

Leaders in microsurgery and reconstruction

Spring-Summer 2020

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Reconstructive Microsurgery

THE AMERICAN SOCIETY FOR RECONSTRUCTIVE MICROSURGERY • VOLUME 31.1

What's New in Reconstructive Microsurgery?



Amir H. Dorafshar MD, FACS, FAAP 2020 Scientific Program Chair

HIGHLIGHTS OF SCIENTIFIC PROGRAM 2020

eems like an eternity has passed since we were all enjoying the ASRM meeting in January 2020. The extraordinary times we currently face with the COVID-19 crisis have left us fond memories of a wonderful ASRM 2020 meeting in Florida.

We kick-started the meeting with a pre-conference industry sponsored workshop on mandibular reconstruc-

Below from left: Attendees listening intently in the lecture hall; ASRM/ASPN Invited Speaker Andrew Feustel, PhD, explored the relationship between NASA and plastic surgery; a perfect score for a Best Case/Best Save presentation. tion using computer aided design and manufacturing. We then combined the American Society of Lymphatic Surgery and the World Society of Reconstructive Microsurgery pre-symposium meetings to focus on "What's New in Lymphatic Surgery." Concepts and outcomes following LYMPHA (Lymphatic Microsurgical Preventative Healing) or otherwise known as "primary lymphatic reconstruction surgery," at the time of mastectomy

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Incoming ASRM president Guenter Germann, MD (right) accepts congratulations from outgoing president Lawrence Gottlieb, MD.



FROM THE EDITOR

Problem Solving and Beyond



Babak J. Mehrara, MD ASRM Secretary, RM Editor

want to welcome everyone to this edition of *Reconstructive Microsurgery*. As many of you have noticed, this newsletter has grown significantly in size and scope and nicely summarizes many of the initiatives and programs of our society.

The world has changed since our last meeting with the emergence of COVID-19 and the pandemic that has touched all of our lives. We all know people who have suffered from this disease and many of us, unfortunately, know people who have succumbed to it. Hundreds of physicians, nurses, physicians assistants and other medical professionals all around the globe died from complications of COVID-19. Many of our members were redeployed and helped with the care of the enormous number of patients that flooded our hospitals. Putting themselves at personal risk, these selfless and brave individuals represent all that is good in our society.

This has been a humbling experience. Humbling that in 2020, the world is brought to its knees by a virus with a genome spanning just 30 kilobases—for reference, the human genome is 3 million times bigger. Humbling that in 2020, our most advanced medical advice is social distancing, avoid touching your face, and hand washing. I don't mean to minimize the importance of these approaches, but it is astounding how little our medical system has advanced in some areas since the last global influenza pandemic in 1918. I hope that ongoing research projects discover novel treatments and preventative options for this disease so that we can return to our jobs of helping patients.

For many of us, a significant portion of our practice has been sidelined. Although the importance of cancer reconstruction and microsurgery is undisputed, these procedures have been deemed "non-essential" in some areas during this difficult time. As a result, many of us have had to make difficult decisions and have uncomfortable discussions with our patients. I hope that we can use this experience for a positive purpose. Perhaps we can use this unusual and external negative experience as a means of evaluating the importance of reconstructive microsurgery.

"[After the emergence of COVID-19] many of our members were redeployed and helped with the care of the enormous number of patients that flooded our hospitals."

Given the events that have occurred this spring, it is difficult to imagine a time when we will be able to meet again in a large gathering such as our annual ASRM meeting. However, we anticipate that travel restrictions and meeting restrictions will be lifted in the next 6-9 months enabling us to proceed. The planning for our annual meeting has progressed nicely under the leadership of our President Dr. Guenter Germann and his Scientific Chairs Aldona Spiegel and Bauback Safa. The scientific Committee is planning an exciting meeting with emphasis on scientific evidence. This

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RECONSTRUCTIVE MICROSURGERY

Spring-Summer 2020

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The mission of the American Society for Reconstructive Microsurgery is to foster excellence and innovation in microsurgery and reconstructive surgery. ASRM upholds the values of Integrity, Collegiality, Scholarship and Innovation.

PRESIDENT'S MESSAGE

Dear Fellow Members



Guenter Germann, MD ASRM President

t is a great honor to serve as the President of ASRM and as the first foreign member elected into this position. First off, I want to thank our past president Larry Gottlieb and program chair Amir Dorafshar for an excellent meeting that took place in Fort Lauderdale in January. It was a meeting full of exciting science and encounters among friends. It was an atmosphere where we all did not anticipate how a new disease was about to change our lives.

This disease, not taken too seriously by many countries in the beginning, holds the world in its firm, relentless grip. The SARS/COV2 (COVID 19) virus apparently originated in the Chinese province of Hubei and was considered a local or Asian disease until its spread around the globe at galloping speed.

Europe became the new epicenter of the pandemic ravaging through southern areas, especially Italy and Spain. The death toll in these countries reached more than 28,000 in Spain, almost 37,000 in the UK, and more than 32,000 in Italy with approximately 220,000-260,000 people infected respectively. My home country, Germany, accounted for approximately 180,000 infected people with a death toll of 8,275 as of May 24, 2020. Unfortunately, the USA has now become the epicenter of the pandemic with more than 2,424,000 people positively tested, and over 123,000 deaths.

What do these frightening numbers mean to our organization in an environment where the world has come to an almost complete standstill in many countries and a new normality has set in?

Well, the impact on the ASRM membership is severe. Many hospitals, in which our members work, still only allow urgent and emergency cases, and a return to a full normal schedule is not in sight in many states.

