



MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN



YEAR IN REVIEW)

2018

SECTION OF PLASTIC SURGERY)

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The University of Michigan, Section of Plastic Surgery, has had another highly successful year. I could not be more proud of the program we have developed. We have achieved new levels of success in the three pillars of our academic mission including clinical care, research, and teaching. This has been achieved through strategic growth of our clinical programs, increasing breadth of our research activities, and new initiatives focused on novel ways to train the next generation of leaders in plastic surgery. I am excited to share with you some of the highlights of the year.

Clinically, we have incredible breadth and depth of expertise covering the entire field of plastic surgery. We currently have 16 full-time plastic surgeons at the University of Michigan who see 28,000 patients a year in our outpatient clinics and perform over 4000 major operations annually. We not only provide outstanding patient care for the routine problems but also take pride in caring for patients with the most complex clinical challenges. It provides us with great satisfaction to be able to help patients in need and to support the work of other surgeons as they tackle complex medical problems. During this time, we have seen growth and evolution in a number of our clinical programs. Our Comprehensive Gender Services Program remains one of the most prominent academic programs in America. Our Multidisciplinary Comprehensive Hand Surgery Program continues to mature with seven full time hand surgeons (four plastic surgeons, three orthopedic surgeons). Our microsurgery program has grown dramatically with over 150 microsurgical cases performed annually. Our Peripheral Nerve Surgery Program is the only center in the state offering surgical solutions to pain related conditions and one of only a few programs nationally. Our Lymphedema Surgery Program is one of only a few programs in the Midwest offering the highest level of care possible for these patients.

Our Comprehensive Scar Management Program has introduced novel lasers to treat some of the most difficult scars. This new approach is as close as we have ever gotten to a "scar eraser". We have incredibly busy and successful clinical programs!

Academically, our research enterprise continues to grow dramatically. Last year alone, we had over \$4,500,000 in research spending. This includes over \$15,000,000 in funded grants held by our faculty as principal investigators. This level of accomplishment in the research arena is rare. You can attend any plastic surgery meeting and see our faculty prominently displayed on the program as invited speakers and presenters. You will also see our residents winning many awards for their academic accomplishments at these same meetings. We have one of the most successful research programs in the world!

Educationally, our program continues to draw the best and the brightest candidates. I could not be more proud of the residents in our program and the level of their accomplishments while they are with us and after they leave our program. Many of our trainees have become highly successful academic surgeons and private practitioners. I am also excited to let you know that we will be one of four programs who will have a competency based program for advancement through residency. This will allow our residents to progress through training based upon their level of accomplishment and achievements clinically. This is an entirely new training paradigm and one that will change the way we train the future leaders of our specialty.

It is an honor to serve as the Chief of the Section of Plastic Surgery at the University of Michigan. We have an amazing group of faculty, residents, fellows, and support team and I am humbled by their achievements every single day. It makes me proud to help facilitate the success of our team and even more proud to be a member of our Dingman Alumni Society. In the coming year, please consider attending our Dingman Society Symposium in Ann Arbor on September 7 and 8, 2018. It will be a great opportunity to come home to the University of Michigan, connect with friends and enjoy a Michigan football game in the Big House. As our current faculty, residents, fellows, and alumni members, you continue to ensure that we remain the Leaders and Best!

Go Blue!!

Paul Cederna, MD
Chief, Section of Plastic Surgery



MEDICAL SCHOOL ACTIVITIES)



Galens Smoker

students applying in Plastic Surgery this fall. Despite the competitiveness of the match, we anticipate all of them being extremely competitive in the match based on their clinical and academic records.

Our visiting student Sub-I rotation continues to be filled on a competitive basis. From July through November, we will have four visiting sub-interns each month. These are all great applicants allowing us to have some of the brightest and best students rotate with us at the University of Michigan. In addition to our two Michigan students, another one of our sub-interns from last year, Austin Remington, will also be joining our program this summer. This increased exposure between us and the applicants continue to allow for long-term “matches” that work out well.

For the more junior medical students, Plastic Surgery continues to be an official rotation as part of the Surgery clerkship. As the medical school curriculum is transitioning, it is now M2 students who are doing their core clerkships. Our service continues to be rated highly by the students. They highlight the high quality teaching from our residents, the variety of surgical problems seen over the three week rotation, and the ability to practice their technical skill. We also have expanded our M3 exploration rotation allowing students who might want some exposure to Plastic Surgery a two week opportunity to have a clinical experience on our service. This rotation is tailored to the student's goals which can include exposure to our field, working in a specific area, or gaining knowledge that might be relevant to a career choice outside of our specialty. We also continue to have a significant role with the first-year medical students. Our Plastic Surgery Interest Group continues to expose M1 students to our specialty.

It has been another exciting and successful year for our medical student related activities. We had four University of Michigan medical students match into Plastic Surgery earlier this year. We are excited to have both Galina Primeau and Megan Lane joining our training program. Both Galina and Megan were heavily recruited by other programs and we are fortunate that both elected to stay at Michigan. Graham Ives has matched at the University of Southern California and joins two previous University of Michigan Medical School students (Lee Squitieri and Ashley Stasiak) in the USC-Keck training program. Josh Peterson matched at the University of Texas-Medical Branch in Galveston. Josh has a strong interest in burn surgery and burn reconstruction making this a perfect match. Looking forward, we are excited to have at least three more M4



Jeffrey H. Kozlow, MD, MS
Medical Student Program Director

RESIDENCY PROGRAM)

Many of our faculty were again highlighted in the annual Galen's Smoker produced by the medical students. This event which lampoons the medical student experience is actually an honor for the faculty when they are selected to be portrayed.

From a research perspective, we estimate over 100 papers over the last couple of years have been co-authored with medical students by faculty and residents in our section and we are often seen as a "go to" place for students who are interested in getting involved in academic surgery. Every plastic surgery meeting now has our students on the podium presenting all of their hard work and winning multiple awards. Overall, we continue to expand our role in medical student education and solidifying a pipeline for future academic leaders.



Midwestern Association of Plastic Surgeons 2018 Presenters

Left to right: Vickram Tandon, MD, Kavitha Ranganathan, MD, Gina Sacks, MD, Daniel Lyons, MD, Rachel Hooper, MD, Adeyiza Momoh, MD.



Galina Gaggin, Galen's Smoker

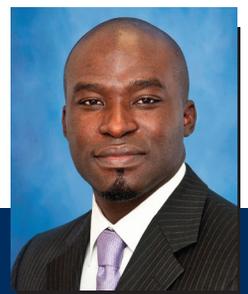


Megan Lane, Galen's Smoker

Our residency program remains stronger than ever and continues to evolve as our section grows. Our residency program has expanded from three to four residents per year and this year we have reached our full complement of twenty-four clinical residents. Our training program continues to attract the best and brightest applicants through the Plastic Surgery Residency Match. This year, we are excited to welcome our new interns, Drs. Austin Remington, Megan Lane, Galina Primeau, and Remi Sherif, to the Michigan Plastic Surgery family.

