2011. Currently, 972 members have obtained board recognition of four years' training in history of hand surgery, academic achievement in the field of hand surgery, a written examination, and an interview.

3) International activities of the JSSH
Contribution to the IFSSH

The 3rd IFSSH Congress in 1986 was the first major international meeting hosted by the JSSH (President: Prof. Tatsuya Tajima of Niigata University). This international involvement was followed by the 2nd International Symposium on the Wrist in 1991 (President: Prof. Miura of Nagoya University) and the 5th International Symposium on Congenital Differences of the Upper Limb in 2000 (President: Prof. Ogino of Sapporo Medical College). Prof. Yamauchi of Juntendo University was elected President of the IFSSH in 1998 as the first Japanese to hold the position. Drs. Akio Minami and Kazuteru Doi were recently elected as 'Pioneers of Hand Surgery' by the IFSSH in 2019. With their inclusion, a total of 17 Japanese hand surgeons have received this honor. The present Japanese delegate of the IFSSH is Prof. Ryosuke Kakinoki of Kinki University.

The 4th Italian-Japanese joint meeting was held in Florence, Italy, in October 2019 during the 57th Italian Hand Society Annual Meeting. In addition to the main topics of Kienbock's disease and finger reconstruction, several papers by Japanese surgeons were presented as symposia, free papers, and posters.

In December 2019, the JSSH was invited to a round table session at the 55th annual French Hand Surgery Society (SFCM) Meeting. The session, which centered on Japanese innovations and the scope for future hand surgeries, was organized and chaired by Dr. Satoshi Ichihara of Juntendo University, who is also an associate member of the SFCM. All five speakers were leading members of the JSSH.

Looking forward, the JSSH is currently planning the 7th Combined Meeting of the Japanese and American Societies for Surgery of the Hand to be held at the Sheraton Waikiki in Oahu, Hawaii, from 27 to 29 March 2021. The Presidents of the meeting will be Prof. Hirata of Nagoya University from the JSSH and Prof. Rizzo of the Mayo Clinic from the ASSH.
Contribution to Asian Pacific Federation of Societies for Surgery of the Hand (APFSSH)

Prof. Tajima of Niigata University was elected as the first President of the APFSSH in 2000. Later, the 5th APFSSH meeting was held in Osaka in 2005 (President: Prof. Ikuta of Hiroshima University; Secretary General: Dr. Minamikawa of Kansai Medical University). Prof. Beppu of St. Marianna University was elected President of the APFSSH in 2012, and Prof. Kanaya of University of the Ryukyu was elected Secretary General Elect at the previous APFSSH meeting in 2017. The current JSSH delegate of the APFSSH is Prof. Hirata of Nagoya University.

International exchange traveling fellowship programs
The JSSH has exchange traveling fellowship programs with hand societies in four foreign countries and regions (United States, Hong Kong, Korea, and Taiwan). Many young JSSH members are applying for these programs, and competition is increasing. Candidates are selected on the basis of their English ability in interviews as well as of their academic careers and performance.
We congratulate all Hand Societies worldwide on their constant evolution and we hope to keep a close relationships with them as members of the IFSSH and APFSSH.

4) Annual meeting of the JSSH
The 62nd Annual JSSH Meeting was held in Sapporo on April 18–19, 2019. Congress President Prof. Iwasaki of Hokkaido University led the meeting theme of "Be Ambitious, Be Innovative". Active discussions abounded among the 1,715 participants on the 726 poster presentations and papers. As a special program, the Dr. Toshihiko Ogino Memorial Symposium was held in honor of his achievements and noble character.

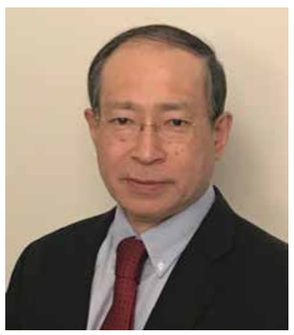
The 63rd Annual JSSH Meeting will be held in Niigata City (Congress President: Dr. Naoto Tsubokawa of Niigata Hand Surgery Foundation) on April 23–24, 2020 (URL: https://admedic.co.jp/jssh2020/greeting.html). The main theme of the meeting is "Lesen, Denken, und Arbeiten" in German. This event will feature eight prominent doctors from abroad who will give lectures on the current hot topics in hand surgery. Two additional special lectures will be included as the detailed program becomes finalized. The meeting will be an excellent opportunity to acknowledge and examine the practice of hand surgery specialists.