In light of these developments, ASRM has postponed all traveling fellowships, (i.e. Godina Fellowship, Zamboni Visiting Professors, and MicroSurge Visiting Educators) to the year 2021. The council believes every colleague is entitled to enjoy the full privileges of these prestigious awards and that they should not be impaired by travel restrictions, no visitor policies, etc...

Despite these circumstances, there is much good news to report. We have a strong agenda for the coming year.

The most important project in my eyes is the challenge to build a new website that meets the requirement of a modern responsive communication platform for our members and patients. Evan Matros is doing a fantastic job with all of the Website Task Force members in pushing this large undertaking forward. In the upcoming weeks, the task force will be soliciting materials from the member-

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"ASRM has a strong agenda for the coming year: we're building a new website, revamping our social media activities, and the first joint ASRM/ ALAM webinar will be held in August."

Outgoing President Lawrence Gottlieb, MD (left) and incoming President Guenter Germann, MD (right) recognize Dr. Amir Dorafshar for his service as the 2020 Scientific Program Chair



PRESIDENT'S MESSAGE

Continued from page 3

ship to "fill in" the new website canvas. This will include images from past meetings, personal images of yourself to include on your account page and for committees, information on fellowships and training courses, as well as research interests. Please respond to these requests as fast as possible as it will be critical to the success of the website.

We are also revamping our social media activities by enlisting younger members into a new Social Media Task Force. Melissa Poh and her team are working with unbelievable enthusiasm to ensure that ASRM is on "top of the social media ballgame."

Another new venture is the first ASRM/ALAM webinar that will be organized by our South American colleagues in August and will definitely expand the range of our society. Bauback Safa is our "liaison officer" and we think that this virtual meeting will be a great success.

ASRM is constantly growing. The number of new applications reviewed by the Membership Committee will raise our member numbers to 1,012. This speaks for the attractivity of our society.

The Program Committee, with Aldona Spiegel, Bauback Safa and Dirk Schäfer from the European side, as well as Krista Greco and her team and the entire Council, is working on our 2021 Annual Meeting in Kauai. However, we were not able to go for a site check in early April, due to widespread travel restrictions.

We all hope that the tidal wave of new infections will be over soon and countries can return to normal, but projections are difficult to determine, especially since scientists assume that the peak has not been reached and we have to expect a second wave. Let me assure you that at the moment, our brilliant staff and committees are continuing to function to create a memorable meeting in January.

As the President of our organization, I wish you all the best for the coming summer. Take care, adopt protective measures, stay healthy, and we all hope we'll come together once again in Kauai. **RM**



Our esteemed leaders reconnect during the Past Presidents Breakfast. (Back row left to right) Ronald Zuker, MD; Michael Neumeister, MD; Randy Sherman, MD; L. Scott Levin, MD; David W. Chang, MD; Lawrence Gottlieb, MD; William C. Pederson, MD; Joseph Serletti, MD. (Front row left to right) Peter Neligan, MD; Lawrence Colen, MD; William Swartz, MD; Robert Russell, MD; David T.W. Chiu, MD

FROM THE EDITOR

Continued from page 3

will be an exciting and memorable program in Hawaii.

In this edition of *Reconstructive Microsurgery,* you will also find a welcome letter from our incoming president, Dr. Guenter Germann, as well as highlights and photos from the 2020 meeting in Ft. Lauderdale. I want to congratulate our immediate past president, Dr. Lawrence Gottlieb and his



Dr. Bauback Safa (left) shares his techniques during a "Sewing with the Masters" session.

scientific program chair Dr. Amir Dorafshar on a successful and highly enjoyable meeting. The scientific committee did a fantastic job planning the program and set a high bar for our upcoming program.

The ASRM is also excited to announce that our website will be getting a fresh look that includes a more user-friendly interface and comprehensive materials. You will find details on the plans for the redesigned site and progress of development on page 6.

I hope that this issue of *Reconstructive Microsurgery* will build excitement for our next annual meeting and that you all take care until we meet again. **RM**

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TRUSTEE Charles Butler, MD

SOCIETY NEWS

Website Task Force Forging Ahead



Evan Matros, MD

Reporting on behalf of the Website Task Force

ne of the major initiatives of ASRM for the 2020 calendar year has been to update the organization's website (https://www.microsurg. org/) with a fresh look, more user-friendly interface and comprehensive materials. In order to accomplish this large undertaking, Dr. Germann has put together a Website Task Force composed of the membership.

The task force had its first group call this winter to review the current website, identify areas for improvement, and develop novel ideas along with areas for future growth. As an initial step, to better understand how the membership is currently using the website, a traffic report was obtained from the existing website vendor. Heavy traffic was identified on the meeting, fellowship and physician search tabs as well to a lesser degree on information for patients. All members on the task force also carefully evaluated each section of the current website content and user interface.

There was universal acknowledgement that the website should not only be accessible from a laptop, but easier to use from a cell phone or tablet platform. This is also known as a "responsive" website. There was agreement to make the member log in tab more easily identifiable on the landing page



and with enhanced functionality, including current and past dues and donations, as well as active committee membership. Overall there was a consensus to minimize text throughout the website in exchange for more visual ways of introducing materials, including images, figures and videos in some sections. Suggestions were also made to expand information about the organization's history to include the founding members as well as develop an interactive timeline of key events or firsts in microsurgery. Lastly, the area of the website identified to have the most potential for growth was the education section. The task force agreed not to create new materials. but to be a resource to easily locate and identify areas for knowledge about microsurgery. This will include better access to the Master Series videos from previous years' meetings, links to other educational websites, as a well as hyperlinks to landmark articles in microsurgery.