Despite high clinical demands, residents remain active in research. Residents not only perform high quality research during their clinical rotations, but they also have the opportunity

to spend dedicated time after their third or fourth post-graduate year for academic development. This time is protected from clinical activity and allows residents to focus on basic science or clinical outcomes research to learn how to become productive academic surgeons. Historically, our residents have excelled in the academic arena, with multiple publications and national presentations. Just this past year, our residents have authored 60 peer-reviewed publications, given 42 national or international presentations. In addition, residents are routinely successful



Adeyiza O. Momoh, MD
Program Director, Integrated Plastic Surgery Residency Program

RESIDENCY PROGRAM)

when competing for grants. They were awarded over \$215,000 in extramural funding for the 2017-18 fiscal year. The academic success of our residents has culminated in multiple awards, which is a testament to the quality of research that our section performs.

A good measure of a program's success is its graduates. Graduates from the University of Michigan have been successful in obtaining their first choices in fellowships at leading institutions, academic positions, and private practice positions. Our graduates practice from coast to coast and are seen presenting at national meetings and sitting in prominent positions within our national organizations. Not surprisingly, a certificate in plastic surgery from the University of Michigan is recognized as a significant achievement that can open many doors. The faculty at the University of Michigan is committed to placing our graduates in positions of leadership and opportunity. On the right is a list of our most recent graduates and their positions since graduating from residency.



2017 Graduates

Brian Kelley, MD

Hand Fellowship, University of Michigan
Starting on faculty at Seton Institute of Reconstructive Plastic Surgery,
Austin, TX

Ian Sando, MD

Microsurgery Fellowship, Stanford University
Starting on faculty at St. Vincent Medical Group, Indianapolis, IN

Tiffany Ballard, MD

Cosmetic Fellowship with Dr. Julius Few, Chicago, IL
Starting on faculty at Ann Arbor Plastic Surgery, Ann Arbor, MI

2016 Graduates

Katherine Gast, MD

Microsurgery/Gender Fellowship University Ziekenhuis Ghent, Belgium
Starting on faculty at University of Wisconsin

Aviram Giladi, MD

Hand Surgery Fellowship, Beth Israel Deaconess Medical Center
Starting on faculty at Curtis Hand Center, Baltimore

Shoshana Woo, MD

Microsurgery Fellowship, University of Pittsburgh Medical Center
On Faculty, Henry Ford Allegiance Health, Jackson

2015 Graduates

Seyi Aliu, MD

Microsurgery Fellowship, Albany Medical Center
On faculty at Johns Hopkins University

Matthew Chetta, MD

Microsurgery Fellowship, Stanford University
On faculty at Beaumont Health System

Theodore Kung, MD

Microsurgery Fellowship, University of Washington
On faculty at the University of Michigan

2014 Graduates

Frank Fang, MD

Microsurgery Fellowship, Chang-Gung Memorial, Taiwan
On faculty at Mount Sinai Hospital, New York City, NY

Erika Davis Sears, MD, MS

Hand/Wrist Surgery Fellowship, University of Michigan
On faculty at the University of Michigan



Resident Awards

Dr. Russell Ettinger

American Society of Craniofacial Surgeons (ASCSF) Kawamoto Award 2018

Dr. Carrie Kubiak

Outstanding Paper Award, American Society of Peripheral Nerve (ASPN) Meeting 2018

Best Clinical Paper Resident Award, American Society of Peripheral Nerve (ASPN) Meeting 2018

Best Clinical Paper, Plastic Surgery Research Council (PSRC) Meeting 2018

Dr. Katelyn Bennett

Young Clinician's Award, American Association of Plastic Surgeons (AAPS) Meeting 2018



At the University of Michigan, residents are exposed to the full breadth of plastic surgery, including complex reconstructive surgery, cosmetic surgery, gender affirmation surgery, hand surgery, and craniofacial surgery. Our microsurgical experience continues to expand thanks to ongoing efforts by Dr. David Stepien and Dr. Nicholas Berlin, who continue to organize and implement our microsurgery curriculum with prior funding from the Plastic Surgery Foundation/American Council of Academic Plastic Surgeons. In addition, our section has hosted visiting professors and distinguished alumni whose time in Ann Arbor provides an invaluable educational experience and networking opportunity for residents. Just this past year, residents have had the opportunity to spend time with such leaders as Drs. Susan Mackinnon, Amy Moore, Joseph Disa, Rod Rohrich, Lynn Jeffers, Michelle Carlson, and Ming-Huei Cheng. Although residents remain clinically busy, they find time for family, friends, and life outside the hospital. There has been much to celebrate this past year, including new additions to the growing number of Plastic Surgery babies (Dr. Russell Ettinger: Ashlyn, Dr. Shailesh Agarwal: Zoya, Dr. Jessica Billig: Asher Noah, Dr. Kavitha Ranganathan: Simran and Dr. Kristoffer Sugg: anticipating arrival). We look forward to what next year will bring!

2018 Graduating Residents



Shailesh Agarwal, MD



Russell Ettinger, MD



Kate Polyatskaya, MD



Dhivya Srinivasa, MD

PLASTIC SURGERY CLINIC)



DOMINO'S FARMS

Lunch break on a cloudy spring day.

The past year continued to be a busy and successful one in the Michigan Medicine Plastic Surgery Clinic. Currently the clinic consists of twelve surgeons, five physician assistants, four occupational therapists, four registered nurses, five medical assistants, four surgery schedulers, one medical photographer and six patient service associates. As of March, our team performed 16,765 clinic visits and anticipate to finish this year with over 22,000.

Our efforts were rewarded with another Patient Satisfaction Award, with an overall score of 94%!

Under the direction and leadership of our Scherlyna Comer, Clinic Manager, and David Brown, MD, ACU Director, we have continued to improve our delivery of compassionate, efficient and effective care of our patients.



David Brown MD
Clinical Director, ACU

In recognition of our hard-working, multi-tasking, dedicated clerical team, Scherlyna worked with human resources and determined that their duties were in line with a higher job classification. This resulted in their promotions to patient services associates. Dr. Brown states, "Our team works very hard, and I am pleased that they were recognized with promotions and a raise. We are lucky to have each member of this hard working team!"

Specific patient groups continue to be served under our umbrella of care, including:

- Breast reconstruction
- Hand surgery
- Burn reconstruction
- Cosmetic surgery
- Peripheral nerve / pain surgery
- Skin cancer and sarcoma reconstruction
- Facial paralysis
- Hand therapy
- Lymphedema
- Complex microvascular reconstruction
- Gender affirmation surgery

We have also welcomed the Comprehensive Gender Services Program onto our team this past year!

New additions to our plastic surgery family since last summer; Amy Jankowski, RN, Keisha Davis-Johnson, Patient Associate, Sara Skelton, Administrative Assistant and Erica Arndt, Project Manager. We are pleased to announce that Marissa Ebels and Michelle Turner have accepted our patient services assistant positions and will be our newest members. Welcome to our plastic surgery family!

New construction will be underway soon to construct an additional clinical team room to provide more efficient, confidential care to our patients.



