



*Leaders in  
microsurgery and  
reconstruction*

**Spring-Summer  
2018**

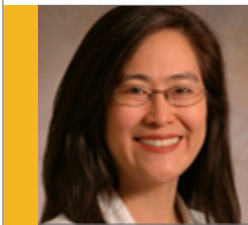
**IN THIS ISSUE:**

- 2** | President's Message
- 3** | Annual Meeting  
Photo Highlights Begin
- 9** | 2018 ASRM Council  
and Committees
- 10** | Microsurgical Pearls
- 12** | Future Growth Report  
ASRM New Members
- 13** | Research Grant  
Report
- 15** | Young Microsurgeons'  
Group  
Med Student Travel  
Scholarship Report
- 17** | International Travel  
Grant Report
- 19** | Women's  
Microsurgery Group
- 21** | Historian's Corner
- 23** | Message from the  
2019 Program Chair

# Reconstructive Microsurgery

THE AMERICAN SOCIETY FOR RECONSTRUCTIVE MICROSURGERY • VOLUME 29.1

## What's New in Reconstructive Microsurgery?



**Julie E. Park, MD,  
FACS**  
2018 Scientific  
Program Co-Chair

**T**he 33rd Annual Meeting for the American Society for Reconstructive Microsurgery took place on January 13–16, 2018, at the beautiful Biltmore Hotel in Phoenix, Arizona. This historic Frank Lloyd Wright venue was chosen after learning of the devastating effects of Hurricane Maria on Puerto Rico. The ASRM leadership agreed to donate 5% of the registrations fees to the American Red Cross to help in the recovery efforts of Puerto Rico.

Despite the change of venue late in winter, attendance and participation were robust with a record number of 667 attendees. Twenty-two percent of the attendance was international, representing 31 difference countries. Of the attendees, 48% were members, 17% non-members and 35% were residents or medical students, illustrating the vast

*Continued on page 3*



*Liza C. Wu, MD, FACS presents the  
ASRM Godina Lecture.*



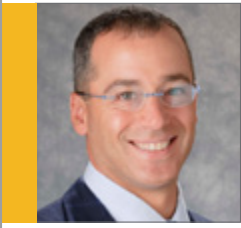
*Dr. David Chang introduces ASRM's guest society, the Association of Latin-American Microsurgery (ALAM). From left: moderator/panelist Eric Santamaria, MD, and panelists Mauricio Mendieta, MD, FICS, Alexander Cárdenas, MD, and Giovanni Montealegre, MD*



*Sewing with the Masters offered hands-on training.*

## PRESIDENT'S MESSAGE

# Making Adjustments As We Go



**Joseph J. Disa, MD**  
ASRM President

**W**ell, it's supposedly spring in New York and Mother Nature still has her icy grip on the Northeast. An unprecedented four consecutive Nor'easters one week apart paralyzed the region. All the storms were a little different, but affected us all. Between wind and tree damage, power outages, school closings, etc., we were all affected in some way. The last storm crushed my maiden voyage to China where my son and I were travelling to attend the annual meeting hosted by our current Godina Fellow Yixin Zhang and his colleagues at the Peoples 9th Hospital in Shanghai. Having had the flights cancelled, our schedules cleared, and nowhere to go, we took to the old phrase "when life gives you lemons, make lemonade." Instead of lemonade, we thought Key Limes was a better call, and off to the Florida Keys we went. The weather was perfect and it was a much-needed respite from the winter weather doldrums.

Fast forward to April, and it is still cold. All of us golfers in the region are itching to get out and play. The good news is, when we are in the throes of winter 2019, we will be surrounded by sun, mountains, golf, tennis, and a multitude of outdoor activities in Palm Desert California. The 2019 Annual Meeting of the AAHS, ASPN, and ASRM promises to be truly unique. It has been 15 years since we have been to the Palm Desert area and once again we will enjoy the predictable warm sunny days and cool, dry nights.

The date of the meeting is later than usual. As a result, we have initiated a change in the programming. Sunday February 3 is Super Bowl Sunday! Being on Pacific Standard Time, the game will commence approximately 3:20 pm local time. We plan on ending the program in the early afternoon to allow our attendees to enjoy the region, the game or whatever they wish. The ASRM is honoring the biggest day in sports in the USA by hosting a tailgate party and game watch for our attendees!

I have enlisted the tireless efforts of Evan Matros and his Program Committee to create an excellent program. We are working hard to listen to the feedback from prior meeting evaluations to create the best possible program. The goal is to stay relevant, express diversity, bring fresh faces and ideas to the podiums, and shake things up a little, while maintaining the traditions of the meeting. One example is the re-tooled Masters Series. Under the direction of Joan Lipa, we are going to present a case-based format to complex problems in reconstructive surgery. Experts in the field will present different perspectives to handling the same problem. It will demonstrate to the attendees that there is more than one way to solve a complex problem.

One of my overreaching goals is to promote the health of a Society that has been instrumental in my career development. In an effort to raise awareness and support for our endowment, multiple members have generously donated to a LIVE AUCTION, of which the proceeds will support our mission of education, research, and leadership.

*Continued on page 2*

*"[For the 2019 Scientific Program], the goal will be to stay relevant, express diversity, bring fresh faces and ideas to the podiums, and shake things up a little, while maintaining the traditions of the meeting."*



*Incoming President Joseph Disa, MD (left), thanks outgoing President David Chang, MD for his service to the Society.*



## PRESIDENT'S MESSAGE

*Continued*

Finally, and perhaps most importantly, thanks to the efforts of our past president David Chang and the Council, the ASRM has donated 5% of its registration fees for the 2018 Annual Meeting to the American Red Cross Disaster Relief Program for Puerto Rico. As a result of the fantastic attendance to the 2018 ASRM Annual Meeting, the organization is able to donate \$24,000 to assist in the rebuilding of Puerto Rico, the original location of our 2018 Annual Meeting.

I very much look forward to ditching the Northeast in the dead of winter and joining my colleagues from around the world at our next meeting! **RM**

*Saturday night started off with a Young Microsurgeon/New Member Reception (at right) followed by the ASRM ASPN Welcome Reception (below).*

## 2018 ANNUAL MEETING IN REVIEW



*AAHS/ASPN/ASRM Combined Panel: Targeted Muscle Reinnervation Panel. From left: Moderator Paul Cederna, MD, FACS and Panelists Oskar C. Aszmann, MD, Gregory A. Dumanian, MD, and R. Glenn Gaston, MD*

MEETING HIGHLIGHTS *Continued*

potential for growth of our discipline and membership.

The theme of the 2018 Annual meeting was "Achieving Excellence Through Serving and Sharing" with the Association of Latin

American Microsurgery (ALAM) invited as our guest society. The Lymphatic Pre-Symposium on Friday was a collaboration between ASRM, WSRM and the American Society for Lymphatic Surgery (ASLS). Each day there were instructional courses that covered four major tracts of Head and Neck, Breast, Lymphedema, and Extremity, as well as Innovations, Business, and Transgender Teconstruction.

