TOURS

MAYO CLINIC HERITAGE

10am – 11am / 2pm – 3pm
Mayo Building Lobby
Tour led by Matthew D. Dacy, MA
This one-hour walking tour will introduce you to the history, mission, art and architecture of Mayo Clinic—experiencing what Dr. William J. Mayo called “the spirit of the Clinic.” At Mayo Clinic, art and design are key elements of the healing process. While the visual expression of Mayo Clinic has changed significantly during the past 150 years of medical practice in Rochester—and will continue to evolve as Mayo moves forward—the unique function of Mayo’s “healing environment” remains constant. You will discover what works by Calder, Chihuly and Tiffany, as well as stories of people from many walks of life who shaped Mayo Clinic into a global center of hope and healing.

NEW PROTON BEAM THERAPY FACILITY

6pm – 7pm
Kahler Hotel Lobby
Tour led by Erik Tryggestad PhD, DABR
Dr. Tryggestad will lead a tour of the soon to be opened Mayo Clinic Proton Beam Therapy Facility; housed in the newly-constructed Richard O. Jacobson Building at the Mayo Clinic, Methodist Campus, in downtown Rochester. Proton beam radiotherapy offers the benefit of lower normal tissue complications associated with therapy. This translates to a significantly reduced risk of developing secondary cancers (eg, leukemias) and eliminates the need for patient-specific dose-shaping devices.

WORKSHOPS

TRADITIONAL

Anatomical Écorché Sculpture in Clay
Melinda Whitmore, MFA
8am – 5pm • Viking Room, Kahler Hotel
CEUs: 0.4 Art, 0.4 Biomed
Écorché (ay-kor-shay) is a French word meaning “fleshed” or “skinned,” but to figurative artists it also refers to any representation of the figure that describes what lies under the skin. This workshop focuses on the major masses of the human body—the skull, ribcage, and pelvis.

Drawing from Life: Portrait Drawing
David Jamieson, MFA
8am – 5pm • Rochester Art Center
(Leave Elizabethan Room, Kahler at 7:45 am to walk over)
CEUs: 0.8 Art
In this workshop, students will learn the procedures for drawing an accurate likeness of the human face. Demonstrations will illustrate the basic geometric structures of the skull and facial features, and emphasize the importance of correct proportion and consistent angle of view in a well-constructed portrait.

Dissecting with a Paintbrush—the Not So ‘Gross’ Anatomy
Danny Quirk, BFA
8am – 5pm • 9-42 Stable Building, Mayo Clinic
(Leave Elizabethan Room, Kahler at 7:45 am to walk over)
CEUs: 0.8 Art
The workshop will consist of a demonstration in which Quirk will ‘dissect’ a model with a paintbrush, revealing a given region of the body. Those in attendance will have the opportunity to paint well, get a feel for the materials, and experience it all first hand.

Anatomical Origns: Reconstructing Human Evolution
Viktor Deak, MFA
1pm – 5pm • Regency Room, Kahler Hotel
CEUs: 0.2 Art, 0.2 Biomed
This workshop will explore the forensic reconstruction of an early hominin. Participants will be provided partial skull casts from an early hominin and will be instructed in the basics of reconstructing facial features in clay using forensic paleo-reconstruction techniques.

BIOMEDICAL

Closer to Life: Exploring Anatomy Through Dissection of Unembalmed Cadavers
Wojciech Pawlina, MD and Nirusha Lachman, PhD
8am – 5pm • Procedural Skills Lab: 9th Floor Stable Building
Workshop Length: Ten 2-hour sessions
CEUs: 0.2 Biomed per 2-hour session
M. Lachman and Pawlina will lead ten concentrated two-hour hands-on sessions in human cadaveric dissection using fresh, unembalmed cadavers. The sessions offered will be: Head and Neck, Torso, Abdomen, Upper Limb, and Lower Limb.

The ten workshop sessions are as follows:
- Head and Neck Session 1: 8am-10am
- Thorax, Session 1: 8am–10am
- Abdomen, Session 1: 8am–10am
- Head and Neck, Session 2: 10am-12pm
- Thorax, Session 2: 10am-12pm
- Abdomen, Session 2: 10am-12pm
- Upper Limb, Session 1: 1pm-3pm
- Lower Limb, Session 1: 1pm-3pm
- Upper Limb, Session 2: 3pm-5pm
- Lower Limb, Session 2: 3pm-5pm
(Leave Elizabethan Room, Kahler 15 min before session to walk over)

Workshop meals are provided in the Elizabethan Room, Kahler Hotel for all Biomedical, Digital, and Traditional Workshop attendees:
Breakfast: 7 – 8am
Lunch: 12 – 1pm

Digital

Mastering Human Anatomy in ZBrush®
Andrew Cawser
8am – 5pm • Centennial Hall, Kahler Hotel
CEUs: 0.4 Art, 0.4 Biomed
Andrew will lead workshop attendees in a condensed version of his 4-day workshop on foundational & advanced anatomy. This workshop is an active learning course meant for all digital artists who wish to master the figure.