Resident Injectables and Cosmetic Clinics

This spring marked our first ever Resident Injectables Clinic, held May 3, 2018. The clinic was established to provide additional hands on training for our residents in minimally invasive cosmetic procedures. We are able to offer discounted pricing for Botox and fillers to patients while providing the same great care that we always provide our patients. The response has been extremely positive with most clinics booked within days of the announcement. Clinic times have been extended to accommodate additional patients from our wait list. Efforts are still taking place to expand this service to cover all

comprehensive, surgical needs - including breast augmentation, abdominoplasty, body contouring and more. It is a very exciting time for resident education in this new training paradigm.

Social Media

Erika Arndt, Project Manager, and Jennifer Curley, Marketing Assistant, for the University of Michigan, Section of Plastic Surgery, have been combining their talents to increase the social media presence of Plastic Surgery. To date, we now have 500 followers on our Facebook page, University of Michigan Plastic Surgery. This gives us the opportunity to update our alumni on all of the Section of Plastic Surgery news, events and promotions.

Coming soon, the University of Michigan, Department of Communications, recently approved our request for an Instagram account. Watch for our Instagram announcement on Facebook or search #UMPlasticSurgery!

Reed O. Dingman Alumni Symposium

Please join us for the 2018 Reed O. Dingman Alumni Symposium in Ann Arbor, Friday September 7th and Saturday, September 8th! This two day event will include a robust academic program on current clinical concepts across all domains of plastic surgery on Friday, followed by a dinner event. On Saturday, we will attend the Michigan vs. Western Michigan game – we have a block of football tickets reserved. We hope all of you will join us in Ann Arbor for this great event to connect with old and new friends and celebrate Michigan Plastic Surgery! Watch for your RSVP request, it will be emailed to you soon with instructions on reserving your game tickets. We hope to see you all in September – Go Blue!!

Rodney J. Rohrich Family Visiting Professor Lectureship

We are excited to announce the very generous donation to the Section of Plastic Surgery by Dr. Rodney J. Rohrich to establish the Rodney J. Rohrich Family Visiting Professor Lectureship. Dr. Rohrich states, “The Rodney J. Rohrich Family Visiting Professorship is just a small way that my family and I can give back and honor my parents who gave so much so their children could succeed in life in whatever they wanted to do. The most important thing my German–Russian parents instilled in me as I was growing up on a rural farm and ranch in North Dakota was that success only comes from hard work and being focused on being the best you can be each day -no matter what you do . They lived by these adages each day and imprinted them in me. I hope that each year the RJR Family Visiting Professor will bring a truly gifted, giving back leader/teacher to the UM campus to instill such values to the residents and faculty in Plastic Surgery.” This endowed gift allows us to bring a distinguished speaker on an annual basis to speak to our group about a number of different topics pertinent to plastic surgery. Our first lecture is scheduled for Friday, August 31st and will feature Dr. James Stuzin from the University of Miami School of Medicine with a teaching session and cadaver lab. We look forward to the first Rodney J. Rohrich Family Visiting Professor Lectureship this fall.

Leaders in Plastic Surgery

Dr. Robert Oneal and Lauralee Lutz have written a book entitled Leaders in Plastic Surgery, The Dingman-Grabb Era, 1946 – 1986. The book is about the history of plastic surgery in

Ann Arbor and the U of M 1946-1986, including the history of the UM residency program.

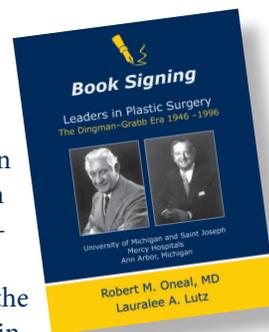
To celebrate this achievement, members of the medical community in Ann Arbor were invited to a book signing event at the Ann Arbor City Club in September hosted by Mrs. Grabb. There was a large turnout of well-wishers who were there to congratulate Dr. Oneal and Lauralee. To date, nearly 500 copies of the book have been circulated.

To purchase a copy of the book, please email Carrie Wickersham at cwick@umich.edu. The cost is \$5.00. If you would like to make a donation on behalf of Dr. Oneal, he has asked that donations be made to the Plastic Surgery Resident Education Account which is the preferred recipient for the donations.

Ways to Give

To make a gift to Plastic Surgery at Michigan Medicine, please consider:

- Making a contribution online: victors.us/umplasticsurgery
- Mailing a check, specifying UM Plastic Surgery Research and Teaching to: Michigan Medicine Office of Development 1000 Oakbrook, Suite 100 Ann Arbor, MI 48104
- Remembering Michigan Medicine in your will or estate plan.
- Contacting us to discuss how we can achieve our shared goals.



FELLOWSHIP PROGRAMS)

CRANIOFACIAL SURGERY FELLOWSHIP

The Craniofacial Fellowship in the Section of Plastic Surgery is one of only ten ACGME accredited programs in the country. It is a highly sought after program because of the significant depth and breadth of the training. The fellows receive one-on-one instruction of some of the most complex cases in craniofacial surgery such as monobloc advancements, frontal orbital advancements and total cranial vault reshaping, distraction osteogenesis, and facial trauma. The program is also one of only a handful in the nation to have a significant opportunity to learn orthognathic surgery. We are now training our seventh fellow since the fellowship was established. Next year's fellow is Raquel Ulma, DDS, MD, who joins us from UCLA where she completed her residency in general surgery and fellowship in plastic and reconstructive surgery. We are looking forward to welcoming her to Ann Arbor!



John Mesa, MD
Private Practice
New York, NY



Christian Vercler, MD, MA
University of Michigan
Ann Arbor, MI



Antonio Rampazzo, MD, PhD
Cleveland Clinic
Cleveland, OH



Yuan Liu, MD
Kaiser Permanente Medical Group
San Marcos, CA



Todd Thurston, MS, MD
The Plastic Surgery Group
Chattanooga, TN



Fan Liang, MD
University of Maryland
Baltimore, MD



Samer Haber, MD
Current Fellow



Steven R. Buchman, MD
Program Director, Craniofacial Surgery Fellowship Director, Craniofacial Anomalies Program, CS Mott Children's Hospital

HAND SURGERY FELLOWSHIP

The University of Michigan Hand Surgery Fellowship will be entering its 9th year in 2018, welcoming two new fellows in August: Dr. Phil Ross from the University of Cincinnati Orthopedic Program, and Dr. Sarah Sasor from the Plastic Surgery Program at Indiana University. Under the leadership of Drs. Kevin Chung and Steven Haase, our fellowship has grown a lot in the past eight years. Whereas we began with just three teaching faculty, we now have a diverse group of seven faculty hand surgeons. In 2015, we expanded from a single fellow to two accredited fellowship spots. Our devoted, hard-working faculty from both Plastic Surgery and Orthopedic Surgery allow us to train fellows in an unique combined program, where we work collaboratively between our two Departments and simply train our fellows in “Hand Surgery”. This attitude, combined with unparalleled case variety, strong didactic instruction, and mentoring in research, makes our fellowship really stand out amongst other hand surgery training programs. Dr. Haase, who has been Associate Program Director since the fellowship’s inception, will be stepping up to take over the role of Program Director this year, as Dr. Chung assumes his new leadership role as the Director of the Michigan Medicine Comprehensive Hand Center.