On Saturday, the meeting started off with the joint ASRM, ASPN, and AASH combined panel moderated by Paul Cederna. Oskar Aszmann, Greg Dumanian, and Glenn Gaston shared their innovative work on Targeted Muscle Reinnervation. The Joint Presidential Keynote Lecture was given by Jeff Karp, B.Eng, PhD, who presented his experiences in looking to nature to find solutions to complex problems in his talk "Towards Accelerated Biomedical Innovation." David Song chaired the Masters Series: Consistency of the Masters. Nine masters in microsurgery shared their secrets in achieving consistent, outstanding results. As always, the Master's Series was well attended, with



*Continued on page 4*

## 2018 ANNUAL MEETING IN REVIEW



*Joint Presidential Keynote Lecture with Jeff Karp, B.Eng, PhD*



*ASRM President David W. Chang, MD, FACS presents plaques to Program Committee Co-Chairs Julie E. Park, MD, and Joon Pio (JP) Hong, MD at the ASRM President and Program Chairs Welcome*



*Chair Dr. David H. Song, MD, MBA introduces the Master Series in Microsurgery: Consistency of the Masters.*



*Ronald M. Zuker, MD, FRCSC was the moderator for the ASPN/ASRM Combined Panel on Facial Reanimation.*



*Audience members listen intently to the ASPN/ASRM Combined Panel discussion.*

MEETING HIGHLIGHTS *Continued*

more participants wanting to join than the fire code for the room allowed. The day was capped off by the Young Microsurgeons/New Member Reception followed by the ASRM/ASPN Welcome Reception in the evening on the beautiful Biltmore grounds in wonderful weather.

Sunday featured the ASPN/ASRM Combined Panel moderated by Ron Zuker. Greg Borschel, David Chuang, and Shai Rozen spoke on advances in Facial Reanimation. The ASRM President's Invited Lecture featured Greg Buncke, who gave a touching and thoughtful talk on his father's career, Harry Buncke, one of our fathers of microsurgery. The Women's Microsurgery Group Lunch Series offered networking opportunities and the Panel: Work Life Balance or Juggling Act? This was moderated by Joan Lipa and featured Anu Bajaj, Aldona Spiegel, and Liza Wu. This year the YMG and WMG sponsored a joint Forum on Ergonomics and the Microsurgeon. With Jon Ver Halen as moderator, panelists David Chang, Susan Hallbeck, and Jack Dennerlein shared ergonomic principles and interventions to help prevent injury. The day was rounded out by Best Case/Best Save, chaired by Mike Zenn, highlighting the amazing work by our members in the setting of camaraderie and razzing.

Back by popular demand and chaired by Gordon Lee, Sewing with the Masters opened on Sunday and continued through Monday. Attendees enjoyed 15 minute one-on-one hands

*Continued on page 6*

## 2018 ANNUAL MEETING IN REVIEW

**THANK YOU TO THE FOLLOWING ASRM ANNUAL MEETING 2018 EXHIBITORS FOR THEIR SUPPORT AND PARTICIPATION:****3D Systems - Medical Modeling**

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GS Innovations

Hand Biomechanics Lab

Hand Rehabilitation  
Foundation

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**A SPECIAL THANK YOU TO THE FOLLOWING  
ASRM ANNUAL MEETING 2018 SPONSORS:****ASSI – ACCURATE SURGICAL****AXOGEN****CALIFORNIA PACIFIC MEDICAL CENTER****CHECKPOINT SURGICAL****DEPUY SYNTHES****ENDO PHARMACEUTICALS INC.****INTEGRA LIFESCIENCES****MEDARTIS, INC.****MITAKA USA, INC.****SURGICAL SPECIALTIES – SHARPOINT MICROSUTURE****SYNOVIS MICRO COMPANIES ALLIANCE, INC.****VIOPTIX, INC.****WETLAB CORPORATION**



## 2018 ANNUAL MEETING IN REVIEW

MEETING HIGHLIGHTS *Continued*

on teaching sessions under the microscope with a master in microsurgery.

Monday was another packed day with the continuation of the scientific paper presentations. This year, a total of 164 abstracts were accepted, with a new digital presentation of posters. A new panel was helmed by our guest society, the Association of Latin-American Microsurgery. Eric Santamaria, Alexander Cardenas, Mauricio Mendieta and Giovanni Montealegre

*Continued on page 7*

**BEST CLINICAL RESIDENT PAPER:**

Rebecca Knackstedt, MD, PhD  
*Eight-year Follow-up on the First Face Transplant in the United States and the Longest Living Composite Tissue Allograft Containing Vascularized Bone*

**BEST RESEARCH RESIDENT PAPER:**

Fatma Betul Tuncer, MD  
*The Effects of Iloprost and Ischemic Pre-conditioning on Mesenteric Perfusion and Ischemia-Reperfusion Injury of Jejunal Flaps*

**BEST SHORT PAPER:**

Anna C. Howell, MD  
*Anatomic Basis of the Gastroepiploic Vascularized Lymph Node Transfer: A Radiographic Evaluation Using Computed Tomography Angiography (CTA)*



Michael Zenn, MD, MBA congratulates Best Save winner Kongkrit Chaiyasate, MD



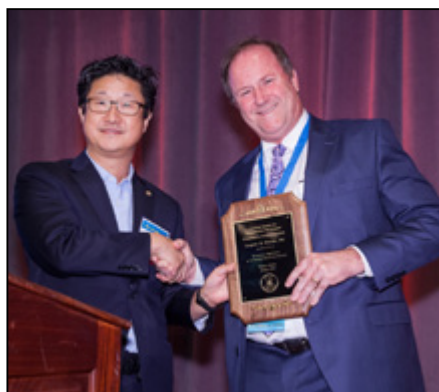
Best Case winner Yixin Zhang, MD is congratulated by Michael Zenn, MD



Dr. Michael Zenn presided over the popular Best Case/Best Save event, with presenters recounting real-life situations for a star-studded panel of judges to "score."



Moderator Gordon K. Lee, MD, chair of the Visiting Professor Committee, introduces 2017 ASRM William A. Zamboni Visiting Professors Gregory R. D. Evans, MD, FACS and Randy Sherman, MD



David Chang, MD thanks Gregory M. Buncke, MD for the ASRM President's Invited Lecture



Lawrence J. Gottlieb, MD, FACS presents the ASRM Harry J. Buncke Lecture

## 2018 ANNUAL MEETING IN REVIEW

MEETING HIGHLIGHTS *Continued*

presented Microsurgical Innovations in Latin America. William A. Zamboni Visiting Professors Greg Evans and Randy Sherman shared highlights of their travels and experience. David Chang's Presidential Address was in the form of a panel highlighting the theme of the Annual Meeting: Achieving Excellence Through Serving and Sharing. David Chang, Adam Maciejewski, Peter Nthumba and JP Hong gave inspirational talks on service and international opportunities. The YMG Forum featured Ed Chang, Jeff Kozlow, Minh-Doan Nguen, and Theodore Kung on "To Evolve is to Change: Lessons Learned in the Last 12 Months of My Practice."

