

# The $67^{\mbox{th}}$ Annual Meeting of the Ohio Valley Society of Plastic Surgeons

## Ian L. Valerio, MD, MS, MBA President

May 31 through June 2, 2024

Renaissance Pittsburgh

Pittsburgh, PA

Jointly Provided by





#### About Pittsburgh, PA

Pittsburgh is the second-most populous city in Pennsylvania after Philadelphia and is the county seat of Allegheny County. The Pittsburgh metropolitan area of Western Pennsylvania has a population of 2.457 million which is the largest in both the Ohio Valley and Appalachia. The city of Pittsburgh lies at the confluence of the Allegheny River and the Monongahela River, which combine to form the Ohio River. It is known both as "the Steel City" for its dominant role in the history of the U.S. steel industry, and as the "City of Bridges" for its nearly 500 bridges. For part of the 20th century, Pittsburgh was behind only New York City and Chicago in corporate headquarters employment, and it had the most U.S. stockholders per capita at one point. Starting in the post-war era, Pittsburgh leaders began to strategically divest in manufacturing and invest instead in education, science, technology, health care, and art.

Pittsburgh is home to the University of Pittsburgh Medical Center, Allegheny Health Network, and 68 colleges and universities, including research and development leaders Carnegie Mellon University and the University of Pittsburgh. It serves as the federal agency headquarters for cyberdefense, software engineering, robotics, energy research, and the nuclear navy. In the private sector, Pittsburgh-based PNC is the nation's fifth-largest bank, and the city is home to eight Fortune 500 companies and seven of the largest 300 U.S. law firms. RAND Corporation, BNY Mellon, Nova, FedEx, Bayer, and the National Institute for Occupational Safety and Health have regional headquarters and offices that helped Pittsburgh become the sixth-best area for U.S. job growth. Furthermore, the region is a hub for Leadership in Energy and Environmental Design and energy extraction.

Pittsburgh's rich industrial history left the area with renowned cultural institutions, including the Carnegie Museums of Pittsburgh, Pittsburgh Parks Conservancy, Pittsburgh Zoo & Aquarium, Phipps Conservatory and Botanical Gardens, the National Aviary, The Andy Warhol Museum, and a diverse cultural district. The city's major league professional sports teams include the Pittsburgh Steelers, Pittsburgh Penguins, and Pittsburgh Pirates.

#### **About the Conference:**

The Annual Scientific Meeting of the Ohio Valley Society of Plastic Surgeons (OVSPS) serves a crucial role for students, residents, fellows and attending surgeons to highlight new technologies, new treatment modalities and new techniques in plastic and reconstructive surgery. In addition, the program serves to educate these individuals on patient safety topics and research occurring within the region thereby expanding the breadth and scope of plastic surgeons. Specifically, the meeting will include didactic and panel presentations to generate discussion involving new concepts and controversies in plastic surgery. The presentations are designed for audience interaction in an open forum allowing ample time for questions and answers.

A resident forum for research presentations is highlighted. This serves an important role in providing the opportunity for the resident/fellow to present his/her work in an open forum; an opportunity that may not be available at the national level.

#### Intended Audience:

The target audience of this meeting includes plastic surgeons in practice and in training, both private and academic, in the five-state Ohio Valley region.

#### **Learning Objectives:**

Upon completion of this course the participants should be able to:

- Review the state of art in aesthetic medicine and changes to practice over recent years.
- Discuss the impact of mentors and educators in focusing on as well as building the careers of burgeoning surgeons in their practice
  after residency and fellowship training.
- Explain the learning advances in headache surgery with evidence-based progress over the last two decades across programs.
- Compare and contrast recent advances and offerings in breast surgery for the oncologic and transgender care arenas.
- Review the latest updates and offerings in VCA across countries including collaborations for improving care of VCA hand and facial transplant patients
- Review the methods and process of basic through translational medicine to bring their IP ideas to the research and/or clinical care markets.

#### **ABMS Competencies:**

This activity will address the following ACGME/ABMS Competencies: Medical Knowledge, Patient Care, Systems Based Practice, Practice Based Learning, and Professionalism

#### **Accreditation Statement:**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education through the joint providership of the University of Cincinnati and the Ohio Valley Society of Plastic Surgeons. The University of Cincinnati is accredited by the ACCME to provide continuing medical education for physicians.