Nathan S. Taylor, MD
Advanced Center for Orthopedics
Marquette, MI



Jennifer F. Waljee, MD, MPH, MS
University of Michigan, Section
of Plastic Surgery



Kate W. Nellans, MD, MPH
Hofstra Northwell School of
Medicine, Orthopedic Surgery



Joshua M. Adkinson, MD
University of Indiana, Section of
Plastic Surgery



Erika Davis Sears, MD, MS
University of Michigan, Section
of Plastic Surgery



Matthew S. Brown, MD
Midland Plastic Surgery Center
Midland, TX



Brett Michelotti, MD
University of Wisconsin



Kate Elzinga, MD
University of Calgary



Paymon Rahgozar, MD
University of California, San Francisco



Xuan (Elizabeth) Qiu, MD
Current Fellow



Brian Kelley, MD
Current Fellow



Kevin C. Chung, MD, MS
Chief of Hand Surgery, Michigan Medicine Comprehensive Hand Center

PEDIATRIC PLASTIC SURGERY CLINIC)

The Pediatric Plastic Surgery Clinic occupies a clinic area of 8,104 sq. ft., which it shares with neurosurgery, oral surgery, and pediatric dentistry. We have sixteen staff members who work in the pediatric plastic surgery clinic in addition to two pediatric nurse practitioners. Between Dr. Buchman, Dr. Kasten, and Dr. Vercler, we had 4796 visits last year and our nurse practitioners, Carolyn Walborn and Bethany Lechtanski, had another 1000 visits independently. Our nurse practitioners play a vital role in the care we provide to our pediatric plastic surgery patients. Carolyn and Bethany, along with our orthodontist, continue to provide naso-alveolar-molding to our cleft lip patients, which should allow us to achieve better outcomes. They also continue to see newborns and provide ear-molding techniques. Dr. Vercler and Dr. Kasten also see patients with congenital melanocytic nevi, as well as the full spectrum of vascular anomalies. Bethany Giacobbe, NP continue to coordinate our multi-disciplinary Vascular Anomalies Conference, which provides a comprehensive review of patients with challenging cases of venous malformations, arteriovenous malformations, lymphatic malformations, and hemangiomas.



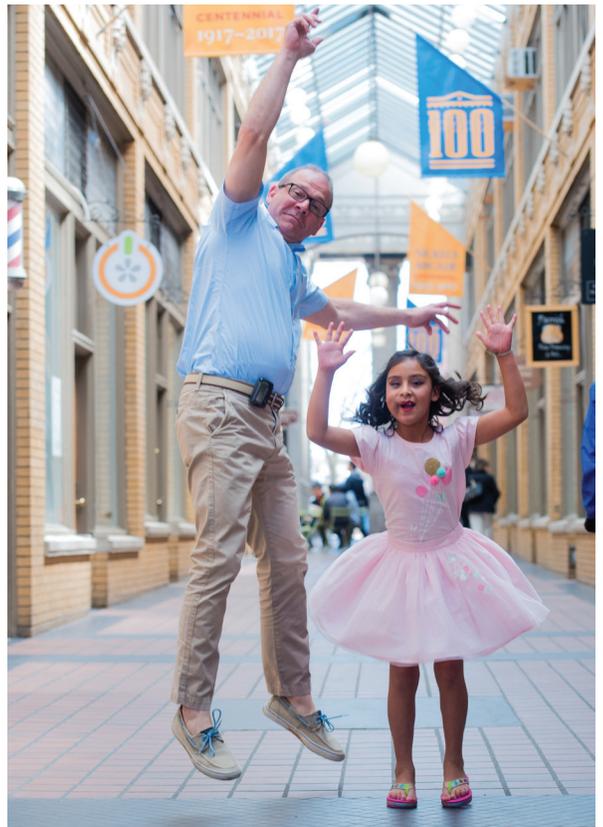
Left to right; Steven J. Kasten, MD, Steven R. Buchman, MD, Christian J. Vercler, MD, MA

Craniofacial Anomalies Program

The Craniofacial Anomalies Program & Cleft Palate Program at the University of Michigan is one of the largest programs in the country. Our multidisciplinary program offers a team of specialists working together to ensure the physical health, growth and development of the children we serve.

The craniofacial team includes forty-seven members in twenty-two medical and dental specialties, all with renowned expertise and vast experience in the care of children with cleft lip, cleft palate and complex craniofacial anomalies. Many disciplines along with plastic surgery are involved in treating the children in our program. Such disciplines include Neurosurgery, Oral and Maxillofacial Surgery, Psychology, Orthodontics, Otolaryngology, Speech/Language Pathology, Social Work, Genetics, Nutrition, and Pediatrics.

We serve patients of any age with cleft lip, cleft palate, jaw or craniofacial malformations including craniosynostosis. The patients are seen both as a team each week and individually according to the patient's needs. Last year, 765 total patient visits were attributed to the Craniofacial Program. The Craniofacial Anomalies Program generates well over 342 surgical cases per year, of the 1027 total Mott cases, for our pediatric plastic surgeons and many more are cared for at the children's hospital by our affiliated specialists.



Taken during Glamour Day 2018



Steven R. Buchman, MD

Program Director, Craniofacial Surgery Fellowship Director, Craniofacial Anomalies Program, CS Mott Children's Hospital

Our Craniofacial Program is extremely active both within the medical center and with an extensive portfolio of community outreach. Some of the exciting special programs we have featured include:

Facebook

Natalie Wombacher, our Speech and Language Pathologist has done amazing things with our Facebook presence, which has been lauded by patients and caretakers alike. The Facebook effort continues to grow with over 1000 hits on our latest post! Follow us at: Craniofacial Anomalies Program at C.S. Mott Children's Hospital.

Glamour Day



When the Craniofacial Anomalies Program at C.S. Mott Children's Hospital dreamed up Glamour Day, they knew the annual event could be about a lot more than hair and make-up. The thought was to allow some of the female children that we treat to get glammed up and pampered. Girls ranging from age 9 to 19 attend the event, and families drive from cities as far as Traverse City, Michigan. The girls are able to get a hair-style, manicure, pedicure and makeup application, along with a glamour photo and lunch sponsored by generous

donors and local businesses. The Aveda Salon and their students also charitably donate their time and efforts each year for this great event. Parents of the girls received chair massages and hand and arm massages while the girls had their hair, makeup and nails done. Glamour Day allows these children to feel special and to feel good about themselves. This was the fourth annual event that broke their attendance record by attracting 42 girls this year to allow our "Little Victors" to have an awesome day.

Wonder Movie Screening Event

The Craniofacial Anomalies Program at C.S. Mott Children's Hospital was pleased to host a special viewing of the movie "Wonder" during the film's opening weekend. The community outreach initiative was made possible by a generous donation from the Coughlan family allowing us to invite school children from all across southeastern Michigan to see the movie, based on the bestselling novel, written by R.J. Palacio, which encourages kids to "choose kind," meaning choose to practice empathy, tolerance, inclusion, and patience. As part of our commitment to creating inclusive environments for children with differences, we sponsored both the movie screening and a book discussion at Carlyle Grill immediately following the movie.