The afternoon continued with the panel: CPR v DNR: Reviving the Failing Flap vs Throwing it in the Bucket. Jim Higgins moderated a great panel on what to do when your flap is blue. Liza Wu, Matt Hanasono, and Scott Levin discussed their tips and tricks in handling failing breast, head and neck, and extremity flaps. The Godina Address marked the landmarks of the 25<sup>th</sup> Anniversary



*Godina Alumni Club Reception – Front row: Ming Huei Cheng, Pierong Yu, Liza Wu, Randy Sherman (between the rows), David Chang, L. Scott Levin, Lawrence Colen, Michael Neumeister. Back row: Matthew Hanasono, Ray Dunn, Greg Evans, Yixin Zhang, Samir Mardini*

of the Godina Fellowship and the first female Godina Fellow. Liza Wu gave an insightful presentation on "The Oncoplastic Revolution: a Paradigm Shift in the Surgical Treatment of Breast Cancer." The afternoon was finished with presentations and libations in the Science Slam: thirty-three 3-minute abstracts presented lightning round style with beer and wine in the back to accompany face-to-face discussion.

Monday evening began with a round of receptions for socializing and networking hosted by the Women's Microsurgery Group,



*Program Co-Chair Julie E. Park, MD presents certificates to ASRM Outstanding Paper presenters David W. Mathes, MD and John T. Stranix, MD*



*Greg Buncke moonlighting in the band*



*The band "Switchblade Nixon" performed at the ASRM Celebration! on Monday night*



*Kicking it up on the dance floor*

*Continued on page 8*



## 2018 ANNUAL MEETING IN REVIEW



*The Presidential Panel on “Achieving Excellence Through Serving and Sharing” included (from left) Adam Maciejewski, MD; Joon Pio (JP) Hong, MD; and Peter Nthumba, MD*

### MEETING HIGHLIGHTS *Continued*

Godina Alumni, and Sewing with the Masters. The evening ended with the ASRM Celebration, featuring a rousing performance from Greg Buncke’s band Switchblade Nixon who performed with guests into the night.

On Tuesday morning, the Harry J. Buncke Lecture was given by Larry Gottlieb, who received a standing ovation after his moving and perceptive presentation “Life or Limb: Creating Deformity to Save a Life.” The program finale was the ASRT panel: Long Term Follow-Up on our First VCA Patients: Ethical Considerations and Lessons Learned. Chaired by Sue McDiarmid and Gerald Brander, Bohdan Pomahac, W.P. Andrew Lee, Christina Kaufman and Robert Walton shared long term outcomes after face and upper extremity transplantation as well as issues in long term monitoring of VCA’s and ethical considerations that have been learned.

Overall, the 33<sup>rd</sup> Annual meeting was a wonderful meeting, packed with superb science, panels, topics and fun. JP and I were honored to have been co-chairs of the program under the excellent leadership of David Chang’s presidency. We look forward to seeing every one again next year in Palm Desert in the first weekend of February 2019. **RM**



*James Chang, CMO of ReSurge International, and ASRM President David Chang, MD celebrate collaborating to provide reconstructive surgical care for children and adults who lack access and building surgical capacity in developing countries.*



*E-Posters on display*



*There were ample opportunities to network outside of the program presentations.*



## AMERICAN SOCIETY FOR RECONSTRUCTIVE MICROSURGERY

## 2018 Committees

**AUDIT**

Gregory Borschel, MD, *Chair*  
Edward Chang, MD  
Albert Chao, MD

**BUNCKE LECTURESHIP**

David Chang, MD, *Chair*  
Joseph Disa, MD  
David Mathes, MD  
Evan Matros, MD  
Liza Wu, MD

**BYLAWS**

Raymond Dunn, MD, *Chair*  
Jon Ver Halen, MD  
Julie Park, MD  
Dhruv Singhal, MD, *YMG Rep*

**CPT/RUC**

Mark Villa, MD, *Chair*  
Scott Hansen, MD  
Liza Wu, MD, *Ex-Officio*

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Edward Chang, MD  
Mark Tan, MD  
Victor Hassid, MD

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Rene Largo, MD  
Hani Sbitany, MD

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Adeyiza Momoh, MD  
Michael Zenn, MD  
Toni Zhong, MD

**OUTREACH**

Liza Wu, MD, *Chair*  
David Chang, MD  
James Chang, MD  
Samir Mardini, MD  
Michael Miller, MD

**PROGRAM**

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Joan Lipa, MD, *Master Series*  
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Summer Hansen, MD  
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Randy Sherman, MD

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## 2018 Council

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**YMG REPRESENTATIVE**

Edward Chang, MD

## EDUCATION COMMITTEE REPORT

## Microsurgical Pearls: Gaining and Maintaining Microsurgery Education



**Michele Manahan, MD**  
Education Committee  
Chair

**M**icrosurgery... the epitome of plastic surgical skills. How do we learn to do these things? How do we keep it fresh and make sure our techniques stay cutting edge? How do we gain and maintain education?

It never hurts to pause for a minute (or two, depending on how fast a reader you are and how lightly you skim this column) to think about how we do what we do. This is particularly important at this time of year when newer colleagues may be looking for solid mentoring advice on setting up successful practices. I'd like to highlight a few general tenets.

### 1. SET UP A FAIL PROOF SYSTEM

We all know the word... routine. While we'd never want to be thought of as boring, routines are good. We benefit from environments that are protective, that don't require a stone and chisel to reinvent the wheel every day. Perioperative pathways. Intraoperative protocols. ERAS initiatives. Standardized education materials. Dedicated nursing units. These are all tidbits to consider when planning and maintaining a microsurgery practice. When we're new, we should probably consider making sure these things exist before doing the index (a.k.a. extraordinarily scrutinized) microsurgery case. Over time, we may find earlier initiatives slip a little as we get busy in the day to day work of our successful practices. You may find out

one day that the antiseptic washes your patients have been using for years have fallen off the pathway, and nobody quite knows why. It may be well worth the effort to designate staff responsible for keeping "the way we do things" fresh and in the forefront of everyone's minds. We have the benefit of a rich and growing body of literature, so malleability of the established systems should also be considered and actively maintained. To new and old alike, we must



remain decision-makers for our patients. So, for example, if regional blocks look promising, regional blocks should get done, without years of political posturing in meetings to obtain a trial period.

### 2. BUILD A TEAM

Have you ever had anyone ask how you can stand in the OR for so long? Granted, it's usually the patients who want to know, and we all recognize that most microsurgery cases are getting shorter (see above about the benefits of streamlining). HOWEVER, the cases do sometimes run long, though it almost never feels that way. For one

*"We must remain decision-makers for our patients. So, for example, if regional blocks look promising, regional blocks should get done, without years of political posturing."*

*Continued on page 11*



## EDUCATION COMMITTEE REPORT

## MICROSURGICAL PEARLS

*Continued*

thing, operating makes the time fly. More so, though, time passes quickly because we enjoy working in a community of care. Our teams make us stronger. Groups unified through common goals of optimized technical skills proudly accomplish greater successes. Surgical technicians know these cases as well as the surgeons. The circulating nursing staff feels

the same concern over a purple flap as the primary surgeon. In good times, the equipment flows smoothly from hand to hand. In rough times, everyone pitches in and works toward creative solutions with value attached to everyone's contribution. We must proactively celebrate the teamwork with our perioperative nursing and anesthesia colleagues, as staffing efficiency seems constantly to threaten expert teams.