The Website Task Force has divided into sub-teams to further develop the areas described as well as others. The task force has also benefitted greatly from the bright ideas and input of our resident members Katie Egan (University of Kansas) and Francesco Egro (University of Pittsburgh). These individuals provide a modern perspective and have done much of the early heavy lifting for this

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SOCIETY NEWS

WEBSITE TASK FORCE Continued

major undertaking. Simultaneously to material and content development, Dr. Germann and Krista Greco are working behind the scenes with the existing and other website vendors to solicit competitive bids for the rebuild.

The ASRM website would not be complete if it did not reflect the interests and contain materials of our members. In the upcoming weeks, the Website Task Force will be soliciting materials from the membership to "fill in" the new website canvas. This will include images from past meetings, personal images of yourself to include on your account page and for committees, information on fellowships and training courses as well as research interests. Please respond to these requests as fast as possible as it will be critical to the success of the website.

ASRM is on Social Media!! Keep informed and up to date!



Instagram @asrm_micro



Twitter @asrm_micro

G

Facebook group: American Society for Reconstructive Microsurgery

Email **ASRMposts@gmail.com** with questions or content for posting!

AMERICAN SOCIETY FOR RECONSTRUCTIVE MICROSURGERY

Welcome New Members

ACTIVE

Andrew Altman, MD *Temple, TX*

Bjorn Behr, MD Bochum, Germany

Cagri Cakmakoglu, MD *Cleveland, OH*

John M. Felder, MD St. Louis, MO

Ruben Yap Kannan, MD East Grinstead, UK

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Amber R. Leis, MD Orange, CA

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Genevieve Mercier-Couture, MD *Quebec, Canada*

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Andrew Watt, MD San Francisco, CA

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Eleanor Bucholz, MD Kansas City, KS

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Brian Kelley, MD Austin, TX

Nicholas Thu Khoa, MD *Taoyuan, Taiwan*

Adam Levy, MD New York, NY

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Travis Joseph Miller, MD *Palo Alto, CA*



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Brady Sieber, MD Boston, MA

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Nicholas D. Webster, MD *Temple, TX*

Kyle Y. Xu, MD St. Louis, MO

MICROSURGICAL PEARLS

Patient Consultation: No Simple Little Chat



Michele Manahan, MD, MBA, FACS Education Committee Chair

Greetings from the Education Committee. I hope the following will serve as a pearl that will give you joy as you consider the color, sheen, and beauty of our profession.

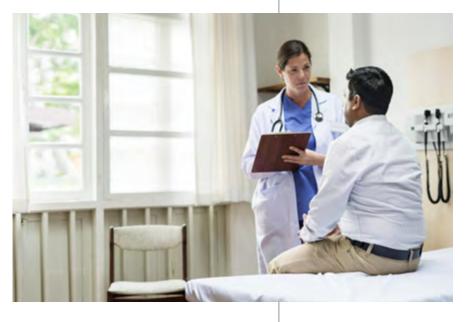
In a few paragraphs, it might be worth considering who we truly are as surgeons, and by extension, who we train to be. In contrast to our less procedurally-oriented colleagues, we are expected to have unerring hands with precision skills, as well as to have razorsharp minds capable of fine diagnosis and reasoning. It's the second skill that we'll ponder today as it seems most of our literature deals more with the technical side of our chosen profession.

When given the time and space to think, we would probably all agree that the preoperative consultation, with its inherent patient education, deductive reasoning, and problem-solving, is no simple little chat. We are given preciously small amounts of time to meet strangers in their times of distress and critical need. We must nearly instantaneously read the emotional environment, determine the level of existing understanding of our patients, deduce the best teaching and interpersonal style, and deliver this flawlessly. While we are morphing ourselves to fit the mold expected by our patients, we must in parallel be analyzing physical examination findings, comorbid histories, and risk factors. We must then devise a complex plan with alternatives and back-ups. We must also communicate the entirety and engage fully enough

to answer not just spoken, but implied, questions from our patients.

How do we learn to become these scions of interpersonal skills and medical knowledge? I have to believe some of it is innate. Those who enjoy these challenges are drawn to reconstructive plastic surgery. Another large chunk of our education in these areas filters down to us as we sit at the knees of our mentors, the greats of our field. Apprenticeship models must continue to have a place in our training. I know I'll never forget the memory of the first time I shadowed someone delivering a new cancer diagnosis to a patient. Now, in this modern age of highly technical digital communications, so fondly

"We must nearly instantaneously read the emotional environment, determine the level of existing understanding of our patients, deduce the best teaching and interpersonal style, and deliver this [in a consultation] flawlessly."



known as "social media," I expect we will all continue to have greater access to the deepest thoughts and innermost feelings of our society. We may more easily track trends. We may more readily adapt to new needs. We will certainly be more exposed to myriad communication styles that resonate (and many that do not).

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PEARLS Continued

I just wanted to give anyone reading this column a tiny bit of time and space to step back, to think about the amazing process of getting to know our patients, and to be proud to be such an amazing representative of the medical profession. I hope this reminder about the non-technical expertise that is so critical to reconstructive plastic surgery will inspire those newest to our numbers and serve as a thank you to the many truly great and caring plastic surgeons who make up our numbers now and since the inception of this field. We are all challenged to educate ourselves daily in the interpersonal side of our profession so that we continue to grow not just as technical surgeons, but as healing physicians. **RM**

OUTREACH COMMITTEE REPORT

Visiting Educator Program Makes It Easier to Serve



David Chang, MD Outreach Committee Ex-Officio Chair

t was a great honor for me to serve as the Chair of the Outreach Committee in 2019. This is a committee that I formed as the President of ASRM in 2017 to "encourage, foster and make it easier" for our members to engage in various serving opportunities nationally and globally. To initiate this effort, we partnered with ReSurge (CMO James Chang) to create the MicroSurge Visiting Educator program that brings our

members' skills to those in need around the world. From the beginning there has been tremendous interest from our members to serve as a MicroSurge Visiting Educator. In the inaugural year (2018) Dr. Steve Bonawitz and Dr. Albert Chao were selected for Nepal and Vietnam respectfully. In 2019, Dr. Evan Matros (Nepal) and Dr. Hani Sbitany (Vietnam) participated as the Visiting Educators. For 2020, please join me in congratulating and thanking Drs. Stefan Hofer (Nepal) and Pierre Chevray (Vietnam) as our next MicroSurge Visiting Educators.