In addition, and also thanks to a generous investment from the Coughlan family (One of our very own cranio-

facial families), the craniofacial program was pleased to donate copies of the book "Wonder" to public elementary schools and middle schools throughout Washtenaw, Livingston, Oakland and Wayne counties. Books were mailed out the last week of November. Drs. Buchman, Kasten, and Vercler have extended and supplemented the event and program to visit local classrooms to speak to schoolchildren and their teachers about the craniofacial program, birth anomalies, and the "wonders" of pediatric plastic surgery. Dr. Kasten was invited to give such a talk in Escanaba, Michigan where one of our craniofacial patient's go to school. The local newspaper was there and the community was amazingly excited and grateful for the outreach.

Craniofacial Acceptance Month & Awareness Picnic



Natalie Wombacher, our speech pathologist, with the help of Drs. Buchman, Kasten, and Vercler, was successful in securing September as Craniofacial Acceptance Month as signed by Gov. Snyder. The State of Michigan joined several other states in celebrating and recognizing patients and families with craniofacial differences. During the team evaluations in the month of September, the patients posed for

pictures with the surgeons, participated in a pizza party, and a craft. The Craniofacial Anomalies Program capped off the month of September by hosting a picnic for our families.

2018 Craniofacial Anomalies Program Boys' Baseball Event



The Craniofacial Anomalies Program partnered with the University of Michigan baseball team in order to host an outing for patients and their families. The day was made all the more special when the patients and their families were able to meet with Jackson Lamb at the event. Jackson is a former patient of Dr. Buchman's who was recruited to the University of Michigan as a pitcher. Jackson was a pivotal component to the event this year as he helped to insure that the boys had an opportunity to run the bases and get the autographs of the players. This event is hosted in order to allow our patients to have interactions with each other as well as their surgeons away from the clinical setting. Additionally, Jackson serves as positive role model in that having a cleft lip and palate does not prevent you from dreaming big and achieving your goals!

MEDICAL MISSIONS)



This year marks my 20th medical mission to South America and my 19th to Cartagena, Colombia. On all but one mission I have hosted a University of Michigan plastic surgery resident. This past February, I had the pleasure of hosting Dr. Russell Ettinger, our current administrative chief resident. Our mission is sponsored by Healing the Children, Northeast, a non-profit NGO that provides logistical support for about 12 missions a year. All missions serve a pediatric population.

As is our custom, we arrived in Cartagena on a Wednesday afternoon meeting up with our Boston team members. After another unusually easy interaction with Colombian Customs, our hosts, the Rotary Club of Cartagena, provided bus transportation to our hotel. The next day we screened approximately 150 children, most of whom were pre-screened by our plastic surgery and pediatric colleagues in Colombia. We were able to accommodate 62 surgical cases and chose these patients very carefully. As you can imagine, it is very difficult to deny any of these children the opportunity for

a better life. I have learned over the years, however, that accepting an impossible case load ends up being detrimental to successful mission outcomes.

This year we screened and operated at a new and different facility. This was only the second change of facility in my 20-year experience. Our new facility, the Clinic Del Mar is affiliated with the Universidad Del Sinu and has an associated Medical School, Dental School, and several allied health professional programs. The facility turned



out to be more modern and better equipped than our previous ones. While teaching local health professionals has always been a part of our mandate, this year we established a more organized approach and participated in a half day seminar on the Universidad Del Sinu's main campus in Cartagena. Dr. Ettinger and I, as well as several

other team members, spoke to an audience of about 250 on topics primarily concerning cleft lip and palate. We were joined by speakers from the university's medical faculty. This year we added Natalie Wombacher, a speech pathologist who works with the pediatric cranio-facial group at the Mott Children's Hospital, to the team. Natalie worked with our patient's and their families to foster better acquisition of speech and also laid the groundwork for future cooperative telemedical interaction to facilitate the care of our patients throughout the year. We also welcomed Joshua Peterson an M4 who began a questionnaire-based study last year concerning the availability of health care in Colombia. This year he was able to expand the study with personal interviews looking deeper into the barriers of care in this part of the world. We hope to further expand the study base by extending it to other Healing the Children sponsored missions to other Colombian locations.

Our case load this year was similar to previous years centering around the treatment of cleft lip and palate. We also saw children with congenital hand anomalies, burn deformities and other congenital, traumatic and disease related deformities. This year's team consisted of 21 members split between the University of Michigan and Harvard University. This year's Michigan contingent included myself as the overall team leader, Dr. Russell Ettinger, Administrative Chief Resident in Plastic Surgery,

Samara Sobh, a surgical technologist at Mott, Natalie Hecht, a PICU NP at Mott, Danielle Van Damme, also a PICU NP at Mott, Natalie Wombacher, a speech pathologist at Mott and Joshua Peterson, M4, from the University of Michigan Medical School. We operate for six days leaving the hotel at 7 am and usually returning around 7-8 pm. I had arranged the schedule so that we operate for three days, take one day off and then operate for another three days. This allows the team to rejuvenate on the day off and helps to avoid team "burn out". As I mentioned earlier, several of us used our off day to participate in the educational seminar at the University.

This year we were able to complete 62 surgeries bringing our 20-year total to nearly 1100.

I am committed to continue this experience for our residents in the years to come. As a section, we are committed to provide a global medical experience for all our residents. I expect to soon pick the dates for our next mission in February of 2019.

- Robert Gilman, MD, DDS

For the third year, Dr. David Brown and a chief resident traveled to Lviv, Ukraine as part of a collaborative, multi-institution, mission trip treating pediatric burn injuries. Lviv is the largest city in western Ukraine and is considered to be its cultural capital. The city itself is full of theaters, conference halls, and beautiful European architecture reflecting Ukraine's rich heritage. Unfortunately, the western part of the country remains war-torn, and due to the current medical infrastructure, secondary burn reconstruction and care is not available to the majority of burn victims. This in fact is a global issue, which has led to World Health Organization to describe burn injuries as the "forgotten global health crisis." Given the paucity of care, the organization "Doctors Collaborating to Help Children", established this medical mission trip to Lviv. This trip is led by an anesthesiologist from Shriners' Hospital in Boston, and includes two other plastic surgeons, a nurse from Boston, and an anesthesiologist from Washington University on St. Louis. Hosted by the local medical center and assisted by Ukrainian medical staff, the group evaluated more than 100 children, performed upwards of 50 operations, and implemented laser therapy for scar rehabilitation on 40 patients, all in the course of one week. Additionally, the group hosted educational lecture sessions and worked in concert with Ukrainian residents and surgeons, who traveled to Lviv to learn new surgical techniques, to improve burn care and scar rehabilitation. This trip has successfully improved the lives of many children over the years and is a very fulfilling experience for all the medical staff involved.



Dr. Brown with Ukrainian surgical resident, Svitvosar Khalak.