## 3. MAKE THE LEAP (BUT LOOK FIRST)

We've all been there... the debate about local tissue rearrangement versus free tissue transfer for closure of a particular wound. The rumblings about hammers and wounds looking like nails. When examined academically, we can probably all agree that the baby bear, "just right" approach is true in surgical planning as in many other aspects of life. Not every wound needs a flap, but some wounds do. By implementing

protective systems and supportive teams, we can ensure that the full range of reconstructive options can be employed for those we serve. We may then remain free to decide and provide, based on the clinical merits of each situation, what treatment best heals our patients.

Hopefully, these pearls of wisdom may be at least slightly beneficial to a few. Feedback is always welcome as we look to a new year of activity on the Education Committee. **RM**



## Call for Abstracts!

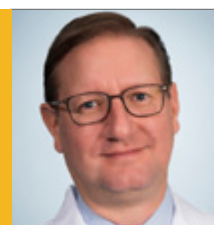
### Submission Deadline / Sunday, July 8, 2018

For submission information, visit [www.microsurg.org](http://www.microsurg.org)

To submit an application, [click here](#).

## FUTURE GROWTH COMMITTEE REPORT

## While Careers May Change, ASRM Remains



**Michael Klebuc, MD**  
Future Growth  
Committee

**T**he future growth fund supports the advancement of research and educational opportunities within the ASRM and its expansion is critical to the health, mission and future of the organization. To this end the committee is implementing a series of novel fund-raising opportunities that we believe will be enjoyable and successful. They

will be combined with an enhanced, direct outreach program. For many of us, the ASRM is our surgical home. Despite changing academic affiliations or practice models during different phases of our careers we remain active in this society that fosters friendships and provides high quality learning opportunities. The Future Growth Fund provides an opportunity to give back to and support an organization that has nurtured scores of microsurgeons. Please give generously. To whom much is given much is expected. So please expect an outreach from one of our committee members. **RM**

**"The Future Growth Fund provides an opportunity to give back to and support an organization that has nurtured scores of microsurgeons."**

## AMERICAN SOCIETY FOR RECONSTRUCTIVE MICROSURGERY

## New Members, as of January 2018

Shoshana W. Ambani, MD

Morad Askari, MD

Bernardo N. Batista, MD

Jens Berli, MD

Nada Berry, MD

John P. Brosious, MD

Jose A. Castro Garcia, MD

Curtis L. Cetrulo, Jr., MD, FACS

Sydney Shuat Nee Ch'ng, MD

Carrie K. Chu, MD

Meredith S. Collins, MD

Michelle Coriddi, MD

Néha Datta, MD

Michael V. DeFazio, MD

Kyle Eberlin, MD

Dana Egozi, MD

Sarah M. Elswick, MD, MBA

Kate Elzinga, MD, FRCSC

Jian Farhadi, MD, FMH, EBOPRAS

Jeffrey M. Feiner, MD

Shaoqing Feng, MD

Jordan D. Frey, MD

Or Friedman, MD

Charles A. Fries, MB, BChir, MA,  
FRCS(Plast)

Noopur Gangopadhyay, MD

Rebecca M. Garza, MD

Jarom N. Gilstrap, MD

Deepak Gupta, MD

Lydia A. Helliwell, MD

Peter W. Henderson, MD, MBA

Amir Inbal, MD

Christodoulos Kaoutzanis, MBBS

Benjamin Kittinger, MD

Nicholas M. Kunda, MD

David E. Kurlander, MD

Oscar J. Manrique, MD

Marco A. Borges Rodrigues Maricevich,  
MD

Juan C. Martinez Grullon, MD

Tim Matatov, MD

Miguel A. Medina, III, MD

Juan R. Mella-Catinchi, MD, MPH

Paschalia M. (Lina) Mountziaris, MD, PhD



John F. Nigriny, MD, DMD

Lauren Noelle Oliver, DO

Patrick L. Reavey, MD, MS

Christopher M. Reid, MD

Joseph A. Ricci, MD

Neil S. Sachanandani, MD

Yukio Seki, MD

Akhil K. Seth, MD

Amanda K. Silva, MD

Geoffroy C. Sisk, MD

Adrian Sjarif, MD

Juan Socas, MD

Lara Cristóbal Velasco, MD, PhD

Frederick Diing-Jye Wang, MD, MAS

Jason W. Yu, DMD, MD

Jamie Zampell, MD

Todd Zuhlke, MD

**RM**



## RESEARCH GRANT COMMITTEE REPORT

## Adding to Our "Investment Portfolio"



**Howard Levinson, MD**  
Chair, Research Grant Committee

**T**he American Society for Reconstructive Microsurgery (ASRM) continues to grow as a successful organization as have the research opportunities afforded to its members. The ASRM is committed to investing in future microvascular reconstruction leaders. One of the best ways to achieve this goal is by providing education and research grant opportunities.

The newest addition to our grant portfolio is a combined grant with the Lymphatic Education and Research Network (LE&RN) to support basic science, translational or clinical research grant in the area of lymphedema/

lymphatic dysfunction. This grant provides seed funding to researchers so they may conduct preliminary investigations and set the stage for future competitive applications to external funding sources. We are pleased to announce that this year's 2018 LE&RN/ASRM Combined Pilot Grant award winner is Dhruv Singhal, MD from Beth Israel Deaconess Medical Center. Dr Singhal's project is entitled "Evaluation of the Lymphatic Microsurgical Preventative Healing Approach (LYMPHA) Technique using a Porcine Model". His investigation will study how an FDA approved dye that "glows" the lymph will quantify flow to the venous system, and as such, establish the role of the agent as a tool to measure real-time lymphatic flow.

In addition to supporting emerging, clinically relevant science, the

*Continued on page 14*

"ASRM also supports medical students by providing a small grant to fund a three-month summer project. The applications were highly competitive this year."



*Save the Date*  
**ASRM**  
**2019 ANNUAL MEETING**  
**FEBRUARY 2-5, 2019**

JW Marriott Desert Springs  
Palm Desert, California



American Society for  
Reconstructive Microsurgery  
[www.microsurg.org](http://www.microsurg.org)



## RESEARCH GRANT COMMITTEE REPORT

*Continued*

ASRM also provides Medical Student and International Travel grants to encourage bright young minds to attend our Annual Meeting. This year's awardees are Joseph Banuelos Mancilla, Mayo Clinic Rochester, Sarah Karinja, Columbia University, Vladimir Cojocari, MD, Chisinau, Moldova, and Sara Contreras Merida, MD, Mexico City, Mexico. Their report is found on page 16 of this issue. ASRM also supports medical students by providing a small grant to fund a three-month summer project. While the applications were highly competitive this year, we are pleased to announce the 2018 recipients are Grace Keane, Washington University in St. Louis, whose proposal is entitled "Brief Electrical Stimulation as a Therapy to Improve Nerve Grafting", and Orr Shaully, USC Keck School of Medicine, whose proposal is entitled "Microsurgical Interventions to Improve Outcomes in Erectile Dysfunction".

Lastly, the Plastic Surgery Foundation and ASRM co-sponsor an ASRM/PSF Combined Pilot Grant for \$10,000. The goal of this grant is to advance the field of microsurgery and provide early pilot stage funding that will lead to sustained long-term future funding. While the scores have not yet been tabulated and the awardee not named, we will be certain to update you in our next newsletter.