5) New secretariat of the JSSH
The JSSH will be changing Secretariat from Congress Corporation to ISS, Inc. on 1 February 2020. The new address is: ISS, Inc., Mita MT Bldg. 8F, 3-13-12 Mita, Minato-ku, Tokyo, 108-0073, Japan;
TEL: +81-3-6369-9985; E-mail: office@jssh.or.jp; URL: www.jssh.or.jp

Hiroyuki Kato, MD
President of JSSH
(Shinshu University)

Yuzuru Kamei, MD
Vice President of JSSH
(Nagoya University)

Hitoshi Hirata, MD
Vice President of JSSH
Delegate of APFSSH
(Nagoya University)



Ryosuke Kakinoki, MD
Delegate of IFSSH
(Kinki University)

NETHERLAND SOCIETY FOR SURGERY OF THE HAND

The first formal hand surgery meeting of the Nederlandse Vereniging voor Handchirurgie (NVVH) was held in 1966 , when the Dutch and Belgian Associations for Plastic Surgery hosted the International Conference on Surgery of the Hand. From that, the enthusiasm was born to found the 'Dutch Club for Surgery of the Hand'. Initiated by Jacques van der Meulen and Johan Landsmeer, several plastic surgeons joined the Club to share their knowledge at the annual meetings. International cooperation was quickly found and in 1970 a joint meeting of the Dutch Club for Surgery of the Hand with the American Society for Surgery of the Hand (ASSH) was organized.

In 1972, The Dutch Club decided to become a more formal Society for Surgery of the Hand called Nederlandse Vereniging voor Handchirurgie, as we know it ever since. The Dutch Society became a member of the IFSSH in 1975 during the Paris meeting, and the Netherlands hosted the first IFSSH Congress in 1980. From then on, The Dutch Society for Surgery of the Hand gradually became the platform where Dutch hand surgeons could discuss cases, and share their scientific efforts.

Nowadays, two scientific meetings are organized every year. Every two or three years, meetings are combined with the Dutch Society for Hand Therapy, and the Belgian Society. The Dutch Society is still growing gradually, and currently has 261 members. At first it was mainly the domain of plastic surgeons, but currently a large number of orthopaedic surgeons and trauma surgeons with a special interest in hand surgery are members. Cooperation and shared enthusiasm for hand surgery remains the principle on which the Society thrives.

Besides these meetings, the Society supports research projects for PhD theses as well as travel grants.

Dutch and Belgian candidates are supported in the preparation for the FESSH exam by organizing trial exams, led by experienced hand surgeons.

After a successful 2002 FESSH conference in Amsterdam, the Dutch Society is proud that the FESSH Meeting returns to the Netherlands in 2021.

Prof. dr. John M. Kauer was honoured as IFSSH Pioneer in Hand Surgery in 2019. As a Professor of Functional Anatomy at the Radboud Hospital, he dedicated most of his professional career to hand anatomy and carpal kinematics.

POLISH SOCIETY FOR SURGERY OF THE HAND

During 2019, the Polish Society for Surgery of the Hand (Polskie Towarzystwo Chirurgii Ręki) made some structural and organizational changes to the Society to make hand surgery more readily recognized, to involve more young surgeons and to give them the opportunity to improve both theoretical and practical skills. This is an ongoing effort also to improve communication with our members and provide them adequate opportunities to exchange knowledge and their experience.

The 10th National Hand Surgery Meeting was held in Trzebnica which gathered around 300 participants and invited international lecturers. At this Meeting, Dr Piotr Czarnecki was elected President of the Society, and Prof Andrzej Żyluk form Szczecin and Dr Janusz Kaczmarzyk from Trzebnica received special recognitions from the Society for their contribution to Polish and international hand surgery.

Besides the National Meeting there is an ongoing educational project called “Academy of Hand Surgery” which consists of two meetings per year. It is directed mostly at residents to improve their skills in microsurgery and general knowledge in hand surgery. It is organized by Prof. Tomasz Mazurek (Past President of the Society) and his team in Gdańsk and Cieszyn.

The known annual course in Poznan (XIIth International Poznan Course in Upper Extremity Surgery) was organized by Prof Leszek Romanowski and Dr Piotr Czarnecki. It has gathered over 350 participants, with 32 speakers, 9 sessions, 5 workshops, a cadaver pre-course and a poster session. The course keeps its international character with an invited faculty, this time PC Ho, Alexandru Georgescu, Frederik Verstreken and Enrique Barrena. Also, as in previous years it is well attended by surgeons from Eastern Europe.

Workshops during the National Meeting in Trzebnica

Dr Piotr Czarnecki, President of Polish Society for Surgery of the Hand opening the National Meeting in Trzebnica

Microsurgical training during Academy of Hand Surgery – periodical courses endorsed by Polish Society for Surgery of the Hand

Poster Session during the XIIth International Poznan Course in Upper Extremity Surgery, a well-recognized event every year in Poznan attended by about 400 surgeons.