#### **Designation Statement:**

The University of Cincinnati designates this live activity for a maximum of 15.75 AMA PRA Category 1 Credit(s)TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### Off-Label Disclosure Statement:

Faculty members are required to inform the audience when they are discussing off-label, unapproved uses of devices and drugs. Physicians should consult full prescribing information before using any product mentioned during this educational activity.

#### **Learner Assurance Statement:**

The University of Cincinnati is committed to resolving all conflicts of interest issues that could arise as a result of prospective faculty members' significant relationships with drug or device manufacturer(s). The University of Cincinnati is committed to retaining only those speakers with financial interests that can be reconciled with the goals and educational integrity of the CME activity.

#### **Disclaimer Statement:**

The opinions expressed during the live activity are those of the faculty and do not necessarily represent the views of the University of Cincinnati. The information is presented for the purpose of advancing the attendees' professional development.

According to the disclosure policy of the University of Cincinnati College of Medicine, all faculty, planning committee members, and other individuals who are in a position to control content are required to disclose any relevant relationships with any commercial interest related to this activity. The existence of these interests or relationships is not viewed as implying bias or decreasing the value of the presentation. All educational materials are reviewed for fair balance, scientific objectivity and levels of evidence. Disclosure will be made at the time of activity.

All identified conflicts of interests have been resolved:

All Chairs, Co-Chairs, Speakers, Authors, Moderators, Reviewers, Committee Members, Staff, Residents, Fellows, Medical Students and other appropriate individuals not included in the preceding list have indicated that they have no conflicts of interest to disclose.

William G. Austen Jr, MD - Cytrellis, Founder, Consultant; Sientra, Founder, Consultant; DurVena, Founder, Consultant

Katherine Carruthers, MD - Tela Bio, Speaker, Consultant

Risal Djohan, MD - AbVie, Consultant; Acelity, Speaker, Consultant; Axogen, Consultant; Pacira, Speaker

Gayle M Gordillo, MD - Med Compliance IQ, Scientific Advisor, Stockholder (<5% and <\$5000)

Bahman Guyuron, MD - Innovative Medical Equipment, Board Member; Elsevier Publishing, Royalties; Thieme Publishing, Royalties; PS Devices LLC, Ownership Interest

Daniel Hammer, DDS, FAC - Stryker, Consultant; Axogen, Consultant; KLS Martin, Consultant; Johnson and Johnson, Consultant

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Ernest K. Manders, MD - Promethean LifeSciences, Inc., Founder, CSO; Undaunted Bio, Inc., Founder, CMO

Andrea Moreira, MD - Axogen, Advisory Board Member, Speaker

Frank A. Papay, MD - Unify Medical Inc, Founder, CSO; Unify Reactive Inc, Founder, Board Member; XII Medical, Founder, Inventor Royalty; Notox, Consultant

Jennifer Sabino, MD - Allergan, Consultant

Teun Teunis, MD, PhD - Integra, PI New Nerve Tube

lan L. Valerio, MD - Axogen, Consultant; Checkpoint Surgical Inc, Consultant; LifeSciences Corp, Consultant

Sunishka Wimalawansa, MD - Axogen, Consultant; CheckPoint Surgical, Consultant

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Chief of Burn Surgery
Chief of OMFS and Dentistry
The Massachusetts General Hospital
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Harvard Medical School
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#### Ohio Valley Society of Plastic Surgeons Annual Meeting May 31- June 2, 2024

Friday, May 31st

6:45am Registration/Breakfast 7:30am Welcome – lan Valerio

Moderator Ian Valerio, MD, MS, MBA

7:35-8:00am Abstract Presentations (5 – 5-minute talks)

Basic Sciences:

1872. Myeloid-derived Mechanotransducive Signaling Modulates the Pathologic Foreign Body Response (FBR)

1788. Understanding Syndrome of the Trephined: Development of a Novel Mouse Model

1851. Ex Vivo Normothermic Limb Perfusion Upregulates Cellular Inflammatory and Stress Response Pathways Conferring Protection Against Compartment Syndrome