Of course, all of these grants were made possible by your generous membership support and the efforts of the Future Growth Fund committee. Please keep in mind that while our society continues to thrive and our future is bright, it is scientific inquiry that laid the foundation which brought us here today. It was only ~50 years-ago that Harold Buncke, MD first developed microsurgery tools in his garage laboratory and shortly there-

after performed the first free tissue transfer in a human. I am relatively certain that in Dr Buncke's time his investigation would have been under-appreciated, much like today where many of our current visionary surgeon scientists' studies remain temporary diamonds in the rough. While it is difficult to predict the future, we can be reasonable assured our past will guide our way. If you believe that innovation is the lifeblood of survival, then we must continue to embolden our young surgeon scientists' passion and support their hard-work. For these reasons, please donate to the ASRM.

On behalf of fellow Research Committee members Orr Friedman, MD, Tim King, MD, PhD, FACS and Babak Mehrara, MD we whole-heartedly congratulate all awardees on their accomplishments and look forward to their future successes with great anticipation. **RM**

"Please keep  
in mind that  
while our society  
continues to thrive  
and our future  
is bright, it is  
scientific inquiry  
that laid the  
foundation which  
brought us here  
today."

## Buncke Lectureship Nomination

The Harry J. Buncke Lectureship has been created with the support of the California Pacific Medical Center to honor Dr. Buncke's remarkable contributions to the field of microsurgery. Dr. Harry Buncke played a major role in the development of our specialty and helped develop several microsurgical laboratories across the globe. He influenced countless residents and fellows as well as numerous department chairs throughout the world. It is with great appreciation that the ASRM is able to honor Dr. Harry J. Buncke with this lectureship.

Each year a candidate is selected to give the Harry J. Buncke Lecture during the ASRM Annual Meeting. The main criteria for the selection are the candidate's contributions in the field of reconstructive microsurgery. Nominations for candidates are accepted from ASRM members **ONLY**. **All nominations must be received by May 15.** The application is available at:

<http://www.microsurg.org/grants/buncke-lectureship-nomination/>



## YOUNG MICROSURGEONS' GROUP

## Above and Beyond



**Edward I. Chang, MD, FACS**  
Chair, Young  
Microsurgeons' Group

**T**It is an honor and privilege to serve as the Chair for the Young Microsurgeons Group (YMG) for the upcoming year, and join the ranks of other remarkably talented Chairs who have left large shoes to fill. It is my hope that I will not only meet, but exceed the expectations of this year's ASRM president Dr. Joseph Disa, program chair Dr. Evan Matros, and the Women's Microsurgeon Group chair Dr. Joan Lipa. However, just as important are the next generation of microsurgeons who will ensure the future of the field and the society. The future rests only in part on the seasoned microsurgeons who should serve as mentors for the medical students, residents, and fellows who are about to embark into a field that has ushered in some of the greatest advancements in the history of medicine.

I remember sitting in the audience as a resident while icons in the field of reconstructive microsurgery presented their experience and cases, and now I see the



*A chance to kick back and make new friends at the Young Microsurgeons' Group Reception*

same excitement, enthusiasm, and awe in the eyes of those who I hope will continue to push the field forward for years to come. It will be my personal mission to continue to foster this same excitement and passion for microsurgery, recruiting new members, teaching and training all levels of surgeons, and building lifelong friendships and relationships.

This past year witnessed the inception of the microsurgery fellowship round table discussion which was the brainchild of the past year's Chair Jon Ver Halen. Residents and aspiring microsurgeons had an opportunity to meet with current microsurgery fellows in an informal, honest discussion regarding different programs without pressure or bias from faculty and program directors. While we apologize for the short notice of this forum, it was tremendously successful, and we hope to have more programs represented in the roundtable discussion this upcoming year in Palm Springs.

Just as the audience sits in amazement during the Best Case/Best Save presentations which has regularly been the most well-attended of any session at the ASRM, it is my vision to develop a similar forum for the YMG where members can highlight their accomplishments and disasters in an entertaining and inspiring venue. But most importantly I believe it is critical to expand the involvement of YMG members, giving opportunities to fresh faces, and provide mentorship and guidance to the next generation of microsurgeons and ASRM members and to organize talks and content that

*"The new microsurgery fellowship round table discussion [fostered] an informal, honest discussion regarding different programs without pressure or bias from faculty and program directors."*



*The popular Best Case/Best Save presentation entertains but also inspires YMG members.*

*Continued on page 16*

## YOUNG MICROSURGEONS' GROUP

*Continued*

will be of interest and benefit to young microsurgeons.

And finally as young microsurgeons, we must continue to adapt to the changing times. The YMG has been charged to continue expanding the ASRM footprint on social media, highlighting the accomplishments and goals of the ASRM and YMG nationally, internationally, and across all venues. With a tremendous team of energetic, dedicated microsurgeons

(Manish Champaneria, Jason Ko, Jeffrey Kozlow, Adeyiza Momoh, Chris Price, Dhruv Singhal, and Mehmet Yildirim) from all over the world, I have no doubt we will be able to accomplish and exceed the expectations placed upon us. We have answered the call and look forward to serving you to the best of our ability in the exciting year ahead of us. Please feel free to contact me (eichang@mdanderson.org). **RM**

*A young microsurgeon enjoys the ASRM Celebration!*



## 2018 ANNUAL MEETING IN REVIEW

## Medical Student Travel Scholarship Report

*By Sarah Karinja and Joseph Banuelos Mancilla*

**W**e were honored to have the opportunity to travel to the 2018 American Society of Reconstructive Microsurgery meeting. This was only possible thanks to the Medical Student Research Grant. Being present at this meeting was an extraordinary opportunity only made possible by travel grants like this, which encourage us as students and trainees to pursue our dreams of becoming plastic surgeons. We are thankful for having the honor to attend such an event at this pivotal point in our careers.

By attending this meeting, we had the honor of meeting fellow students, residents, fellows and



*Sarah Karinja and Joseph Banuelos Mancilla pose with fellow medical students and supporters attending the 2018 Annual Meeting.*

professors from all around the world. It was inspiring to learn about their background, achievements, and how they turned their dreams into reality. Additionally, we learned about different and fascinating surgical developments and new technology happening today around the globe. One of our favorite activities during this meeting was to have the opportunity to practicing surgical techniques on the microscope

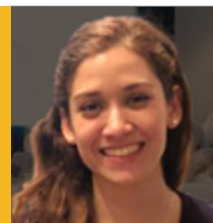
side by side with an expert in microsurgery.

As medical students, we are so thankful to have had this unique and inspiring opportunity, which encouraged us to keep practicing and working hard to pursue our goals. We look forward to attending the ASRM meeting in years to come as our careers in plastic surgery progress. **RM**



## 2018 ANNUAL MEETING IN REVIEW

# Report from the 2018 International Travel Grant Recipient



**Sara Contreras-Merida, MD**  
Member and Travel Grant Recipient

*By Sara Contreras-Merida, MD*

**F**irst of all, I would like to thank the American Society of Reconstructive Microsurgery Grant Committee for being the International Travel Grant Recipient who let me be a part of such an incredible event. It is a great way to help young surgeons from around the world who have limited resources and want to participate in such a top academic Meeting.

It is by far, one of the best Meetings I have ever had the pleasure to attend. I had such an amazing time being able to share experiences with the best microsurgeons from all around the world who were not only approachable but also dedicated to present their best results and efforts in cases that were in more than one way completely defying.

