Dear Friends,

It is my pleasure to introduce the first annual bulletin for the University of Michigan Comprehensive Hand Center. In its short history, the Comprehensive Hand Center has been greeted with multiple achievements and opportunities. Hand Surgery at Michigan Medicine has transformed over the past decade and our international prominence as a center of excellence has grown as a result. I am excited to share with you our accomplishments and detail our academic and clinical successes over the past year. The Comprehensive Hand Center planning is underway. I hope within a few years, I can welcome you to our building that will house not only hand surgery, but will include hand therapy, PM&R, operating suites, and a number of other specialists. This facility will truly be a Hand Center with the comprehensive and collaborative character that we envisioned over the past 20 years. We are proud to start this process and include all of hand surgery, regardless of specialty affiliations.

Above all, Hand Surgery at the University of Michigan is dedicated to excellent patient care. Our clinical enterprise continues to grow, now offering comprehensive care of the hand and upper extremity. In the past two years, we have added two new faculty in Drs. Erika Sears and John Lien. Our fellowship, the first in the state of Michigan, now matches two fellows each year. Our recent graduates are positioned to be leaders in the future of hand surgery. Our combined multidisciplinary hand team now consists of components and physicians from plastic surgery, orthopedic surgery, physical medicine and rehabilitation, neurosurgery, neurology, anesthesiology, and physical and occupational therapy.

Academically, hand surgery at the University of Michigan is unparalleled in our productivity. Our research group continues to expand and our alumni can be found in prominent positions worldwide. In just the past year, we have published over 40 independent scientific manuscripts as our group continues to set the precedent for excellence in hand surgery research. This year, the Third Edition of Operative Techniques: Hand and Wrist Surgery will be published to educate readers around the globe in safe surgical technique as exemplified by surgeons at the University of Michigan.

Education remains a cornerstone of our hand center. In addition to surgical fellows, our surgeons are deeply involved in the education of orthopedic and plastic surgery residents. We additionally provide research training to surgeons and physicians across the globe who then return home with these skills propagating our legacy.

Thank you for being a part of the Michigan hand surgery family. We appreciate the contributions of our colleagues, staff, faculty, and alumni whose continued efforts have built our program to the pinnacles it achieves. We look forward to bringing you annual updates in our Hand Surgery newsletter as our domain and legacy both expand.

Go Blue!

Kevin C. Chung, MD, MS
Chief of Hand Surgery, Director, Comprehensive Hand Center
Michigan Medicine
HAND SURGERY FELLOWSHIP

The University of Michigan Hand Surgery Fellowship was established in 2010 as the only Hand Fellowship in the State of Michigan and it remains the sole program in our state today. This one-year fellowship provides comprehensive clinical and research training in hand surgery for two trainees per year. Our fellowship has rapidly become recognized as a very competitive program and the candidates coming to interview are highly accomplished. We have recruited excellent candidates through the match for multiple cycles and we are proud of this before, during and after their fellowship. In general, hand surgery training is also becoming more competitive as the number of applicants exceeds the spaces available for training every year.

In 2010, our teaching faculty was comprised of three surgeons, only two of which were fellowship-trained hand surgeons. In the past three years, there have been drastic changes to the hand surgery faculty at Michigan. We now have seven fellowship-trained hand surgeons participating as core faculty for our program. The faculty is composed both plastic and orthopaedic surgeons. Our cohesive faculty group with diverse backgrounds forms the core of our comprehensive hand center, providing this fellowship with a truly unique training experience for our fellows.
OUR GROWING FACULTY