PC Ho discussing with Alexandru Georgescu during the XIIth International Poznan Course in Upper Extremity Surgery, Poznan

PHILIPPINES SOCIETY FOR SURGERY OF THE HAND (AHSP)

Jessica Anne Gandionco, MD

In 2019, the Association of Hand Surgeons of the Philippines (AHSP), under its new president Dr. Nathaniel Orillaza Jr., formed the Young Hands Philippines with the aim of nurturing and fostering young doctors with an interest in the hand preparing for their future careers. It is composed of trainees and recent graduates from various institutions across the country.

This year, the AHSP, along with the assistance of Young Hands Philippines, will also be launching a project called Handog Ang Wastong Alaga at Kaalaman (HAWAK, in Filipino means to hold) sa Kamay (hand). The program title roughly translates to “Providing proper care and education for the hand.”

This project aims to increase awareness of Filipinos for all things hands: to present common conditions, debunk myths, and to educate the masses regarding when to seek advice to prevent avoidable complications. This comes at a time when the information from the internet, especially social media, continues to be the fastest growing source of medical information for the people.

The results of the pilot testing were presented during the annual convention of the Philippine Orthopedic Association 15 November 2019.

Search for H.A.W.A.K. Kamay on Facebook, Twitter, and Instagram!

Members of the Young Hands Philippines with officers of the AHSP

Members of the Young Hands Philippines with officers of the AHSP

Members of the Young Hands Philippines with Dr. Jessica Gandionco

THE ITALIAN SOCIETY FOR THE SURGERY OF THE HAND

(Società Italiana di Chirurgia della Mano)

The Italian Society for the Surgery of the Hand, founded on 1962, includes 12 Honorary Members, 820 full registered members, and 50 young members. The majority of the Italian members are Orthopaedic Surgeons, and a few Plastic Surgeons.

The Society Secretariat is based at:
Ad Arte Srl
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40057 Cadriano di Granarolo Emilia Bologna, Italy
Tel. + 39 051 19936160
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Web Site: http://www.sicm.it

The Society Journal is "Chirurgia della Mano" and is the official Journal since 1963 (C.G. Edizioni Medico Scientifiche s.r.l.)
http://www.cgems.it/Cgems-Prodotti-Elenco.asp?Categoria=21

The President elect of the Society is Luciano Cara, Head of the Microsurgery and Orthopedic Surgery Department in Cagliari (Sardinia) and a new council (2019-2021) has been voted following Bruno Battiston's presidency.

Training and education of surgeons
One of the main tasks of the SICM Council is to develop an education program for residents and more experienced surgeons.

During the residency program, three courses per year and three Fellowships are organised:

- Anatomy and Surgery with cadaver dissection course organized into three modules (one week each; anatomy, orthopedic/hand surgery, plastic/hand surgery); (Fig 1)
- Basic Wrist arthroscopy Course started in 2019
- Advanced Course in Microsurgery - organised in collaboration with the Societies of Microsurgery with 120 hours of practice – organised in three weeks during the year; (Fig 2)
- Three Hand and Microsurgery Fellowships of 1 year are available in recognized Hand Surgery Centers in Italy.

From 2017, the Society offers an "International Travelling Fellowship in collaboration with the ASSH" to visit prestigious centers in the USA and participate in the Annual Congress of ASSH.

SICM also organises for established surgeons two dissection courses per year with a local and international Faculty. These two "advanced" courses are in English and last three days.

In 2019, we organised the following two courses in Verona:

- "REVEALING WRIST ARTHROSCOPY: from Zero to Hero" organized with a great success by Andrea Atzei and Riccardo Luchetti – June 2019.
- "THUMB RECONSTTRUCTION: from Zero to Hero" organized by Bruno Battiston and Nicola Felici with special Guest Zeng-Tao Wang from China - December 2019. (Fig 3a,b)

The program of next courses are available at www.sicm.it

Every year a National Congress is held in a Centre of Hand Surgery and in 2019 it was in Florence. The President of the Congress was Sandra Pfanner and the Honorary President Massimo Ceruso. The title "The body machine, to know it in order to understand it". This allowed the speakers to explore all aspects of hand surgery. The Japanese Society of Hand Surgery was our guest Society.(Fig 4, Fig 5).

Next year the national Congress will be in Ancona under the presidency of Michele Riccio, chief of the Reconstructive and Hand Surgery Department in Ancona.

All information and entry criteria are available online: http://www.sicm.it.

Figure Legends

Fig 1 : Participants of the "anatomy and surgery with cadaver dissection" course organized every year in Verona by SICM.

Fig 2: The 14th Adanced Microsurgery Course held in Naples in 2019

Fig 3: Andrea Atzei, Riccardo Luchetti and Bruno Battiston, Nicola Felici organizers of the two "advanced" courses on wrist arthroscopy and thumb reconstruction of 2019.