High-Quality 3D Models from Medical Image Data—Osirix to ZBrush® and Beyond
Travis Vermilye, MFA
8am – 12pm • Regency Hall, Kahler Hotel
CEUs: 0.4 Art
This workshop leads participants through a step-by-step process for creating high-quality surface models from medical image data.

Polygonal Modeling the Skeletal Thorax, Esophagus, and Stomach With Autodesk® Maya®
Glen Hintz, MS
8am – 5pm • Directors Room, Kahler Hotel
CEUs: 0.8 Art
This course will introduce techniques for shading and rendering polygon models literally and interpretively. It will also include artistic techniques. The workshop will utilize a flipped classroom strategy by asking registrants to complete a set of online tutorials prior to attending the workshop. These tutorials will introduce polygonal modeling and shading methods using Autodesk® Maya®.

SALON OPENING

7pm – 9pm
7:30 pm Ribbon Cutting
& Sponsor Remarks
Marriott Ballroom, Marriott Hotel

Digital Workshops sponsored by www.ami.org/meetings/2014 | Program | 5

SALON OPENING: 7:30 Ribbon Cutting
SESSION 1: LAUNCH!

Mayo Clinic’s Chief Marketing Officer will share insights on how this renowned institution plans to extend and enrich their brand with a goal of touching billions of people worldwide. The AMI President will build on the idea of ‘strong brand expression’ from a perspective of openness (as individuals, as businesses, as an association) to engage the science community with our unique voice and perspective. Details of the forward progress made in establishment of laws surrounding author rights in our field will be highlighted. We’ll also hear from an authority on artistic anatomy—an artist with a distinguished background in visual effects work on films such as the futuristic Avatar and Star Wars—films that launched us into other universes. This forward-looking first session will set the pace for all the thrilling content to come.

Conference introduction:
Harnessing the Power of Stories
Robert F. Morreale, MST, CMI, Chair, AMI Conference Director of Creative Media, Mayo Clinic

The Impact of a Multi-Billion Dollar Brand
John Weston, EMBL Chief Marketing Officer. Department of Public Affairs, Mayo Clinic

Presidential Address: Openness
Tonya Hines, CMI, FAMI, President, AMI Art Director, Mayfield Clinic, University of Cincinnati

Rights, Resale & Royalties
Cynthia Turner, MA, CMI, FAMI, Medical Illustrator. Alexander & Turner Inc., Medical Illustration Studio

Keynote Address: Mastering Anatomy
Andrew Caourse, Sculptor and Artistic Anatomy Instructor. President and Co-founder. AnatomyTools.com

WHAT’S NEXT: MEET THE SPEAKERS • COFFEE BREAK
10 – 10:30am | Heritage Hall, Kahler Hotel

SESSION 2: INSPIRE

From reimagining classic images to the beauty of the obvious—we move into a world of intrigue. Listen for the secrets and the hidden gems found in a landmark-anatomy text. First out how bioengineered stem cells are used to treat the mechanisms of heart disease. Discover organic structural patterns with radiological images of the human body and compare them to the beauty found in nature. Be astounded by the detailed anatomical cross sections of the human body created with three pieces of Japanese mulberry paper.

Imaging Amplified: 40+ Years of Computed Tomography (CT)
Terri J. Vrtiska, MD, Diagnostic Radiologist, Assistant Professor of Radiology, Mayo Clinic

Are You Ready for a New Slice of Reality?

Regenerative Medicine:
Stem Cell Biology to Clinical Translation
Timothy J. Nelson, MD, PhD, General Internal Medicine Associate Professor of Medicine, Assistant Professor of Pharmacology, Medical Director, Regenerative Medicine Consult Service Mayo Clinic

Brödel Memorial Lecture:
Transforming Vesalius: The 16th-Century Scientific Revolution Brought to Life for the 21st Century
Daniel H. Garrison, PhD, Professor Emeritus, Department of Classics, Northwestern University

WHAT’S NEXT: MEET THE SPEAKERS • NETWORK
12 – 12:30pm | Heritage Hall, Kahler Hotel

AFTER THAT: EAT LUNCH (PROVIDED)
12:30 – 1:30pm | Business Lunch | Heritage Hall, Kahler Hotel
12:30 – 1:30pm | First Timers’ Lunch | Elizabethan Room, Kahler Hotel

THEN: VIEW SALON & VESALIUS TRUST POSTERS
1:30 – 2:00pm | Marriott Ballroom, Marriott Hotel

WHAT’S NEXT: MEET THE SPEAKERS • COFFEE BREAK
4 – 4:30pm | Heritage Hall, Kahler Hotel

SESSION 3: SPARK

An indelible quality lies at the heart of any successful idea or project—a spark of intuition, genius, or insight that acts as the driver to influence later actions. Our speakers in this session all possess such a spark. You will hear from the cofounders of a cutting edge 3D stereoscopic animation company from Chile. A Mayo Clinic surgeon who led a 70-person care team through the successful separation of conjoined twins will highlight this case. One of many successful separation surgeries he’s performed at Mayo Clinic.