Drs. Kevin Chung and Brian Kelley operating

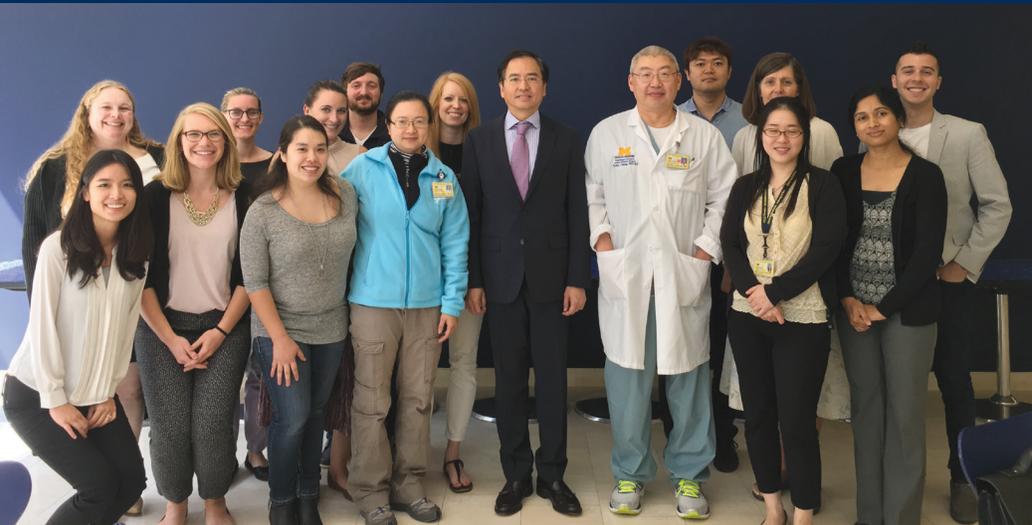
As part of the hand fellowship experience at the University of Michigan, along with support from ReSurge International, Dr. Chung and Brian Kelley had the opportunity to complete an educational service trip to Hanoi, Vietnam. Invited by Dr. James Chang, Medical Director for ReSurg, formerly InterPlast, Dr. Nguyen Quang Trung, the medical director at Vien Chinh Hinh Hospital, was the primary organizer of the trip. The hospital is an open-air building with up to 10 beds per room, with approximately one hundred beds in total. There were two operating rooms that were well maintained, but certainly under-supplied. Specifically, the request was to receive educational support for congenital hand patients who were under-treated, especially in the northern mountainous regions of Vietnam. These rank amongst the most under-served areas of the world according to the World Health Organization. At this hospital, there were no surgeons with dedicated hand training. Dr. Trung and his colleagues are excellent surgeons specializing in a variety of orthopedic conditions but lacked advanced training in these complex hand operations.

During the trip, we saw 25 patients and 11 were selected for surgery during the four-day visit. Wind-blown hand, radial deficiency, clasped or duplicated thumbs, camptodactyly, Apert syndrome, and elbow arthrogyposis were just some of the disorders seen. The children were pre-operatively screened, and the care was excellent - not surprising given our impression of the local team. The hospital and the Vietnam Health Ministry donated the hospital time and surgical care of these patients in cooperation with some assistance from ReSurg - incredibly, this was estimated at only \$200-400 per patient, including a week of admission to the hospital. Performing surgery in a poor, urban Vietnamese hospital is, as expected, a completely different experience. There were no fine instruments, this being an orthopedic hospital that typically treats automotive or industrial injuries. None of the local surgeons could afford loupes for magnification. There were no fiberglass casts or pre-packaged sterile dressings. There were only Vicryl and nylon sutures in limited sizes. The "K-wire driver," and I use the term loosely, was a common, household drill.

Despite these limitations, we were impressed with the collaborative interactions amongst the medical team to keep the operations running smoothly. Room turnover was careful and efficient. Nurses made plaster casts between surgeries in the anteroom while the room was cleaned and the next patient readied. The casts were meticulously inspected by the surgeons between cases, and there was no hesitation if they needed to be adjusted or remade. Gowns were washed and hung to be reused again the next day. The two drills were bathed in disinfectant between operations and cleaned. The unused wires were sterilized to be available again.

It was amazing and humbling for me to see healthcare delivered on an entirely different scale. The facets of this care are hard to reconcile when compared to Western medical expectations. It is difficult to imagine acceptance of a family-centered care system in the US, where one's family was also expected to be your nursing staff. Amazing, though, this was incredibly effective in Vietnam and the buy-in from these families was high. Drs Chung and Kelley are planning to return to Hanoi to continue this emerging relationship. - Brian Kelley, MD

RESEARCH ENTERPRISE)



M-CHOIR STAFF

Left to right: Catherine Lu, Melissa Shauver, Helen Huetteman, Chelsea Harris, Jen Sterbenz, Carrie Kubiak, Michael Sorkin, Liz Qiu, Katelyn Bennett, Ming-Huei Cheng, Kevin Chung, Hidemasa Yoneda, Pat Burns, Esther Cho, Sunitha Malay, Jacob Nasser.

M-CHOIR

Michigan Center for Hand Outcome & Innovation Research

It was an exciting year for M-CHOIR in 2017. We published 54 manuscripts in 18 journals, in addition to publishing 4 textbooks. Our team was also awarded 7 grants. This year should be another productive year. We have already published 7 manuscripts and have submitted the first 2 manuscripts containing data from WRIST. This spring we will welcome a new research assistant, Sharon Kim. Sharon has been a hardworking volunteer on our team for two years and after she graduates from the University of Michigan in April (with a BS in Neuroscience and Spanish) she will work with us full-time for two years, gaining both research and clinical skills. Sharon will join Jacob Nasser, BS, who is beginning his second year as an MCHOIR Research Assistant. We are sad, but proud, to say goodbye to Meghan Lark, BS, Helen Huetteman, BS, and Jennifer Sterbenz, BS. Meghan left us in 2017. She published 5 manuscripts in her time with us and has assisted with two more since. This fall she will start her M2 year at the University of Toledo College of Medicine. Helen

will be attending Oakland University William Beaumont School of Medicine this fall. While on our team she published five manuscripts, one of which (The Desired Role of Health Care Providers in Guiding Older Patients with Distal Radius Fractures: A Qualitative Analysis) was selected for the Journal of Hand Surgery's monthly interview podcast. Jen, who published four manuscripts with us, will be moving to San Francisco to pursue a career as a pastry chef. If the treats she brought to the office are any indicator, we think she will be a success! We wish them all the best of luck! Finally, in 2018 we welcomed our first M-CHOIR baby! Catherine Lu and her husband welcomed a baby girl, Anna, on March 13, 2018.

Major projects

FRANCHISE: Finger Replantation and Amputation Challenges in assessing Impairment, Satisfaction, and Effectiveness is a retrospective study evaluating traumatic digit amputation patients. We have recruited 247 participants (175 replantation and 72 Revisions Amputation) so far. Currently, performing preliminary analysis to compare several patient-reported, functional, and sensory outcomes in these participants. We

intend to submit several manuscripts arising out of this study beginning this summer.

WRIST: All participants have complete 12-month follow-up assessment and we have begun data analysis. We have submitted two papers thus far and have several more in the works. We are excited to be sharing the results of our research after seven years of hard work!