I would like thank all of our MicroSurge Visiting Educators for volunteering their time and

Member Spotlight

Congratulations to Dr. Stefan Hofer and Dr. Pierre Chevray on being selected as the 2020 ASEM MicroSurge Visiting Educators. Stefan Hofer, MD, PhD will be visiting Nepal. Pierre Chevray, MD, PhD will be visiting Vietnam. However, due to the pandemic, the tours of duty that were originally scheduled to begin this spring have been postponed until 2021. We wish Drs. Hofer and Chevray all the best as they wait until such time that they can safely embark on their missions.

MicroSurge is the joint clinical outreach program of ASRM and ReSurge International whose goal is to provide reconstructive surgical care for children and adults who lack access and build surgical capacity in developing countries. It provides ASRM members the opportunity to fulfill this goal and serve on short term surgical missions to underserved communities.

For information on this program, visit www.microsurg.org.



Stephan Hofer, MD, PhD



Pierre Chevray, MD, PhD

sharing their skills and knowledge to help educate and train local surgeons in reconstructive microsurgery. I would encourage all our members to volunteer for this or other similar opportunities. I would like to thank our partner **ReSurge and express** my special gratitude to Synovis and Mitaka-USA for sponsoring this program. **RM**

MEETING HIGHLIGHTS *Continued from page 1*

to secondary reconstruction following the onset of lymphedema were discussed and vigorously debated. This was followed by the Masters Series in Microsurgery, which helped us to understand what it takes to become successful in our practices with a series of inspirational TED style talks on "Building Blocks of Success" from experts around the country.

The ASRM break out panels were extremely well attended this year. The theme of the meeting was "Excellence Beyond Technique: Thought Process"; we wanted to highlight controversies in treatment and increase the discussion between the panelists and the participants. We covered a broad range of reconstructive surgical

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Eduardo Rodriguez, MD addresses the attendees during the Master Series in Microsurgery.



Fellow Microsurge Visiting Educators with Past President David W. Chang, MD. (Left to right) Steve Bonawitz, MD; Evan Matros, MD; Hani Sbitany, MD; Stefan Hofer, MD; David W. Chang, MD; Pierre Chevray, MD



Womens Microsurgery Group leaders unveil new WMG-emblazoned surgical caps.



(From left) Bauback Safa, MD with Buncke lecturer David W. Chang, MD, FACS and Greg Buncke, MD



Godina lecturer Bauback Safa, MD (left) with Joseph Disa, MD



The "paparazzi" were definitely out in force at the meeting!

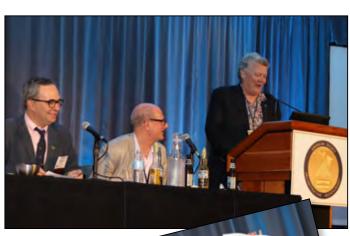


(From left) ASPN President Christine Novak, PT, PhD with ASRM/ASPN Invited Speakers Andrew Feustel, PhD and Paul Cederna, MD



A "Ryder Cup" competition on the topic of breast reconstruction was added this year.

Clockwise from top right: Dr. William C. Pederson presents a case to the attendees during the popular Best Case/Best Save Competition; Judge Carolyn de la Cruz is faced with an impossible decision; Dr. Adam Maciejewski taking his turn at the lecturn.







The 2020 Best Case/Best Save winners and sponsors: (From left) Session Chair Michael Zenn, MD; Mike Campbell, Synovis MCA; Best Case Winner Adam Maciejewski, MD; Best Save Winner Kongkrit Chaiyasate, MD; and Terry Harrell, Synovis MCA.

MEETING HIGHLIGHTS Continued

topics, but we also included new areas in Global Surgery, Doctors as Entrepreneurs, Social Media and Imaging, and Surgeon Wellness. We also added two other novel panels to the ASRM program for our members, one on "Innovations in Microsurgery", and another on "Healthcare Directions", with the aim of providing insights into the possible future of our field. The Women's Microsurgery Group and Young Microsurgery Group panels rounded out a broad range of topics for this year's ASRM meeting.

This year we also added the "Ryder Cup" Breast Reconstruction Competition to the main ASRM program, along with the timeless ASRM favorites of Best Save/Best Case, Sewing with the Masters, Presidential, Godina and Bunke Lectures, to illustrate the differing approaches to breast reconstruction within the United States and Europe.

The Joint Outstanding Paper Session highlighted two areas of development and research within the field of microsurgery pertaining particularly to breast reconstruc-

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BEST CASE OF THE YEAR WINNER:

Adam Maciejewski, MD "Bleach Ingestion Injury"

BEST SAVE OF THE YEAR WINNER:

Kongkrit Chaiyasate, MD "Multiple Free Flaps for Cervical Sarcoma"

MEETING HIGHLIGHTS Continued

tion. The first paper presented a 3 year follow up of clinical outcomes following LYMPHA and the second paper described multi-center prospective outcomes of sensory recovery after breast reconstruction.



Aharon Amir, MD, gave a talk about the history of and current practices in microsurgery in Israel.