Erika Davis Sears, MD, MS

Erika Sears, M.D. Assistant Professor in the Department of Surgery, Plastic Surgery Section, was the recipient of the 2016 J. Leonard Goldner Pioneer Award for the most meritorious clinical research grant entitled “Impact of Pre-Referral Advanced Testing on Upper Extremity Treatment Efficiency” from the American Foundation for Surgery of the Hand (AFSH). The grant aims to evaluate the effect of pre-referral diagnostic advanced testing (PADT) on referral patterns to subspecialty clinics and the impact of PADT on efficiency of care for common hand and upper extremity conditions, including carpal tunnel syndrome, soft tissue masses, solitary bone tumors, and joint pain in the hand and wrist. In addition, the study will explore the decision-making processes leading to PADT among patients and physicians. The research grant was inspired by a previous study, “Utilization of Preoperative Electrodiagnostic Studies for Carpal Tunnel Syndrome: An Analysis of National Practice Patterns” that Dr. Sears presented at the 71st ASSH Annual Meeting in Austin, Texas. The study found that EDS use before carpal tunnel release is associated with increased time to surgery (2 additional months), additional preoperative visits (1 additional visit) and increased costs (approximately $1000 greater total costs and $100 greater out of pocket patient costs). Dr. Sears is also an investigator in the Ann Arbor VA Center for Clinical Management Research. Her research focuses on strategies to improve efficiency and value of hand surgical care.

John Lien, MD

Hand surgery at the University of Michigan is proud to welcome back Dr. John Lien. Dr. Lien is a Clinical Assistant Professor at Michigan Medicine and holds an appointment with the Department of Orthopaedic Surgery. Dr. Lien grew up in the Ann Arbor area. He completed a seven year undergraduate and medical school accelerated program with a major in medical sciences from Boston University. After medical school, Dr. Lien completed his residency in Orthopaedic Surgery at the University of Michigan. Following residency, he completed a fellowship in hand, wrist and elbow surgery at the Mary S. Stern Hand Fellowship in Cincinnati, Ohio. Dr. Lien's clinical interests include the treatment of small joint arthritis in the hand, acute trauma of the hand and upper extremity, and the management of Dupuytren contracture of the hand. Also, he is actively involved in veteran care at the Ann Arbor Veteran's Affairs Hospital.

HAND CENTER PLANNING

The Hand Center is currently in the early planning phases. It will take our virtual hand center and create a physical space for Orthopaedic and Plastic surgery trained hand surgeons, doctors, and occupational therapy. Providers will include specially trained PAs to work alongside the hand surgeons.

The building will be located east of the East Ann Arbor surgery center. The first phase of the buildout is expected to be 300,000 square feet. The plan for the center will include several exam room “pods” with approximately 30 exam rooms in total and up to 7 procedure rooms for outpatient surgery. Radiology will be adjacent to the center and Occupational Therapy will be housed within the center for ease of access for patients. The Comprehensive Musculoskeletal Center will also share neighboring space to fully provide care of the total upper extremity.

The new building will offer shared locker space for staff, shared conference rooms for education and meetings and other amenities. The planned groundbreaking will occur as early as 2020.
2016 MISSION TRIPS

Drs Chung and Brown, our fellowship graduate from 2016, both traveled to Vietnam this past July. They were able to establish new fertile research grounds and demonstrated new operative techniques in hand surgery to our colleagues there. Matt described the experience as “amazing” and dramatically influenced his interests in delivery of healthcare internationally. Based on this experience, he said he may consider international aid work once his new practice is fully established in Texas. Our fellows are now granted multiple opportunities to travel abroad to experience different systems of healthcare and to broaden their surgical experiences.

Hand surgery at the University of Michigan has also teamed with the Ganga Hospital in New Delhi, India to provide our fellows with another chance to participate in international medicine. Alumnus, Brett Michelotti, was our first fellow to travel to India to spend time with Dr. S. Raja Sabapathy and his team performing complex upper extremity reconstruction in urban India.

Dr. Matt Brown demonstrates complex operative techniques while on visit to Vietnam with Dr Chung in July 2016.