1854. Lyophilized Human Amnion Chorion Membrane Improves Scar Formation through Myofibroblast TGFB Expression

1792. Mitigating radiation induced skin fibrosis through Rosiglitazone mediated targeting of macrophages

8:00-8:05am Q&A

Moderator Kate Carruthers, MD

8:05-8:30am Abstract Presentations (5 – 5-minute talks)

Breast

1858. Predicting Breast Cancer Related Lymphedema After Immediate Lymphatic Reconstruction: An Artificial Intelligence Approach with Synthetic Data

1845. Sensory Preservation after Gender-Affirming Mastectomy: Prospective Matched Case Control Study of Quantitative and Qualitative Sensory Outcomes of Targeted Nipple Areola Complex Reinnervation (TNR)

1742. The Effects of Radiation on the Lymphatic Anatomy of the Chest

1737. When is Enough Enough? Reconstructive Revision Rates and Emotional Well-Being 1855. Safety of Hormonal Therapy prior to DIEP Reconstruction: A Matched Cohort Analysis

8:30-8:35am Q&A

Moderator Jen Sabino, MD

8:35-9:05am Abstract Presentations (10 – 3-minute talks)

1807. Establishing the Pediatric Head Circumference Growth Curve for Patients with Sagittal Craniosynostosis

1797. The Business of Plastic Surgery: A Machine Learning Model for wRVU Prediction and Salary Benchmarking of Pediatric Plastic Surgeons

1789. Feeding and Swallowing Outcomes in Pierre-Robin Sequence: a 10-Year Cohort Study

1803. Over the Ridge: Discerning Metopic Ridge vs. Metopic Craniosynostosis Using an Image-Based, Deep-Phenotyping Toolset

1784. Technique and Outcomes in Tissue Augmenting Palatoplasty for Cleft Palate

1857. Early Outcomes in Buccal Myomucosal Flaps Versus Buccal Fat Pad Flaps as Adjunctive Techniques in Primary Palatoplasty Repair: a Single Institution Analysis

1752. 3D Volumetric Analysis of Alveolar Clefts Using Cone-Beam Computed Tomography

1795. Autologous Fasciae for Dura Reconstruction: Systematic Review

1769. Lymphatic Surgery for Alzheimer\'s Disease- Technical Feasibility Study of a Mouse Model

1868. Artificial Intelligence Based Classification of Indocyanine Green Lymphography Patterns

9:05-9:15am Q&A

9:15-9:45am Break/Visit Exhibits

Moderator 9:45 – 10:15am

Derek Cody, MD

Abstract Presentations (10 – 3-minute talks)

1776. Evaluation of Metformin and Adipose-Derived Stem Cells Combination

Therapy for Radiation Induced Fibrosis

1724. Effectiveness of Simultaneous Intense Pulsed Light and Ablative Fractional CO2 Laser Therapy in the Treatment of Hypertrophic Burn Scars

1862. A Novel Protocol for Global Standardization In Upper Extremity Indocyanine Green (ICG) Lymphography

1848. Immediate Flap Reconstruction following Abdominoperineal Resection for Fistulizing Inflammatory Bowel Disease and IBD-related Oncologic Pathologies: A Single-Surgeon, Tertiary Care Longitudinal Experi 1736. Venous Thromboembolism Risk in Breast Reconstruction: Application of the Caprini Risk Assessment Model

1850. Nerve Reconstruction in Alloplastic Breast Reconstruction: Expanding the Indications for Breast Reinnervation

1860. Small Cuts, Big Changes: Precise Crafting of Axillary Tissue in Reduction Mammoplasty

1787. Cryopreserved Autogenous Cranioplasty: A Systematic Review and Meta-Analysis of Factors Associated with Severe Bone Resorption

1778. Development of an ex vivo Human Skin Perfusion Model for Radiation induced Fibrosis

1859. Tetris Technique for Surgical Treatment of Gynecomastia: Case Series

10:15-10:25am

Q&A

Moderator 10:25-10:50am Peter Koltz, MD

Abstract Presentations (5 – 5-minute talks)