We were very fortunate to have Israel as our host nation for this year's meeting, and they presented a wonderful history and their current approach to microsurgery in their country. The meeting ended with a recap of the latest developments in vascularized composite allotransplantation in the American Society of Reconstructive Transplantation panel.

The social program this year was nearly as intense as the academic program! With the opening ceremonies and flip-flop beach party, there was dancing and socializing galore! In keeping

Continued on page 13

OUTSTANDING PAPER AWARDS:

Arash Momeni, MD Stanford University Medical Center, Palo Alto, CA

Sensory Recovery after 1 Year from a Multi-Center Propective Outcomes Registry

Adam S. Levy, MD Columbia University Medical Center, New York, NY

Lymphatic Microsurgical Preventive Healing Approach (LYMPHA) for the Primary Prevention of Lymphedema: A 3-Year Follow-up Matched Cohort Study







The annual meeting builds in lots of opportunities for happy reumions, socializing and networking.





Another inspiring Sewing with the Masters session



MEETING HIGHLIGHTS Continued

with surgeon wellness, we also offered morning yoga and a 5K run into the academic program.

As we all tackle the current situation with COVID-19 virus that has impacted all of our lives, we very much hope that along with us, you highly enjoyed the ASRM 2020 program and have fond, pleasant memories of the meeting! **RM**



The social events really brought out the fun-loving side of members, especially the Flip Plop party.



A special thank you to these ASRM Annual Meeting 2020 Sponsors

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FUTURE GROWTH FUND COMMITTEE REPORT

An Outpouring of Support for Our Mission



Michael Klebuc, MD Future Growth Committee

hank you to all of the ASRM members that have supported the Future Growth Fund. Because of your generosity the fundraising campaign and auction at the 2020 Annual Meeting were a great success and the money raised will be utilized to support many of our organization's core missions, including education and research. For members who have elected to spread their donations over a two-year period, we understand that the COVID-19 pandemic has created a serious economic impact on almost everyone's practice. Please feel free to honor your commitment at a time that is comfortable for you.

The ultimate objective of the Future Growth Fund is to create an endowment where investment income alone will support academic pursuits. When the waters have settled and life returns to normal, I invite all members to come together to achieve this important goal. "The fundraising campaign and auction at the 2020 Annual Meeting were a great success."

Thank you to the following ASRM Annual Meeting 2020 Exhibitors for their support and participation:

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YOUNG MICROSURGEONS' GROUP

The Future is Bright



Jason Ko, MD, MBA Young Microsurgeons' Group Chair, Ex-Officio

he Young Microsurgeons' Group (YMG) Committee is very excited that our contributions to the 2020 ASRM Annual Meeting went really well. We are grateful for the support that ASRM President Dr. Lawrence Gottlieb, and Annual Meeting Program Chair Dr. Amir Dorafshar, have given to the YMG to showcase the innovative work of young microsurgeons around the world.

This year's YMG Panel titled, "The Macro of Micro: Different Perspectives on Building a Microsurgery Practice," focused on building a practice in various settings, and featured young microsurgeons that provided academic, private, "privademic," military, and international perspectives. Keeping to the "Excellence Beyond Technique: Thought Process" theme, our YMG Forum entitled, "The Good, the Bad, and the Ugly: Lessons Learned from the Trenches," highlighted some innovative and challenging cases, with each presenter providing some important pearls of wisdom they learned during their first few years in practice. I am excited how these YMG sessions have become great platforms for young microsurgeons within ASRM to showcase some of the exciting work they are doing.

Back by popular demand was the YMG Microsurgery Fellowship Roundtable, which provided a forum to promote open and honest dialogue about each microsurgery fellowship. With over 150 people in attendance, the representatives from each microsurgery fellowship answered questions from potential trainees and students interested in pursuing a career in microsurgery. The change to hold it in one room so all attendees could hear from each and every microsurgery fellowship made it much more entertaining and informative this year.

At last summer's ASRM Executive Council meeting, the YMG Committee inquired about further educational opportunities for young microsurgeons, which led to a discussion about the Godina Traveling Fellowship that included provocative topics such as, how "young" should the Godina Fellow actually be? The YMG Committee will develop proposals for future possible educational scholarships and will delve deeper into the issue of age and the Godina fellow"The future depends on what we do in the present."

—Mahatma Gandhi

ship, which we will discuss at the next Executive Council meeting. Stay tuned....

In closing, I would like to thank the amazing YMG Committee members, Krista Greco at ASRM, the ASRM leadership, and the YMG community who have been wonderfully helpful over the past year. It has been an honor and privilege to serve as the YMG Chair, and being part of the YMG Committee these past few years has proven to me that the future of the ASRM is indeed bright!



James A. Butterworth, MD Young Microsurgeons' Group Chair

t is a great honor to take over as chair of the YMG. I would like to congratulate Jason on the incredible job that he did last year leading the committee and organizing such a successful portion of the meeting. I do not recall an annual meeting where the YMG panels were so well attended and received. We are already working hard to maintain course on this trajectory. Our first committee meeting was filled with so many novel and innovative ideas for next year's meeting. It is wonderful to be a part of a group that is so energetic, passionate and diverse. This year not only do we

have representation from the usual suspects of microsurgery centers, but also places as foreign and extraordinary as Singapore and Portland, Oregon.