VISITING INTERNATIONAL HAND SURGERY SCHOLARS

Kenji Kawamura, MD  
Nara Medical University  
Japan  
2005

Seongeon Kim, MD  
SeMyeong Christianity Hospital  
Pohang, Korea  
2006

Takashi Oda, MD, PhD  
Asahikawa Kosei Hospital  
Japan  
2008

Sandeep Jacob Sebastin, MD  
National University Hospital  
Singapore  
2009

Pao-Yuan Lin, MD  
Kaohsiung Medical Center  
Taiwan  
2010

Shimpei Ono, MD, PhD  
Nippon Medical School  
Japan  
2012

Keming Wang, MD  
Peking Union Medical College  
China  
2013

Yirong Wang, MD  
Peking Union Medical College  
China  
2013

Guang Yang, MD  
Jilin University  
China  
2014

Takanobu Nishizuka, MD  
Nagoya University  
Japan  
2014

Takeshi Ogawa, MD, PhD  
Tsukuba University  
Japan  
2015
Michiro Yamamoto MD, PhD was no stranger to Dr. Chung, who he had previously met at an ASSH meeting and at Japanese Society for Surgery of the Hand. He was inspired by Dr Chung as an academic scientist and excellence in hand surgery education. His current position is associate professor at the Department of Hand Surgery at Nagoya University Graduate School of Medicine in Nagoya, Japan. The department boast the largest hand surgical team in Japan. To his fortune, Dr Yamamoto received a grant from the Japan Society for the Promotion of Science to study hand prosthetics. To this effort, they are conducting an international multi-center study for use and abandonment of prosthetic hands in the US and Japan.

During his fellowship, Dr Yamamoto is excited to further his education in hand surgery. His participation in Dr. Chung's Operative Techniques in Hand Surgery was a particularly illuminating experience in the breadth of hand care and the ability to pass this knowledge along to other surgeons. After returning to Japan, Dr Yamamoto is motivated to apply the knowledge bestowed by Dr Chung to his residents and fellow surgeons. Particularly, he hopes to apply his experiences with Dr Chung to foster team building, leadership, and teaching in his own academic career.

Nasa Fujihara, MD is an international research fellow from Japan and is currently faculty in the Section of Hand Surgery at Nagoya University. She is accompanied on her fellowship by her husband and co-fellow, Dr Yuki Fujihara. She has four years of experience as an orthopedic surgeon since graduating in 2009 from the University of Occupational and Environmental Health (UOEH) in Kitakyushu City, Japan. Her training focused largely on the administration and application of medical care from a business model, but she has chosen to pursue her clinical interests in orthopedic surgery.

However, her training and experiences in public health and preventative medicine as a student has been particularly useful for her research with M-CHOIR. In addition to her husband, Dr Fujihara is accompanied by her young son, Koh. The catalyst for her fellowship was the impact of a lecture given by Dr Chung in 2014. Despite interest in studying in the United States, Dr Chung’s lecture accelerated her dreams to study here to an earlier point in her career. She is excited to continue to write papers in Japan using skills learned through my experiences here. She is also driven to inspire and encourage female doctors in Japan to work as both clinicians and researchers – a significant hurdle in the current academic climate. She is grateful for her time in Ann Arbor and very much enjoyed the city and her learning experiences.

Sirichai Kamnerdnakta, MD is faculty at the Division of Plastic Surgery at the Siriraj hospital at Mahidol University in Thailand and in independent academic practice for over 5 years, Dr Kamnerdnakta sought greater research experience and an opportunity to learn the intricacies of hand surgery with Dr Chung at the University of Michigan. During his time in the United States, he has been dedicated to observation of complex hand surgery, including an interest in Dr Chung's robust rheumatology practice. Of the things he is excited to take back with him at the conclusion of his training, Dr Kamnerdnakta cites his experiences in patient-centered care, outcomes research, and academic practice management. Upon returning to Thailand, he hopes to pass along these experiences to his own trainees and to impart his learning to the benefit of his patients.