M-CHOIR Alumni Highlights

Chelsea Harris, MD, MS – Dr. Harris graduated from the University of Vermont School of Medicine in 2014 and matched into General Surgery at the University of Maryland. After completing two clinical years in Maryland, Dr. Harris came to the University of Michigan to complete a T32 Fellowship with Dr. Chung in Health Services Research. Through this fellowship, Dr. Harris has earned a Masters of Science in Health and Health Care Research and has conducted multiple studies using mixed methods and complex survey methodology to investigate how patients' unique contexts and preference shape their preferences in hand surgery. In addition, Dr. Harris is also very active in scholarly and advocacy work to advance diversity, equity, and inclusion in medicine. Finally, as the Creative Director at Annals of Surgery, Dr. Harris has developed her skills as a leading expert in visual abstracts and research dissemination techniques. This summer, after completing her tenure as a research fellow she will return to the University of Maryland as a PGY-3.

Research Assistants – This spring two alumni research assistants will be graduating from medical school. Lauren Franzblau will graduate from the University of Michigan Medical School with a distinction in Medical Education. While a student, she developed a new course in medical ethics. She has matched in Internal Medicine at the University of Texas Southwestern.

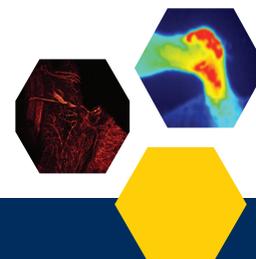
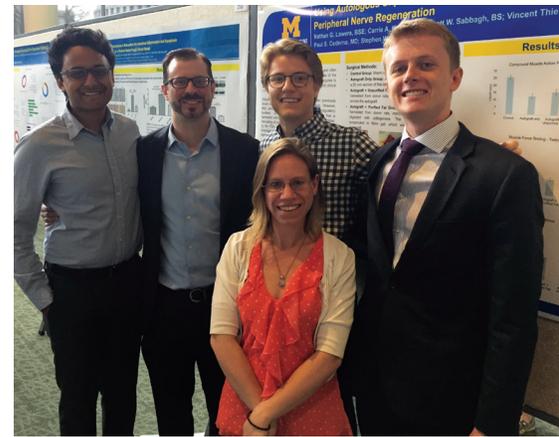
Dr. Franzblau began volunteering with M-CHOIR when she was a freshman at Pioneer High School. Over the years she published 12 manuscripts. Evan McGlinn will graduate from Wayne State University School of Medicine; he has matched in Emergency Medicine at Western Michigan University. During his time with us Dr. McGlinn published nine manuscripts and one chapter.

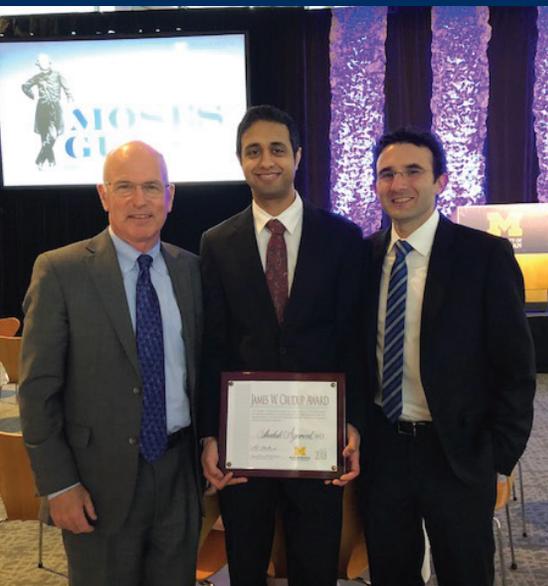
Medical Students – Michael Nolte and Peter Swiatek both had prolific tenures at M-CHOIR while students at the University of Michigan Medical School. Dr. Nolte published six manuscripts, one of which (Effect of Policy Change on the Use of Long-Distance Transport and Follow-Up Care for Patients with Traumatic Finger Amputations) was presented at the 2016 Annual Meeting of the American Society for Surgery of the Hand. Dr. Nolte graduated in 2017 and this summer will begin his 2nd year as an orthopaedic surgery resident at Rush University Medical Center. Dr. Swiatek published seven manuscripts, including one presented at the 2016 ASSH meeting (National Practice and Impact of Preoperative Electrodiagnostic Studies for Carpal Tunnel Syndrome) and one presented at the 2018 Annual Meeting of Plastic Surgery Research Council (Utilization of mammography prior to elective breast surgery: A national claim-based analysis). Dr. Swiatek graduated in 2018 and has matched in Orthopaedic Surgery at Northwestern University. He got married in May 2018.

NEUROMUSCULAR LABORATORY

The Neuromuscular Laboratory under the direction of Stephen Kemp, Ph.D and Paul Cederna, MD, had a highly successful and productive year. The core program of the NML involves the use of regenerative peripheral nerve interfaces (RPNIs) for both enhancing functional control of prosthetic devices, and for relief of painful neuromas. This

year saw our first patient implanted with electrodes within their RPNIs, a first at the University of Michigan. Secondary research interests in the lab include utilizing fat grafting to enhance regeneration following nerve injury, using biological nerve cuffs to power exoskeletons, and the effect of GABAergic drugs on depression following chronic nerve injury. Dr. Carrie Kubiak (post-doctoral fellow in the lab) won joint outstanding papers at both the European Plastic Surgery Research Council and The American Society for Peripheral Nerve annual meetings. These awards are highly prestigious within each respective society, and a testament to the work performed by Dr. Kubiak in the lab. Several high quality papers were published by the lab in both top rated plastic surgery and neural engineering journals, including a seminal RPNI paper published in JAMA Surgery. An IDE and several patents were approved during the past year based on the innovative work performed by the NML research team and collaborators from biomedical engineering mechanical engineering, material science, neurosurgery, and physiology. The NML team continues to have a diverse portfolio of funding from agencies such as the Defense Advanced Research Projects Agency (DARPA), National Institute of Health (NIH), Congressionally Directed Medical Research Program (CDMRP), and the Plastic Surgery Foundation (PSF). Collectively, the NML has received over \$2.5 million in research funding over the past year and a half. Trainees in the lab include postdoctoral fellows, medical students, graduate students, and undergraduate students. The lab is looking forward to continuing its high degree of research excellence and collaboration in the upcoming year.





MOSES GUNN RESEARCH SYMPOSIUM
Left to right: Drs. Michael Mulholland, Shailesh Agarwal, Benjamin Levi

BURN/WOUND & REGENERATIVE MEDICINE LABORATORY

The Burn/Wound and Regenerative Medicine Laboratory had a very exciting and successful year in 2017/2018. We had a reunion of Stanford trainees and faculty as Michael Sorkin, MD, joined our laboratory to reunite with Shuli Li, PhD, John Li, and Benjamin Levi, MD. They had previously worked together 7 years ago at Stanford and now we are reunited at Michigan. This allowed for fun stories, innovative research, and success. Michael Sorkin, MD added a new dimension to the laboratory with his expertise in flow cytometry and wound healing biology. He has been incredibly successful with presentations at the Plastic Surgery Research Council, Gordon Research Conference, and American Society for clinical investigation. More important than his success in the laboratory was

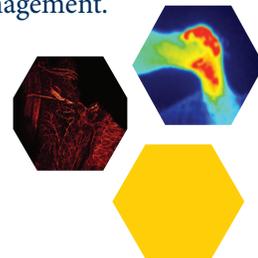
his success personally as he recently got married this past year. His family both in and out the laboratory is extremely proud of Mike and all he has accomplished and look forward to seeing his continued success both in the laboratory and out.