**Aesthetics** 

1875. Evaluating the time of maximal vasoconstrictive effect of epinephrine in facelift surgery.

1760. The Use of Adipose Tissue Based Therapies on Facial Atrophic Post-Acne Vulgaris Scars: A Systematic Review

1773. Mitigating Age-Associated Senescence in Subcutaneous Adipose Tissue through Caloric Restriction

1764. Beyond Barriers to Access: Association of Socioeconomic Factors with Body-Contouring Outcomes

1766. A Retrospective Review of Patient Charts where Helium Plasma RF was used following UAL

Lipoabdominoplasty versus UAL Lipoabdominoplasty without Helium Plasma RF

10:50-10:55am

Q&A

10:55-11:15am

Break/Visit Exhibits

Main Session Talk 1

11:15-12:00pm

The Power of Mentorship – Around the Ohio Valley and Beyond...

Jennifer Sabino, MD; Kate Carruthers, MD, Dan Hammer, DDS, Peter Koltz, MD

12:00pm

General Lunch/Program Directors' Lunch

Moderator

Sebastian Brooke, MD

13:00-13:25pm

Abstract Presentations (5 – 5-minute talks)

**CMF** 

1732. Does Intraoperative Systemic Anticoagulation After Anastomosis Revision Improve Outcomes in Head and Neck Free Flap Reconstruction?

1798. The Spectrum of Severity in Metopic Craniosynostosis: An Updated Analysis of the Largest Cohort to Date Using Craniorate Machine Learning Algorithm

1844. Radiologic findings in children with absent/fused cranial sutures. Analysis of prevalence of incidental sagittal craniosynostosis: is it more common than we expect?

1741. Assessment of Long-Term Speech Outcomes in Children with Pierre Robin Sequence

1753. Provider Characteristics and Pre-Transfer Costs of Potentially Avoidable Transfers for Pediatric Facial Fracture Patients in a Single Institution

13:25-13:30pm

Q&A

Moderator 13:30-13:55pm Joshua Adkinson, MD

Abstract Presentations (5 – 5-minute talks)

Gen Recon

1822. Linear Modeling 2.0: Prospective Data-driven Modeling Reduces Application Overload, Decreases Bias, and Permits Bespoke Optimization in the Integrated Plastic Surgery Match

1751. Physician innovation in topical wound device development: Is it stifled by costly approval pathways? 1823. A 10-Year National Analysis of Plastic Surgery Residency ACGME Case Logs and Operative Experience

1861. Artificial Intelligence Generated High Quality Synthetic Data to Enhance Microsurgery Outcomes: A Proof-of-Concept Study

1853. Virtual Surgical Planning in Free Fibula Reconstruction of the Mandible: Comparison of Long-Term Outcomes with the Conventional Technique

13:55-14:00pm

Q&A

Moderator 14:00-14:30pm Andrea Moriera, MD

Abstract Presentations (10 – 3-minute talks)

1866. A Novel Plastic Surgery Literature Specific Artificial Intelligence Large Language Model: A Proof-of Concept Study with GPT-2

1734. Understanding Healing Complications in Implant-Based Breast Reconstruction using Novel Metrics in Indocyanine Green Angiography

1735. Absorbable Antibiotic Bead Prophylaxis for Implant-Based Breast Reconstruction: A Single-Institution Experience

1864. Implementation of Decision Support for Breast Reconstruction in the Healthy State Alliance

1839. Oral, Inactive Vd3 Significantly Improves Autologous Fat Graft Retention in a Swine Model

1841. Current Autologous Fat Graft Applications of Cryopreserved Adipose: A Review of Clinical Studies

1762. Trends in Plastic Surgery utilization by Hidradenitis Suppurativa patients with Neuropsychiatric Diagnoses

1815. Fat Transposition to Decrease Orbital Rim Hardware Palpability

1870. Targeting Wasteful Preoperative Workup: Benefits of \"Big Data\" Tools Embedded within the Epic FHR

1833. The Elephant in the Room: The Cost of ADM in Implant-Based Reconstruction

14:30-14:35pm

Q&A

14:35-15:00pm

Break/Visit Exhibits

Moderators 15:00-15:30pm Teun Teunis, MD, PhD & Sunishka Wimalawansa, MD, MBA Abstract Presentations (5 – 5-minute talks)