Yuki Fujihara, MD came to the University of Michigan with his wife, Dr Nasa Fujihara. With them, they brought their 1-year-old son, Koh. Both
Occupational Therapy and Physical Therapy Hand Residency Program

The University of Michigan Health System Occupational Therapy and Physical Therapy Division is proud to offer a comprehensive hand therapy residency program. This fellowship program is designed to provide occupational therapists with the advanced knowledge and skills necessary to succeed in the field of hand therapy.

The program curriculum is designed to provide mentoring, hands-on experience and educational opportunities available in a progressive high paced teaching atmosphere.

Candidates receive a challenging clinical and educational environment at our uniquely academic and robust clinical hand practice. The twelve-month fellowship includes comprehensive evaluations, clinical reasoning, anatomy, formal competencies, splinting, treatment planning and care implementation within the multidisciplinary team.

Our residency program started in 2006, but was formally accredited in October of 2013 by AOTA. To date we have had 16 graduates. We have two current residents, Erica Smith and Megan Park. Linda Miner OT, CHT and Carole Dodge, OTR/L, CHT deserve much of the credit for establishing the residency program here at Michigan. Carole currently directs the program with the assistance of many clinical mentors across all of our locations.

Drs Fujihara come to Michigan from Nagoya University Graduate School of Medicine in Nagoya, Japan. He was first introduced to Dr Chung during a visit to Nagoya when he gave a lecture on writing a scientific manuscript. Dr Fujihara was impressed by the difficulty and was inspired to learn more. Therefore, he requested permission from his Chairman, Professor Hitoshi Hirata, to train in outcomes research and hand surgery with Dr Chung in the United States. After his two years, both Drs. Fujihara will go back to Nagoya University and continue their academic hand surgery practices in Japan with an improved research skill set. He hopes to excel academically after his return and translate these experiences into an academic model in his home institution.

Taichi Saito, MD came from Japan as an international fellow where he worked as an orthopedic surgeon since graduating in 2005 from the Okayama University in Okayama City, Japan. He has also previously completed a microsurgical fellowship at Okayama University. He appreciates that a broad understanding of principles in both orthopedic and plastic surgery are a benefit in the treatment of hand disorders. He is most interested in seeing a breadth of practice in hand surgery performed by Dr Chung while participating in his fellowship. After completion of his fellowship, he hopes to impart what you has learned to his own trainees after he returns to Japan. Additionally, he feels he has greatly benefited from the strong academic and research instruction he has received while here and hopes this pays dividends toward advancing his own research goals and career. He is excited to continue learning from his experiences and is thankful for his time with Dr. Chung’s research team.

Carole Dodge, OTR/L, CHT
Occupational Therapy Supervisor and Occupational Therapist Clinical Specialist
This was an exciting year for M-CHOIR. First, we have a new name and acronym, courtesy of Sunitha Malay. Erika Sears joined our group and Pat Burns is celebrating 10 years working with Dr. Chung! We’ve recently welcomed three new Research Associates, all from the UM School of Public Health: Catherine Lu, MPH; Yiwen Lu, MS; Rena Steiger, MPH. We also welcomed three new research assistants, all graduates of the University of Michigan: Helen Huette man, BS, Jennifer Sterbenz, BS, and Michaela Baker, BA. Michaela will continue her ongoing work examining the use of patient reported outcomes in clinical practice this summer and throughout the year as she begins a Masters in Social Work. Helen and Jennifer will spend two years with us gaining both research and clinical skills as they prepare for the MCAT and medical school applications. Over the years our RAs have gone on to medical and dental school as well as physicians’ assistant and pharmacology programs. We are sad, but proud, to say goodbye to Brianna Maroukis and Alex Mathews. Brianna will be attending UMMS and Alex will be attending Loyola School of Medicine. Frank Yuan will also leaving after two years to return to the University of Massachusetts. All three had very productive tenures with us. Frank received an NIH Ruth L. Kirschstein F32 Postdoctoral National Research Service Award, published seven peer-reviewed manuscripts, wrote a book chapter, and presented at the 2015 AO Trauma Seminar; Brianna published six peer-reviewed manuscripts; Alex published five peer-reviewed manuscripts, and wrote two book chapters. Good Luck! We will also be wishing farewell to our hand fellows Matt Brown and Brett Michelotti. This was another productive year for M-CHOIR. We finished SARA (Silicone Arthroplasty in Rheumatoid Arthritis), a 13 year long project of comparative effectiveness for surgical vs medical management of RA. We entered our final year of enrollment for WRIST and are in the final IRB stages to begin enrollment for FRANCHISE in conjunction with PSF. Dr. Mahmoudi received new funding from the American Foundation for Surgery of the Hand and Dr. Waljee received funding from the University of Michigan Injury Center to examine the variation in postoperative opioid prescribing. As a group we published forty-eight articles in twelve different peer-reviewed journals.