I really enjoyed and took some very useful tips from the "Sewing with the Masters" series, which helped in the

interaction with different surgeons and with the increase of knowledge from one another. Watching the "Best Case-Best save", I felt and outstanding admiration not only for the wisdom shared by all of the Panelists but especially from all the Women Microsurgeons. I really felt related to all the struggles shared and it showed me that with dedication, effort and courage to never give up, we are unstoppable.

I definitely think this has shifted the way I thought about microsurgery and opened my eyes to new horizons. I really appreciate the amazing opportunity given and hope we'll see each other very soon.

Thank you so much! **RM**



*Sewing With the Masters*



*ASPN poster presentation*



*Sharing with some Mexican colleagues*



*Enjoying dinner with (from left) Dr. Peter Neligan, Dr. Gabrielle Neligan, and Dr. Eric Santamaria*

## WOMEN'S MICROSURGERY GROUP

## Education and Empowerment in Arizona



**Aldona J. Spiegel, MD**  
Chair, Women's Microsurgery Group

Through the vision of Julie Park, the WMG has continued to grow from its inception as an ad hoc committee to a significant section of the ASRM. We were fortunate to have Joan Lipa maintain the momentum through her role as chair over the last two years, and the committee has grown significantly because of her leadership, dedication and enthusiasm. She will continue to provide valuable guidance ex-officio. Over the past five years, female membership in ASRM rose by fifty percent, increasing from 12% to 18% of the total membership.

The WMG Luncheon titled, "Work Life Balance or Juggling Act?" was, as usual, a hot ticket. We were delighted to be joined by Eric Santamaria – the sole male in attendance – as he sought to understand the topic from the perspective of his female residents. I enjoyed the camaraderie of our all-female panel, which included Joan Lipa, Liza Wu and Anu Bajaj, in addition to myself. We shared advice and specific tips on delegating, prioritizing tasks, self-care and the juggling act of work-life balance. One particularly helpful takeaway was to visualize work-life balance as a juggling act with five balls: work, friends, family, health and integrity; and understand that only the work ball is made of rubber, while the others are made of glass that can be easily shattered. The Lunch series will continue at the next annual meeting and will focus on defining career success and preventing burnout.



*WMG Luncheon Panelists Liza C. Wu, MD, FACS; Anu Bajaj, MD; and Aldona J. Spiegel, MD*



*WMG Luncheon Moderator Joan E. Lipa, MD, FRCS*

We had an exciting ASRM joint forum between YMG and WMG on "Ergonomics and the Microsurgeon," presented by Susan Hallbeck and Jack Dennerlein. We learned about the benefits of micro-breaks in enhancing surgeons' physical function and about work-related musculoskeletal disorders through understanding the mechanisms and prevention of these injuries.

The tradition of the WMG Reception preceded the ASRM Celebration, generously supported by Integra. It was an excellent opportunity to connect with



*Attendees enjoyed the friendly atmosphere at the WMG Reception*

*Continued on page 19*



## WOMEN'S MICROSURGERY GROUP

*Continued*

friends and welcome new members in a family-friendly atmosphere.

WMG continues to enjoy support from ViOptix for a travel scholarship that helps two award recipients attend the meeting. The spirit of the scholarship is to foster interest in careers in plastic surgery. The large number of highly competitive applicants demonstrates the high level of interest in this coveted scholarship. The Resident/Fellow award went to Dr. Stephanie Koonce of the Cleveland Clinic Florida. The medical student scholarship went to Ms. Alexandra Keane of Washington University School of Medicine in St. Louis. You can read about her experience in this issue of *Reconstructive Microsurgery*.

The mentorship program is going strong and continues to cultivate many fruitful mentee/mentor relationships. It is an opportunity for medical students, residents, fellows, and faculty just beginning their practice to get advice and support from more experienced faculty. If you would like to become a mentor, mentee, or get more information, please check out our webpage: [www.microsurg.org/WMG](http://www.microsurg.org/WMG). **RM**



Past WMG Chairs Joan Lipa, MD (left) and Julie Park, MD at the WMG Reception

## Reflections from a ViOptix Travel Fellowship Winner

By Alexandra Keane

I would like to extend my sincerest appreciation to the Women's Microsurgery Group and ViOptix for providing to me the opportunity to attend the 2018 American Society for Reconstructive Microsurgery Annual Meeting. The meeting was invigorating, highlighting the collegiality, collaboration and scholarship within the field of plastic and reconstructive surgery.

The first combined panel that kicked off the meeting was titled "Targeted Muscle Reinnervation," that discussed the indications and operative approaches for targeted muscle reinnervation in the control of upper limb prosthetic devices. Additionally, this panel discussed



Alexandra Keane with Dr. Alison Snyder-Warwick

the integral role that sensory feedback will play in optimizing the function of future prostheses. I later attended the "Facial Reanimation" combined panel, where approaches to improving the cross face nerve



Alexandra M. Keane

graft were presented, along with the key factors considered in determining motor nerve selection for facial reanimation. Finally, I attended "CPR vs DNR: Reviving the Failing Flap vs. Throwing It in the Bucket." The panelists reviewed their approach to the failing flap, offered their thought processes in deciding to revise versus abandon, and provided techniques for salvage and improvement of flap outcomes. These panels were composed of leaders within these microsurgical fields, and it was a privilege for me to learn from their experiences and expertise.

Given my strong interest in research, I was enthused by the innovative, forward-thinking research presented by surgeon-scientists and trainees during the scientific paper presentations. The "Best Case/Best Save" portion of the program highlighted the humor and sense of camaraderie within the field of microsurgery, while also exhibiting the abundant creativity and awe-inspiring

*Continued on page 20*

## WOMEN'S MICROSURGERY GROUP

## REFLECTIONS OF A TRAVEL FELLOWSHIP WINNER

*Continued*

surgeries that have forever changed the lives of the presenters' patients. The "Presidential Panel: Achieving Excellence Through Serving and Sharing" provided a global perspective on plastic and reconstructive surgery, and shone a spotlight on the incredibly important work being done in the most underserved communities across the globe. Apart from the panels, lectures, and research presentations, all attendees were offered the opportunity to "Sew with the Masters," an incredible experience for attendees to improve upon, perfect, or learn new techniques in private one-on-one sessions with master microsurgeons.



*Ms. Keane speaking at the 2018 Annual Meeting*

One of the highlights of the meeting was the Women's Microsurgery Lunch Series, "Work Life Balance or Juggling Act?" Drs. Joan Lipa, Liza Wu, Anu Bajaj, and Aldona Spiegel discussed their personal approaches to maintaining a balance between their busy surgical practices, family, and



*Hiking above the resort*

hobbies that suits their personality and values. They then fielded questions from an audience of talented and ambitious young female microsurgeons (and aspiring medical students!), and provided candid, insightful, and valuable answers and advice.

I wish to extend a special thank you to Dr. Joan Lipa and Dr. Julie Park for their warm welcome, keen insights, and thoughtful mentorship during the conference, and for eagerly introducing me to fellow meeting attendees. Additionally, I would like to thank my mentors at Washington University School of Medicine, most notably Dr. Alison Snyder-Warwick and Dr. Katherine Santosa, for encouraging me to apply for the Women's Microsurgery Group ViOptix Travel Scholarship, and for providing unwavering support of my academic and research endeavors. I am incredibly

appreciative of ViOptix for their continued partnership with the Women's Microsurgery Group as they have supported countless aspiring women microsurgeons such as myself, thereby laying the groundwork for the future of the field of microsurgery.