Hand

1725. A Single Center's 13-year experience with a 3-stage Dermal Regeneration Matrix Approach to the Acute Management of Hand Burns

1865. Natural History of Acute Nontraumatic Upper Limb Ischemia

1836. Cost Comparison of Type B Ulnar Polydactyly Excision in the Office and Operating Room

1740. Impact of Area of Deprivation Index and Urban-Rural Geography on Outcomes in Obstetric Brachial Plexus Palsy

1781. Standard Management of Acute Hand Burns: Results from a Survey of American Burn Association-Verified Burn Centers

15:25-15:35pm

Q&A

Main Session Talk 2

15:45-16:45pm

Advances in Oncologic Breast & Chest Masculinization Surgery – From Robotics to Reinnervation

Breast Oncology Reinnervation - Risal Djohan, MD

Gender Affirmation Surgery Reinnervation – Kate Carruthers, MD Robotics in Breast & Microvascular Surgery – Andrea Moreira, MD

16:45-17:00pm

Q&A

17:00pm

Adjourn

#### Ohio Valley Society of Plastic Surgeons Annual Meeting May 31- June 2, 2024

Saturday, June 1st

6:45am Registration/Breakfast/Visit Exhibits

6:45 am Past President Breakfast

7:30am Welcome – Ian Valerio

Main Session Talk 3

7:30-8:30am Vascularized Composite Allo-Transplantation & Where Are We Today

The U.S. Experience: Francis Papay, MD The U.K. Experience: David Leonard, MD

8:30-8:45am Q&A

Main Session Talk 4

8:45-9:45am Navigating Innovations in Plastic Surgery – From Getting a Project Funded to Entering the Marketplace

WG Austen Jr, MD; Francis Papay, MD, Ernie Manders, MD; Gayle Gordillo, MD

9:45-10:00am Q&A

10:00-10:30am Break/Visit Exhibits

Main Session Talk 5

10:30-11:15am Leaders in Service to Our Nation – Opportunities to Collaborate and Inspire!

CAPT Ian Valerio; LTC Jennifer Sabino, MD; CDR Dan Hammer

11:15-11:30am Q&A

Main Session Talk 6

11:30-12:30pm Aesthetic Surgery Updates – What I Do Differently Today from Yesterday!

The Art of Rhinoplasty - Bahman Guyuron, MD

New Areas of Investigation & Facial Rejuvenation - WG Austen Jr, MD & James Zins, MD

What You Should Incorporate into an Aesthetic Practice - Anne Taylor, MD

12:30-12:45pm Q&A

12:45-13:00pm ASPS Update

Scott Hollenbeck, MD, ASPS President Elect

13:00pm OVSPS Business Lunch (Members Only)

13:00pm Adjourn Meeting & Go See Pittsburgh before the Main Gala Event!

Carnegie Museums of Pittsburgh, Music Hall Foyer

4400 Forbes Avenue

18:00pm Evening Gala Event & Awards

#### Ohio Valley Society of Plastic Surgeons Annual Meeting May 31- June 2, 2024

Sunday, June 2nd

6:45am Registration/Breakfast

7:30am Welcome – Ian Valerio

Main Session Talk 7

7:30-8:30am Head & Neck Surgery – How to Innovate and Collaborate in Provision of Team Based Care

"Jaw-in-a-Day" - Dan Hammer, DDS

Best Practices in H&N Microvascular Surgery - Mario Solari, MD & Sebastian Brooke, MD

8:30-8:45am Q&A

Main Session Talk 8

8:45-9:45am Peripheral Nerve Surgery – Tough Cases that Need Innovative Surgical Solutions A

Joshua Adkinson, MD; Sunishka Wimalawansa, MD, MBA; Anne Schwentker, MD;

Teun Teunis MD, PhD

9:45-10:00am Q&A

10:00-10:45am Break/Visit Exhibits

Main Session Talk 9 Transitioning from Residency/Fellowship to Private Practice – Peter Koltz, MD

10:45-11:45am The "Privademic" Practice Environment – Derek Cody, MD

11:45-12:00pm Q&A

12:00pm Adjourn and Looking Forward to Seeing Everyone at the 2025 OVSPS Meeting

(The Greenbrier, White Sulphur Springs, WV)!