Dr. Elham Mahmoudi is accepting a new position in the Department of Family Medicine. Our research family continues to grow and our alumni continues to move on to wonderful opportunities.
M-OPEN
Michigan Opioid Prescribing Engagement

October 1st marked the launch of the Michigan Opioid Prescribing Engagement Network, or M-OPEN, an initiative that seeks to transform pain management and curb opioid abuse in the state of Michigan across all surgical procedures, including orthopedic, reconstructive, general surgery, vascular surgery, and gynecology. Led by Drs. Jennifer Waljee, Chad Brummett, and Michael Englesbe and based at the University of Michigan Medical School and Institute for Healthcare Policy and Innovation, this initiative is funded by the Michigan Department of Health and Human Services.

Although surgical care is one of the most common indications for opioid prescribing, surgeons have few guidelines to direct their postoperative prescribing, often resulting in overprescribing. M-OPEN aims to collect data and implement and continually refine evidence-based strategies to better serve providers and their patients across the state of Michigan.

To learn more about M-OPEN visit our website at: http://ihpi.umich.edu/our-work/strategic-initiatives/michigan-open or Email: MichiganOPEN@umich.edu

M-CHOIR Alumni Highlights

Lee Squitieri, MD, PhD - Lee Squitieri graduated from the University of Michigan Medical School in 2011 and matched into the integrated plastic surgery residency program at the University of Southern California. After completing her first three years of residency training, Lee was accepted to the Robert Wood Johnson Clinical Scholars Program at UCLA where she is also pursuing a Ph.D. in health management and policy. For her doctoral dissertation, she is working with the Centers for Medicare and Medicaid Services (CMS) and RAND Health to evaluate the quality and cost of care across clinical settings for elderly patients with pressure ulcers. She has also spent substantial time researching current MACRA legislation and worked with various stakeholders to better understand the hospital and clinician quality metric development process. Her most recent work with CMS will be used to revise quality metrics for hospital-acquired pressure ulcers and her ultimate career aspirations are to leverage large administrative and electronic health record data to inform value-based reimbursement reform policies. Lee will return to residency this July as a PGY4 and continue to work with CMS and RAND throughout the remainder of her plastic surgery training.

Avi Giladi, MD, MS - Dr. Giladi graduated from the University of Michigan Plastic and Reconstructive Surgery Residency and has continued his training at the Beth Israel Deaconess Medical Center Hand and Upper Extremity Fellowship. After graduation, this year, Dr. Giladi has been accepted as academic faculty at the Curtis National Hand Center in Baltimore, MD.

Oluseyi Aliu, MD, MS - After completing a Robert Wood Johnson Fellowship with Dr. Chung, Dr. Aliu completed his residency training in plastic surgery at the University of Michigan and a microvascular surgery fellowship at the Albany Medical College before joining the Johns Hopkins faculty in 2016.