I hope to be given the opportunity to become a member of the plastic and reconstructive surgery community in the future, and look forward to the possibility of attending the American Society for Reconstructive Microsurgery Annual Meeting for years to come!

Alexandra M. Keane  
Washington University School of  
Medicine, MD Candidate

**RM**



## HISTORIAN'S CORNER

## The Recent History of Microsurgery



**Matthew Hanson, MD**  
ASRM Historian

I was looking through past issues of *Reconstructive Microsurgery* for inspiration for the Historian's Corner, when I came across an excellent article by A. Lee Dellon in the 2012 Spring/Summer issue highlighting the early history of complex reconstruction. He describes some of the amazing work done by Harry J. Buncke, Jr. (1922-2008), the "Father of Microsurgery," and Joseph E. Murray (1919-2012), who performed the first successful human kidney transplant and later won the Nobel prize for his work on organ transplantation. He then fast forwards to the 1980's and 1990's, highlighting some of the achievements of the founding members of the ASRM, including Berish Strauch, Julia Terzis, James B. Steichen, James R. Urbaniak, and Allen L. Van Beek.

During the 80's and 90's, there was an explosion of new free flaps and microsurgical techniques that were developed by these pioneers and many others. Microvascular free flaps not only became widely available, but emerged as the standard of care across the United States for the reconstruction of many oncologic and traumatic wounds. As virtually every previously described pedicled flap gave rise to a free tissue equivalent, a new class of reconstructive flaps was also born: perforator flaps. For example, the deep inferior epigastric perforator (DIEP) flap was described in 1991 by Koshima et al. and gained popularity after Blondeel<sup>2</sup> as well as Allen and Treece<sup>3</sup> demonstrated its usefulness in breast reconstruction. Equally important, the anterolateral

thigh (ALT) perforator flap was described by Song et al.<sup>4</sup> in 1984 and popularized in the works of others in the 1990's and early 2000's.

The work of these individuals who pioneered microsurgical techniques is at once both inspirational and intimidating. I started my practice in 2005. As a young microsurgeon staring at the aftermath of incredible age of discovery, I wondered what, if anything, was left for contemporary microsurgeons to contribute to the specialty. By this time, the DIEP and ALT flaps were no longer advanced techniques reserved for the masters, but well on their way to becoming workhorse flaps in armamentarium of every graduating microsurgery fellow. Though we would see a few more flaps popularized in years since I started practice, such as the superficial circumflex iliac perforator (SCIP),<sup>5</sup> profunda artery perforator (PAP),<sup>6</sup> and medial sural artery perforator (MSAP)<sup>7</sup> flaps, the era of new flaps seemed to be drawing to a close.

*Continued on page 22*

"We [now] embrace technology as a way of refining our results, [including] computed tomography angiography (CTA) for preoperative flap planning and perforator mapping, and computer planning with 3D printing of craniofacial models, implants, and hardware."

## HISTORIAN'S CORNER

By A. Lee Dellon, MD, PhD

As the new Historian for ASRM, I must confess that I am an "old" historian. It is now fun for me to view what did not exist when I was trained in plastic surgery, hand surgery and microsurgery as it exists today in a historical context.

While we were using microvascular techniques to replant fingers and do toe-to-hand transfers during my fellowship at the Raymond M. Curtis, MD (1913-1994) Hand Center in Baltimore, the first microvascular free tissue transfer in our city—what was done at the former Baltimore City Hospital, in 1977 by G. Patrick Maxwell, MD, Pat was by the year behind me in residency at Johns Hopkins Hospital, and had just finished a fellowship with Harry J. Buncke, Jr. MD (1922-2008), the "Father of Microsurgery" as we know it today. Pat transferred a dorsalis pedis flap from one foot to reconstruct a defect on the contralateral foot/ankle, with the "life boat" option being a cross-leg pedicle flap. In 1977 this was a very "complex reconstruction", indeed, at the height of the "reconstructive lad-



**Figure 1: Alexis Carrel MD, winner of the 1912 Nobel Prize in Medicine or Physiology**

## Complex Reconstruction

alignment with purely "Microvascular" procedures.

In 1912, the Nobel Prize in Medicine or Physiology was awarded to Alexis Carrel, MD (1873-1944), a general surgeon at the University of Chicago (Figure 1A). The recognition stated that the award was "in

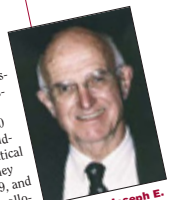
recognition of his work on vascular suture and the transplantation of blood vessels and organs." In 1938, after working at the Rockefeller Institute in New York City, Carrel published a book, *The Culture of Organs*, co-authored with Charles A. Lindbergh (1902-1974), the famous aviator. In the introduction to this book, Lindbergh explained how he came to work with Carrel:

"My wife's older sister had developed a seriously defective heart valve as a complication of rheumatic fever. I had asked her doctor why surgery would not be beneficial. He replied that the heart could not be stopped long enough to permit a surgical operation. I asked why an artificial heart could not be used during the operation. He said he didn't know. He showed little interest in the problem. I asked other doctors. To my amazement, none of them could tell me, and none seemed to have much interest in me. To Paul Flagg, I said I would not

answer my questions, he had a friend who could—the French surgeon Alexis Carrel."

Lindbergh then went on to develop a perfusion pump that maintained a sterile, pulsating circulation of fluid through excised organs, and enabled Carrel to keep organs such as the thyroid and kidney alive and functioning. Lindbergh's pump was the forerunner of apparatus now in use in heart surgery. Carrel did not use vascular surgery to transplant organs, but rather did whole organ tissue perfusion. Carrel did not use a microscope.

The Nobel Prize for free, vascularized transplantation of tissue went to plastic surgeon Joseph E. Murray, MD in 1990 (Figure 2). He did the first kidney transplant between identical twins in 1954, the first kidney allograft in humans in 1959, and first kidney human cadaver allo-



**Figure 2A: Joseph E. Murray, MD**

*continued on next page*



**Figure 2B: The first kidney transplantation in a human. Note that no microscope is present.**

## HISTORIAN'S CORNER

THE RECENT HISTORY  
OF MICROSURGERY *Continued*

In reality, reconstructive microsurgery has continued to grow rapidly. In the time since I started practice, we have embraced technology as a way of refining our results. Examples include computed tomography angiography (CTA) for preoperative flap planning<sup>8</sup> and perforator mapping, and computer planning with 3D printing of craniofacial models, implants, and hardware.<sup>9</sup> Other developments include the concept of free flaps based on random cutaneous perforators (freestyle free flaps)<sup>10</sup> and the popularization of local flaps based on perforators dissected using microsurgical techniques (propeller flaps).<sup>11</sup>

"Supermicrosurgery," first described by Isao Koshima, has broadened the scope of our practice in recent years.<sup>12</sup> Born as way of treating lymphedema via lymphaticovenular bypass, supermicrosurgery involves anastomosis of tiny (<0.8 mm) vessels. Along with the transplantation of lymph nodes, lymphaticovenular bypasses, have brought the treatment of lymphedema into the purview of microsurgery. Moreover, supermicrosurgical techniques are usable in perforator-to-perforator flap reconstructions as well as distal digital replants and transfers.