Additionally, this success this past year can be attributed to the addition of Kaetlin Vasquez as our laboratory manager. She comes to us from the Compliance Offices here at University of Michigan with a background in Veterinary Medicine. Her work ethic, leadership, knowledge, and organization have helped keep everyone on track and compliant with the ever changing landscapes of University of Michigan Research. Her central role in the laboratory cannot be understated as she has improved the overall culture in the laboratory. Outside the laboratory she also continues to run a busy house with three wonderful children and many pets ranging from dogs to cats to goats. Charles Hwang joined the laboratory full time this past year after receiving the prestigious Howard Hughes Medical Investigator Award. Charles has been working in the laboratory since his M1 year with an expertise in CT analytics. This past year, however, he has expanded this into other areas, including immunofluorescent imaging, flow cytometry, and mouse genetics. He has traveled around the country presenting his outstanding work and received multiple awards, including his second year of Howard Hughes Medical Investigator Award and the Moses Gunn Best Poster Award. He continues to excel in all aspects of the laboratory and is well liked by all and is an outstanding teacher.

Additional personnel who have made an outstanding contribution to the

laboratory include Noelle Visser who comes to us from the University of Indiana with expertise in Molecular Biology. Keiko Kaneko, who has an expertise and PhD in Bone Biology from Rochester and recently comes to us from Washington University and Amanda Huber with expertise in Immunology from the Department of Immunology here at the University of Michigan. Finally, our breeding core manager who keeps everything together, Karen Kessel, with over 10 years of experience here at the University of Michigan as a breeding core manager.

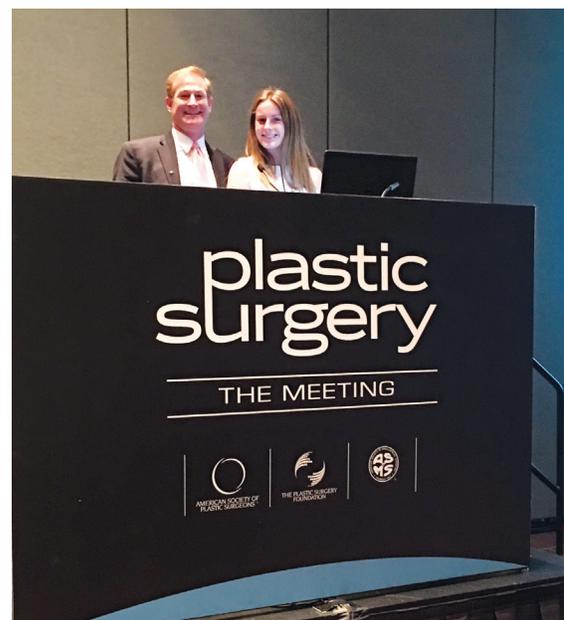
We have had many fun laboratory outings this past year, including trips to Menlo Innovations, multiple restaurant around Ann Arbor, bowling, and upcoming registration of our laboratory in the Dexter/Ann Arbor race. Shuli Li, PhD, and John Li remain pillars of the laboratory. Shailesh Agarwal, MD, was awarded the Crudapp Award as a most accomplished senior resident in research for his outstanding performance in the laboratory. Several recent undergraduates also were accepted into their medical schools of choice, including University of Michigan. We look forward to continuing to mentor young surgeon scientists and helping them innovate and make breakthroughs from bench to bedside to improve overall patient care. Work from these talented young scientists have already led to clinical trials for children with previously untreatable rare disease and have changed protocols across the country in burn management.



CRANIOFACIAL RESEARCH LABORATORY

The Craniofacial Research Laboratory, under the direction of Dr. Steven Buchman, has been very productive working on understanding bone healing and regeneration in the context of craniofacial surgery. The lab currently has one part time high school student, 12 part time undergraduates, one full time plastic surgery resident outcomes research fellow, one full time general surgery lab fellow, two gap year post baccalaureate research fellows, two part time medical students, a full time master's student research fellow and a full time surgical research fellow. The lab has been successful at winning grants from the NIH as well as outside philanthropies which help immensely to underwrite some of the creative research being performed. The lab currently has an NIH R01, faculty status on two NIH P30 grant, and recently Dr. Buchman was awarded salary support as a faculty member as well as a separate sub grant awardee from an NIH U24 Consortium grant consisting of the "Michigan-Pittsburgh-Harvard Wyss Resource Center: Supporting Regenerative Technologies in Dental, Oral, and Craniofacial Technologies". In addition, the lab has won a PSF National Endowment for Plastic Surgery foundation Grant Award. Some exciting new technological advances have been developed in the lab resulting in the filing of U.S. Provisional Patent as well as a grant from the U-M Michigan Translation and Commercialization for Life Sciences Program (U-M MTRAC) & Fast Forward Medical Innovation Program. Work from the laboratory resulted in a Henry Kawamoto Best Paper Award given to Russell Ettinger, MD, for his podium presentation at the National American Cleft and

Craniofacial Meeting given in Colorado Springs. Finally, the work in the laboratory resulted in 35 presentations at local, regional and national meetings and 20 peer reviewed publications in scientific journals over the last year. Katelyn Bennett, MD, was awarded her own hyper-competitive NIH F-32 National Research Service Award to look at patient reported outcomes to measure pediatric facial appearance. She will work with both Dr. Waljee and Dr. Buchman to perform cutting edge of health services related research to pediatric and craniofacial patients. The work by both Dr. Bennett and Dr. Kavitha Ranganathan is helping to brand the University of Michigan Craniofacial Program one of the national leaders in pediatric and craniofacial outcomes research. The Section of Plastic Surgery continues to administer an NIH T-32 training grant under the direction of Dr. Steven Buchman (PI) and Dr. Kevin Chung (Co-PI) entitled: "Surgical Scientist Training Grant in Health Services and Translational Research". It is the only such grant awarded to a plastic surgery academic program in the country. The grant trains both a surgical basic scientist and an outcomes scientist to become physician scientist in Translational Research and Health Services respectively. The former emphasizes translating scientific discoveries from the research bench to the patient's bedside, whereas the latter centers on determining the efficacy of therapeutic interventions to improve clinical outcomes. Our very own Carrie Kubiak, MD, was awarded a basic/translational position in Dr. Paul Cederna's Lab under the auspices of the T-32 for the next two years. Chelsea Harris MD, a general surgeon from the University of Maryland, is finishing her second and final year of the outcomes side of the training grant: in Dr. Chung's research group.





If you would like to **MAKE A DONATION** to our wonderful program, please contact Matt Douponce at mdoupo@umich.edu or 734-763-5392