We find ourselves at a pivotal time in global history. Believing in the resilience of humanity, I have no doubt that will come out of this crisis stronger and better prepared. As the ASRM annual meeting is a bright spot for all of us, I hope to see you all and shake your hand in Kauai. **RM**

WOMEN'S MICROSURGERY GROUP

Having It All at the Annual Meeting



Summer E. Hanson, MD, PhD Chair, Women's Microsurgery Group

t was another fantastic year for the Women's Microsurgery Group (WMG). We welcome new members Noopur Gangopadhyay (Chicago) and Katie Weichman (New York) to the committee and Aldona Spiegel has generously agreed to continue her mentorship and sponsorship as the Ex Officio Chair. Our first initiative was to formalize the WMG membership. All active ASRM members, Candidates for membership, Plastic Surgery Residents and Fellows are eligible. With this initiative came our WMG newsletter, edited by Stephanie Caterson, and an expanded presence on social media. This has allowed improved communication and engagement with all women microsurgeons in ASRM. #WomenMicrosurgeons

The WMG luncheon was again at full capacity at this year's meeting in Fort Lauderdale. Attendees engaged with a panel of women microsurgeons on how they make it work - maximize productivity, execute career changes, keep space for themselves and generally "Have It 'All' as a Woman Microsurgeon." As one of the panelists, I was most impressed at our diverse definitions of what having it "all" means to each of us and truly found value in each of the women sharing their experience. Other panelists included Aldona Spiegel (Houston), past Godina Fellow Liza Wu, (Philadelphia), Stephanie Caterson (Newark), and international guest WMG Maria Mani (Uppsala, Sweden).

As with the luncheon, we continue to expand on our current programs and

have identified new priorities for the WMG. The collective experience of our WMG faculty members has been the strength of our mentorship program and each year we add new mentors and mentees. To enhance the experience, mentor and mentee pairs were matched this year based on survey questionnaire responses identifying specific needs of the mentee, similar career goals and interests, and demographic informa"Based on feedback, this year's Mentorship program now includes an optional year mentorship plan in addition to connecting at the annual meeting."



The WMG luncheon included panelists Aldona Spiegel, MD, Maria Mani, MD, Liza Wu, MD, Summer Hanson, MD, PhD and Stephanie Caterson, MD discussing family planning, productivity, career changes and "Having It 'All' as a Female Surgeon."

tion. Overall, we had 24 mentee participants and 12 mentors. Based on feedback, this year's program includes an optional year mentorship plan in addition to connecting at the annual meeting. As we have quickly learned to optimize our virtual meeting capacity, the Mentorship subcommittee will be developing a Zoom series. Stay tuned for programming on WMG Career Development.

Continued on page 17

Events like the WMG Networking Reception, the WMG Luncheon and the mentoring program open up opportunities to connect, network and learn.

Reflections from a WMG ViOptix Travel Scholarship Winner



By Giulia Daneshgaran MD Candidate

his year I had the honor of receiving the 2020 ASRM

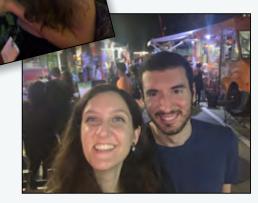
Women's Microsurgery Group ViOptix Travel Scholarship, which allowed me to attend the ASRM Annual Meeting in Fort Lauderdale. Throughout the meeting, I had the privilege to learn from and be mentored by a group of remarkable female surgeons and leaders in the field who are paving the way for trainees like myself. At the Women's Microsurgery Group (WMG) reception, I was even given the embroidered WMG surgical cap to don with pride! Furthermore, I had the honor of being paired with Dr. Summer Hanson through the WMG

Mentorship Program. Dr Hanson was an inspiring mentor who gave me advice on how to balance personal life with work commitments and career ambitions.

The ASRM meeting possessed a unique combination of learning, mentoring and networking. At one of the social events at the host hotel, I met with and was able to thank the ViOptix representatives for sponsoring my scholarship. Other highlights included the ASRM Best Case/Best Save event and the American Symposium for Lymphedema Surgery panel, where I listened to fascinating talks on innovations in the diagnosis and surgical management of lymphedema. Lastly, while at the conference I had the opportunity to present my group's recent work on improving outcomes of allograft-based nerve surgery. Amidst all the talks, food, great weather, and maracas from the ASRM Flip Flop Party, I had a wonderful first-time trip to Florida. Thank you once again to the ASRM Women's Microsurgery Group and to ViOptix for enhancing my education and for allowing me to continue my path toward becoming a future microsurgeon.



Happily sporting the WMG surgical cap and ASRM nametag



Playing maracas at the ASRM Flip Flop Party Below: Exploring the food trucks of Fort Lauderdale with my partner

HAVING IT ALL AT THE ANNUAL MEETING Continued

ViOptix has generously funded two WMG Travel Scholarships again this year for two women medical students or residents interested in plastic surgery and microsurgery. Once again, we had an unprecedented number of highly competitive applications and the Scholarship Subcommittee had their work cut out for them. The Resident/Fellow Award went to Dr. Megan Fracol from Northwestern University while Giulia Daneshgaran from Albert Einstein College of Medicine (soon to be UW-Seattle PS intern) was the recipient of the Medical Student Award. Each awardee will have their experience featured in the newsletter. Having spent time with all of the mentees this year, the future looks bright for microsurgery. For more information on the scholarship applications or Mentorship Program please see the website www.microsurgery.org/WMG.

The WMG Networking Reception was generously supported by Integra LifeSciences again this year. This event is open to all ASRM attendees and family members and is a great opportunity to connect with colleagues early in the meeting and welcome new members to WMG.

Our biggest addition this year was the first WMG Wellness Workshop in advance of the Annual Meeting. The premeeting workshop was themed "Building Capacity: Resilience,

WOMEN'S MICROSURGERY GROUP

Continued from page 17

Happiness and Masterful Self-Care" guided by speaker Maria Sirois. The program highlighted the importance of wellness and practical tools for building resilience at various stages in personal development. It was a huge success and will be a great addition to future WMG programming.