Distinguished Hand Surgery Lectureships

Annual Dean Louis Hand Surgery Lectureship
Dean S. Louis, M.D. - Dr. Louis completed his residency at the University of Michigan before heading to New York as the Carroll Hand Fellow at Columbia Presbyterian Hospital. In 1971, he returned to Michigan - this time to join the University faculty. During his 30 years at Michigan, he specialized in congenital hand problems and has served as a past president of the American Society for Surgery of the Hand. Today, he is professor emeritus for the Department of Orthopaedic Surgery and a legacy for hand surgery in Michigan. We will continue to honor his career with an annual lectureship in hand surgery.

Section of Hand Surgery Annual Visiting Professor Lectureship
Our Section now moves to its seventh annual visiting professor in hand surgery. Originally started within the Section of Plastic Surgery, the lectureship has included premiere plastic and orthopedic surgeons from across hand surgery. Our past lecturers are among the nations most distinguished professors, including Drs. Peter Stern, W.P. Andrew Lee, Richard A. Berger, Nicholas B. Vedder, L. Scott Levin, James Chang, James P. Higgins, Allen T. Bishop, and, most recently, Richard H. Gelberman. This years distinguished Visiting Professor of Hand Surgery is Dr. Brent Graham. Dr. Graham is the Medical Director of the University Health Network Hand Program for the University of Toronto. He additionally serves as the Editor-in-Chief of the Journal of Hand Surgery for the American Society for Surgery of the Hand.
Our group is, in Dr. Chung’s words, “dominating the ASSH meeting.”
Please see everyone’s contributions below. Nice work Team!

The J. Leonard Goldner Pioneer Research Award
Erika D. Sears MD, MS

34th Annual Adrian E. Flatt Residents & Fellows
Conference in Hand Surgery
Risk of prolonged opioid use among opioid-naïve patients following common hand surgery procedures.
Shepard Peir Johnson, MBBS
Kevin C. Chung MD, MS
Lin Zhong, MD, MPH
Melissa J. Shauver, MPH
Michael J. Engelsbe, MD
Chad M. Brummett, MD
Jennifer F. Waljee, MD, MPH, MS

Value-based Hand Care: Introduction to Implementation
Patient Reported Outcomes and Value in Hand Surgery
Jennifer F. Waljee, MD

Hand/Wrist Reconstruction
7 Year Outcomes of the Silicone Arthroplasty in Rheumatoid Arthritis (SARA) Study
Kevin C. Chung, MD, MS
Sandra Kotsis, MPH
Patricia B. Burns, MPH
Frank D. Burke, MD
E. F. Shaw Wilgis, MD
Hyungjin M. Kim, ScD

Elbow/Forearm Reconstruction
Outcomes of Massive Proximal Upper Extremity Reconstruction in the Resource-Poor Setting
Aviram M. Giladi, MD
R. Raja Shanmugakrishnan, MS, MRCS
Kevin C. Chung, MD, MS
R. Raja Sabapathy, MS, MCh

Hand/Wrist Trauma
Effect of Policy Change on the Use of Long-distance Transport and Follow-up Care for Patients with Traumatic Finger Amputations
Michael T. Nolte, BS
Aviram M. Giladi, MD
Melissa J. Shauver, MPH
Kevin C. Chung, MD, MS

Ultra Small Proximal Pole Scaphoid Nonunion Reconstruction with 1,2 Intercompartmental Supraretinacular Artery Vascularized Graft and Micro Screw Fixation
Mark S. Morris, MD
Andy Zhu, MD
Kagan Ozer, MD
Jeffrey N. Lawton, MD

Nerve
National Practice and Impact of Preoperative Electrodiagnostic Studies for Carpal Tunnel Syndrome
Erika Davis Sears, MD, MS
Peter A. Swiatek, BA
Kevin C. Chung, MD, MS

If you would like to MAKE A DONATION to our wonderful program, please contact Jeff Guyton at jeffguy@med.umich.edu or 734-763-1756

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