Fig 4: SICM 57th Annual Congress held in Florence in 2019 - a group of Italo-Japanese collegues.

Fig 5: Dr Emiko Hori and Dr Sandra Pfanner, president of the Congess, during the inaugural cerimony

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KOREAN SOCIETY FOR SURGERY OF THE HAND (KSSH)

The Korean Society for Surgery of the Hand (KSSH) was established in 1982. The KSSH has successfully held international hand society meetings, which included the 4th Congress of the Asian Pacific Federation of Societies for Surgery of the Hand (APFSSH) in 2002 and the 11th Congress of the International Federation of Societies for Surgery of the Hand (IFSSH) in 2010. In addition, the 9th Congress of the World Society of Reconstructive Microsurgery (WSRM) was held in COEX, Seoul, from 15-17 June 2017. At this exciting event, recent advances in the hand, micro and reconstructive surgery were discussed by experts from 72 countries.

The annual congress of the KSSH takes place in November, a time when the autumn leaves are at their most beautiful. The most recent congress (37th) was 1-3 November 2019, and was chaired by Dr. Jin Soo Kim. Twelve outstanding ASSH members (Martin Boyer, David Brogan, James Chang, Christopher Dy, Duretti Fufa, Warren Hammert, Jason Ko, Fraser Leversedge, Steven Moran, Tamara Rozental, Jennifer Wolf, Jeffrey Yao) attended and gave inspirational key-note lectures about the most recent advances in the field of hand surgery. In particular Donald Lalonde`s special lecture on WALANT was very impressive. In addition, six travelling fellows from Taiwan, Japan, Malaysia, Hong Kong and Singapore presented interesting topics and practices from their own countries. It was a meaningful time to share their knowledge and friendship with them.

Fig 1-2. 1-3 November 2019 KSSH Congress

One week later the 5th Congress of Asia Pacific Wrist Association (APWA) was successfully held in Seoul from 7-9 November 2019 and was chaired by Prof. Min Jong Park. Around 200 hand surgeons and therapists were gathered from 17 countries and enjoyed interesting invited lectures, free paper presentations as well aspects of Korean culture.

Fig 3-4. 7-9 November 2019 APWA Congress

The 2020 KSSH Annual Congress will take place 6-8 November, 2020, in Seoul. We will ensure that this meeting is educational and interesting for our international participants. The new chairman of the KSSH, beginning in 2020, is Prof. Min Jong Park.

The KSSH started its hand surgery subspecialty board system in 2005. Presently there are about 1600 KSSH members in Korea and among them 245 are board-certified hand surgeons. The KSSH is active in its education for young hand surgeons. The KSSH organizes microsurgery workshops twice a year, and a cadaveric workshop for basic hand surgery skills once every year.

The KSSH is trying to reach out to many Asian Countries to share, encourage, and learn from each other and to develop friendship. We have an exchange ambassador program with Japan, Hong Kong, Taiwan, and Singapore.
As always, this year many of the KSSH members will participate in several international conferences on hand surgery (APFSSH 2020 Congress (Melbourne, Australia), FESSH 2020 Congress (Basel, Switzerland) and the ASSH 2020 Meeting (San Antonio, USA)).

Korean hand surgeons sincerely wish that this New Year becomes a very special one with health, happiness, prosperity, and peace for all members of the IFSSH and their families.

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An Arctic CULA (congenital upper limb anomalies) symposium will be held on the archipelago of Svalbard, Norway 7-13 March 2020 at the Radisson Blu Polar Hotel.

You are hereby invited to participate!
For information about the symposium, and to register, see link below: m
https://www.spitsbergen.info/arcticCULAsymposium

Congress organisers:
Mona Winge
Ida Neergård Sletten
Upper extremity and Microsurgical Unit
Orthopaedic Department at
Oslo University Hospital
Rikshospitalet
Oslo
Norway

Scientific Committee:
Gill Smith (London, UK)
Wiebke Hülsemann (Hamburg, Germany)
Pasi Paavilainen (Tampere, Finland)
Stéphane Guéro (Paris, France)

12APFSSH/8APFSHT

12th Asian Pacific Federation of Societies for Surgery of the Hand &
the 8th Asian Pacific Federation of Societies of Hand Therapists Triennial Meeting

11-14 March 2020 | Melbourne Convention and Exhibition Centre

apfssh2020.org

We look forward to seeing you in Melbourne from the 11th - 14th March 2020, to learn, be inspired, network with colleagues and enjoy everything Melbourne has to offer.

WEB apfssh2020.org • CONTACT US info@apfssh2020.org

12APFSSH/8APFSHT
11-14 March 2020 | Melbourne Australia
Hand Surgery and the Digital Revolution


IFSSH XV & IFSHT XII
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