Another major advancement is composite tissue allotransplantation (CTA). CTA is not just a set of techniques, but a shift in paradigm for us as reconstructive surgeons. The first partial facial transplant on a living human was carried out in Amiens, France in 2005.<sup>13</sup> The first facial transplantation in the United States was performed at the Cleve-

land Clinic by a team led by Maria Siemionow in 2008.<sup>14</sup> Clearly, the future of this procedure depends on our future ability to control the immune system and manage tissue rejection. Our own team, led by Jesse Selber, performed scalp and skull transplant simultaneously with a kidney and pancreas

**"Reconstructive microsurgery is a field defined not by a single disease process or organ system but by innovation."**

transplant, demonstrating that no additional immunosuppressive therapy is needed for composite tissues beyond what is given for solid organ transplant.<sup>15</sup> The experience demonstrated to me the power of truly replacing "like with like" beyond any autologous flap reconstruction, and, in addition, with no donor site morbidity.

Without question, today's microsurgeons stand on the shoulders of giants. I don't have a crystal ball nor do I have much faith in my ability to predict the future (otherwise I would be an investment banker, not a microsurgeon!). However, I do know with certainty that we will continue to advance in our methods and embrace new ideas and technologies. Reconstructive microsurgery is a field defined not by a single disease process or organ system but by innovation. The era of discovery is not over; there is still a lot left to learn. **RM**

*N.B.: Please forgive my omissions, I'm sure there are many and this article was purposefully kept brief. I look forward to feedback to use as further material for the next issue of the newsletter.*

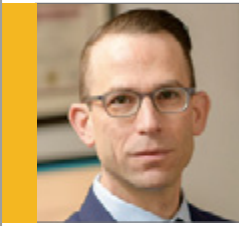
## REFERENCES:

1. Koshima I, Soeda S. Inferior epigastric artery skin flaps without rectus abdominis muscle. *Br J Plast Surg* 1989;42:645-648.
2. Blondeel PN. One hundred free DIEP flap breast reconstructions: a personal experience. *Br J Plast Surg* 1999;52:104-111.
3. Allen RJ, Treece P. Deep inferior epigastric perforator flap for breast reconstruction. *Ann Plast Surg* 2003;112:91-100.
4. Song YG, Chen GZ, Song YL. The free thigh flap: a new free flap concept based on the septocutaneous artery. *Br J Plast Surg* 37:149, 1984.
5. Koshima I, Nanba Y, Tsutsui T, et al. Superficial circumflex iliac artery perforator flap for reconstruction of limb defects. *Plast Reconstr Surg* 2004;113:233-240.
6. Allen RJ, Haddock NT, Ahn CY, Sadeghi A. Breast reconstruction with the profunda artery perforator flap. *Plast Reconstr Surg* 2012;129:16e-23e.
7. Cavadas PC, Sanz-Giménez-Rico JR, Gutierrez-de la Cámara A, Navarro-Monzónis A, Soler-Nomdedeu S, Martínez-Soriano F. The medial sural artery perforator free flap. *Plast Reconstr Surg* 2001;108(6):1609-15.
8. Masia J, Clavero JA, Larranaga JR, Alomar X, Pons G, Serret P. Multidetector-row computed tomography in the planning of abdominal perforator flaps. *J Plas Reconstr Aesthet Surg* 59: 594, 2006.
9. Hirsch DL, Garfein ES, Christensen AM, Weimer KA, Saddeh PB, Levine JP. Use of computer-aided design and computer-aided manufacturing to produce orthognathically ideal surgical outcomes: a paradigm shift in head and neck reconstruction. *J Oral Maxillofac Surg* 2009;67:2115-2122.
10. Wei FC, Mardini S. Free-style free flaps. *Plast Reconstr Surg* 2004;114:910-916.
11. Hyakusoku H, Yamamoto T, Fumiiri M. The propeller flap method. *Br J Plast Surg* 1991;44:53-54.
12. Koshima I, Inagawa K, Etoh K, Moriguchi T. Supramicrosurgical lymphaticovenular anastomosis for the treatment of lymphedema in the extremities. *Nihon Geka Gakkai Zasshi* 1999;100:551-556.
13. Dubernard JM, Lengelé B, Morelon E et al. Outcomes 18 months after the first human partial face transplantation. *N Engl J Med* 2007;357:2451-2460.
14. Siemionow M, Papay F, Alam D et al. Near-total human face transplantation for a severely disfigured patient in the USA. *Lancet* 2009;374:203-209.
15. Selber JC, Chang EI, Clemens MW et al. Simultaneous scalp, skull, kidney, and pancreas transplant from a single donor. *Plast Reconstr Surg* 2016;137:1851-1861.



## A MESSAGE FROM THE 2019 PROGRAM CHAIR

## Dear friends and colleagues



**Evan Matros, MD**  
2019 Scientific  
Program Chair

**A**s we continue preparations for the 2019 Annual ASRM Meeting in Palm Springs, CA, February 1-5, I wanted to update you on details and highlights of the upcoming program. As with all ASRM meetings, the venue location has been carefully selected to provide a pleasing and relaxing atmosphere to join in fun with colleagues from around the world. To that end, the ASRM program committee, along with president Joe Disa, have selected the meeting theme to be "Diversity". This subject was chosen to recognize the importance of exposure to different experiences and perspectives.

The program will commence one day earlier this year on Friday, instead of Saturday, with the Master Series. Please keep this fact in mind as you plan your travels. Led by Dr. Joan Lipa, the lineup has been retitled the "Battle of the Masters". Rather than one master talking about a topic, two masters will square off in the ring presenting differing viewpoints and approaches on the same clinical problem. The updated format promises to bring forth controversy and varied viewpoints.

The educational program also promises to include new and updated versions of old favorites. The YMG Fellowship Roundtable introduced last year was so well received it will be included once again. The highly popular WMG Lunch Series returns as well with a novel topic and new speakers. Sewing with the Masters, led by Gordon Lee, will be modified to include a focus on ergo-

nomie awareness. The Best Case/Best Save will feature new judges selected specifically for their wry humor and will be moved to early Sunday afternoon to avoid conflict with the Super Bowl. The American Society for Lymphatic Surgery, World Society for Reconstructive Microsurgery and American Society for Reconstructive Transplantation celebrate the diversity of our specialty and will be present with updated programming as well.

As always, a variety of social functions are planned. The program has been designed for high quality learning, but also efficiency to ensure

*The JW Marriott Desert Springs Resort and Spa is a beautiful and tranquil escape from the winter doldrums. Pictured below, top to bottom: hike in nearby Andrea Canyon; enjoy spectacular views from one of the many pools; or take a leisurely ride on the waterways in a gondola.*



plenty of free time for people to enjoy the beauty of Palm Desert with family and friends. A group run is planned for those who like to sweat. There's no official golf tournament this year (no time!), but members can always set up their own friendly game if desired. Importantly, immediately following the Best Case/Best Save there will be the first ever ASRM Super Bowl Tailgate Party!

We look forward to seeing everyone once again at the Annual Meeting. **RM**