It is with great enthusiasm and gratitude that I represent the WMG this year. I truly value the mentorship and friendship that I have received from the exceptional membership of the ASRM. I learn something valuable to my practice or my well-being with every program and look forward to seeing everyone soon. Be safe! **RM**



Events like the WMG Networking Reception (above), the WMG Luncheon and mentoring program open up opportunities to learn, connect and network.



NOW ACCEPTING ABSTRACT SUBMISSIONS

Submission Deadline / Sunday, July 12, 2020 For submission information, visit www.microsurg.org

2020 ANNUAL MEETING: INTERNATIONAL TRAVEL GRANT RECIPIENTS

The 2020 Meeting Through the Eyes of a International Travel Grant Recipient



Carolina Hoyos, MD Plastic Surgeon, Microsurgery Fellow at Gea's Gonzalez Hospital

s a microsurgeon in training, I had the fortune to be selected the recipient of the international travel grant to attend the ASRM 2020 meeting that took place in Fort Lauderdale, Florida last January, and I would like to take this opportunity to share my experience.

The scientific program of the meeting was highly educational. Most of the speakers were international experts who presented really outstanding lectures, but what impressed me most was the relaxed way in which they made their presentations. Despite being avantgarde, highly technical and instructive, these were delivered in a humble and sometimes funny way, emphasizing the traps and pearls of each surgical technique, revealing the stumbling blocks and complications and the lessons learned when describing either a single case or an ample experience. All this allowed me not only to learn from the details of each case, but also the thought process, the mentality of a microsurgeon and the approach to face and solve the challenges.

I also felt extremely inspired professionally and personally after attending several sessions. The round table of young microsurgeons, focused on the lessons learned (with blood and tears) in the first years of their practice showed me what I can expect and the common mistakes into which I hope not to fall when beginning my own practice. In the Best Case/Best Save session, I saw impressive presentations of outstanding cases that allowed me to feel how reconstructive microsurgery has a touch of magic and that the limit is in your imagination.

It was also amazing to be part of the social program activities at the meeting. It was an exciting and humble experience to meet, talk and even have fun with the people who wrote the books and papers I read every day during my residency and personally hear from them their history and how they got to be where they are. I was very excited to have the unique opportunity to meet other surgeons from around the world with the same interests as me, make academic contacts and even friends among a very small group of people who share struggles and victories.

In summary, It was an outstanding experience overall, I reaffirmed my love and passion for reconstructive microsurgery and came back with renewed motivation to improve every day, to rise to the challenges and to be the best that I can ever be for my patients, and maybe in 10 years to be the one giving the lectures and inspiring other people as well!

I sincerely thank the International Travel Grant Committee of the ASRM for this incredible opportunity. It definitely broadened my horizons and will surely have a significant impact on my practice. **RM**

FUTURE ASRM MEETING CALENDAR



JANUARY 15–19, 2021 ASRM 36TH ANNUAL MEETING Grand Hyatt Kauai Resort and Spa Koloa, Kauai, Hawaii



JANUARY 14–18, 2022 ASRM 37TH ANNUAL MEETING Omni La Costa Resort and Spa Carlsbad, California



JANUARY 20-24, 2023 ASRM 38TH ANNUAL MEETING

JW Marriott Turnberry Resort and Spa Aventura, Florida

HISTORICAL CORNER

Trends in Microsurgery Today



Matthew M. Hansono, MD Immediate Past Historian

My last few articles as ASRM Historian discussed the origins reconstructive microsurgery up to advances made in the past decade. For this special "Historian Corner," I thought it would be interesting to look at what the state of the art is right now. I did a quick search of "microsurgery" and "free flap" on PubMed to see what has been published in the past year. In fact, there have been well over 1000 papers on microsurgery or free flaps published this past year alone! That's great news for our field. What follows is my gestalt of what I found in my search.

ew technologies continue to be incorporated into the microsurgical workflow. In terms of perforator mapping, dynamic infrared thermography (DIRT) permits detection of cutaneous perforators by thermal readings and has been touted as a simple, low-cost alternative to CT angiography for identification of the dominant perforator(s) in free flap surgery that can be used preoperatively as well as intraoperatively. An exciting recent development is the availability of an affordable smartphone-compatible thermal imaging camera, the FLIR ONE® (FLIR Systems, Wilsonville, OR). Preliminary evidence suggests that results may be equivalent or nearly equivalent to CT angiography in perforator mapping.¹

How we care for our free flap patients is also changing. There is a trend toward earlier hospital discharge following free flap reconstruction. To support this, Jablonka et al.² published a costutility analysis of inpatient flap monitoring after microsurgical breast reconstruction. They noted that health care costs associated with inpatient flap monitoring rises rapidly after postoperative day 2. To salvage a single failing flap each day, the number of flaps that needed to be monitored were 121 on postoperative day 0 to 1, 363 on day 2, 907 on day 3, 1813 on day 4, and innumerable for days 5 and beyond. They determined that the incremental cost-effectiveness ratio of inpatient flap monitoring begins to exceed a willingness-to-pay threshold of \$100,000/quality-adjusted life-year by postoperative day 2. and suggest that flap monitoring alone may not be a sufficient reason for inpatient hospitalization beyond this time.

Enhanced recovery after surgery (ERAS) protocols in which postoperative patient care, including pain management, is standardized are consistently being shown to result in earlier discharge, improved pain control and reduced narcotic use, which is particularly perti"An exciting recent development is the availability of an affordable smartphonecompatible thermal imaging camera, the FLIR ONE[®]."

nent in the setting of current "opioid epidemic" that is being experienced in the US. In the largest study of its kind to date (138 subjects and 138 historical controls), Sharif-Askary et al.,³ found decreased postoperative opioid requirements without an increase in readmission rates following implementation of an ERAS protocol for abdominal-based free flap breast reconstruction. Similarly, Eggerstedt et al.⁴ that multimodal analgesia (MMA) consisting of neuromodulating and antiinflammatory medications with

Continued on page 21

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HISTORICAL CORNER Continued

narcotics reserved for refractory pain resulted in reduced narcotic use in the immediate postoperative period and at discharge with improved analgesia based on patient-reported pain scores in patients receiving head and neck free flaps.

Even as the push increases for faster recovery and lower complication rates, we in academic practice have a second important mission, which is to train the next generation of microsurgeons. Cho et al.⁵ reported a 95.5% success rate with a flap take back rate of 7.1% in a series of 156 consecutive residentled microvascular free flap reconstructions at a county hospital, on par with many other series of free flap reconstruction performed in the tertiary care setting. They concluded that resident-led microsurgical reconstruction can be safely performed with as-needed faculty assistance in high-risk and complicated cases while allowing resident education and maturation of technical and decision-making skills. Looking at the question of resident participation another way, Bresler et al.⁶ compared microvascular free flap outcomes between the first academic quarter (July-September) to the last academic

quarter (April-June) and found no significant differences in 30-day morbidity, operative time, and postoperative adverse events, as well as in mean length of hospital

"We in academic practice have a second important mission, which is to train the next generation of microsurgeons."

stay. They concluded that there appears to be no "July effect" in microvascular reconstruction in which less experienced resident help results in worse outcomes.

Some age-old myths about free flaps were also addressed this year. For example, Kotha et al.⁷ showed that flap perfusion based on near infrared spectroscopy (ViOptix, ViOptix, Inc., Newark, Calif.) was not affected by coffee 100 mg of caffeine, corroborating laser Doppler flow studies on digital vessels that similarly showed no adverse effect of caffeine. They concluded that dietary caffeine following free flap surgery is not clinically relevant. Similarly, vasopressors have long been avoided in microsurgical cases. However, a number of recent studies, including one from my own institution involving 5671 free flap cases, have shown no effect on flap compromise and failure.8 Two recent meta-analyses corroborate our findings, showing no increase in complications and even a statistically lower take-back and failure rate in some cases when vasopressors are used during surgery.^{9,10}

The question of using arteriovenous (A-V) loops in one or two stages was addressed by Henn et al.¹¹ who compared outcomes of free flaps anastomosed to A-V loops in 76 single-stage and 27 double-stage patients. They found no significant difference in flap thrombosis, major wound complications, and flap failure between the two groups, although there was a significant association with thrombosis when the delay was longer than 10 days. They conclude that there is neither an absolute indication for two-stage A-V loops, nor that one approach is superior to the other.

Let me know if you found any other major discoveries or important trends in reconstructive microsurgery this past year. **RM**

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RESEARCH COMMITTEE

The Importance of Fostering Research



Howard Levinson, MD Chair, Research Committee

he American Society for Reconstructive Microsurgery (ASRM) recognizes the importance of fostering the development of surgeon scientists and innovative research in microsurgery and reconstructive surgery. The American Society for Reconstructive Microsurgery is committed to investing in the future of microsurgery and developing leaders in microsurgery and reconstruction. The ASRM Medical Student Research Grant is intended to fund a research project to be completed during the three (3) summer months between a student's first and second year in medical school.

A summary from 2020 Research Grant recipient Hosannah Evie is published below. The other 2020 award recipient, Scott Echternacht, will be published in the Autumn/Winter 2020 issue.

2020 MEDICAL STUDENT RESEARCH GRANT RECIPIENT REPORT

"EFFECTS OF CLINICALLY-AVAILABLE ELECTRICAL STIMULATION DEVICES ON NERVE REGENERATION"



Author: Hosannah Evie MD Candidate | Class of 2022

Histology Co-Course Liaison, WUSM SNMA Applicant Recruitment Committee

Affiliation: *Washington University School of Medicine, St. Louis*

Alternating current (AC) electrical stimulation (ES) has been widely shown to be useful in improving nerve regeneration, axonal growth and preferential reinnervation of motor and sensory pathways following injury. However, there is some evidence that direct current (DC) could also affect nerve regeneration, but limited evidence or mechanisms to support how it does so. We compared two commercially-available ES devices, that use either AC or DC ES, in therapeutic ES protocols in a rat tibial cut/repair model to measure their effects on regeneration. We hypothesized that AC ES, but not DC ES, would improve nerve regeneration after surgical repair.

To accomplish the studies, rats were randomized into three groups: No ES (control), DC ES at 0.5 mA or AC ES at 0.5mA constant current for 1 hour immediately

following repair. All groups underwent a tibial nerve cut/repair surgery followed by ES (or no ES for the control group). Non-invasive functional analysis were conducted using both walking track and grid walk analysis over 8 weeks. In a separate cohort of rats at a 2 or 3 week endpoint, tibial nerve distal to the repair site was harvested for histological analysis to measure the extent of early axon regeneration. From the functional analysis, we found no difference between the groups. While nerve histomorphometry showed an increased number of axons in the control group compared to the AC and DC group, a Thy-1 GFP rat axon analysis demonstrated that AC ES could improve regeneration. However, this analysis determined that AC ES needed to be applied before nerve repair.

Based on these results, we were not yet able to conclude if AC vs DC ES devices differentially promote enhanced nerve regeneration, but instead determined that use of an ES device requires sensitive care and placement. The ES device can disturb the site of microsurgical nerve repair and thus hinder regeneration.

Overall, my summer research experience was challenging due to these setbacks as described from my original goal of testing my hypothesis, but instead resulted in an invaluable insight into the research process and how other interesting findings can result.