(CEU’s: 0.075 Biomed/0.075 Art)

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WHAT’S NEXT: MEET THE SPEAKERS • COFFEE BREAK
4 – 4:30pm | Heritage Hall, Kahler Hotel

SESSION 4: PARALLEL

Inspiration often comes as a result of time-tested experience and consistent exposure to real life scenarios—learning from doing. But how do you increase the opportunities to learn, to be tested, and to practice? Create a parallel virtual world perhaps. The speakers in this session are visionaries who propose that virtual simulated techniques can replace or amplify real experiences with planned experiences, often immersed in nature, that evolve or replicate the real world.

(CEU’s: 0.1 Art)

Designing the Original Robotic Surgery Simulator
Emily Shaw, MA, CMI, EMT-B, Medical Illustrator and Principal, Illustrating Medicine. Regional Sales Manager, Northeast Mimic Technologies
Steve Rowe, Lead 3D Artist, Northwest Mimic Technologies

Medical Illustrating in Military Medicine and Medical Simulation
Elizabeth N. Weissbrod, MA, CMI, Medical Illustrator. Val D. Hemming Simulation Center at the Uniformed Services University
Valerie Henry, MFA, 3D Virtual Environment Artist. Val D. Hemming Simulation Center of the Uniformed Services University

Augmented Reality Reveals Anatomy Within Art
Sarah Hegmann, MS, Medical Illustrator. Division of Clinical Anatomy, Stanford University

WHAT’S NEXT: MEET THE SPEAKERS • NETWORK
6 – 6:30pm | Heritage Hall, Kahler Hotel

AFTER THAT: EAT DINNER (ON YOUR OWN)
7:30 – 9pm | Thursday’s on First & Third, Plaza
SESSION 5: TOUCH

Good things happen when health care providers can touch the patient and their families in a way that affords them the opportunity to be effectively engaged. Research tells us that patient understanding and outcomes improve significantly with this approach. The advocates in this session will share ideas for utilizing visual approaches to increase patient engagement and patient self-efficacy.

(CIEUs: 0.15 Art)

Helping Patients Make Wiser Choices—The Mayo Experience
Michael Gionfriddo, PhD, Graduate Student, Knowledge & Evaluation Research, Mayo Clinic

Hyper-Index: An Artistic Representation of Public Health Information
Trevor Venniyay, MFA, Medical Illustrator, Assistant Professor, Department of Visual Art, University of Colorado Denver

Exploring the Perceptions Of Somali Immigrants In Sweden On Visuals For Health Communications: A Qualitative Research Study
AmelieSe May Lilienthal, MS, CMI, Web Communicator, CLK, Department of Learning, Informatics, Management and Ethics Karolinska Institutet

Way Beyond The Touch
Fr. Nick Mezcaca, Episcopal Priest, Rector, and Teacher

SESSION 6: NARRATE

The speakers in this session will offer compelling evidence that a pictorial narrative can play an important role in patient care, medical education, and the social critique of the medical profession.

GRAPHIC MEDICINE: WHY COMMUNICATE MEDICAL INFORMATION WITH COMICS?
Lydia Greggs MA, CMI, FAMI, Instructor and Medical Illustrator. The Johns Hopkins University School of Medicine

GRAPHIC MEDICINE: WHY USE COMICS FOR PATIENT AND PRACTITIONER REFLECTION?
MK Czerwiec, RN, MA, Artist-in-Residence
Northwestern Feinberg School of Medicine

PATENT MEDICINE: SELLING THE CURE
Norm Barker, MA, MS, BBP, Associate Professor, Department of Pathology and Department Art as Applied to Medicine Director, Pathology Photography and Graphic Arts. The Johns Hopkins School of Medicine

THE MOLECULAR MECHANISM OF HIV ENTRY
Veronica Falconeri, MA, Vesalius Trust Scholar. The Johns Hopkins University School of Medicine

EVO-DEVO EXPLORATION THROUGH HUMAN CYCLOPIA
Christopher Smith, MA, Vesalius Trust Scholar. The Johns Hopkins University School of Medicine

WHAT’S NEXT: MEET THE SPEAKERS + NETWORK
10 - 10:30am | Heritage Hall, Kahler Hotel

AFTER THAT: EAT LUNCH ON YOUR OWN!

THEN: VIEW SALON & VESALIUS TRUST POSTERS
1:30 - 2:00pm | Marriott Ballroom, Marriott Hotel

SESSION 7: PERCEIVE

Is seeing really believing? Or is seeing just the beginning for understanding? You likely already have an opinion—but will it be the same after this session? Speakers in this session will challenge you to question the integrity of visual data and explore the creation of information graphics in the context of the content it represents. You’ll also hear stories of how visualization techniques can change a person’s perception of their own patient experience. You will be challenged to hone your observational skills, refocus, and concentrate on ‘now.’

Keynote Address: Beyond Perception
Jeff Lieberman, MS, Roboticist/TV Host, Time Warps, The Discovery Channel

LIES, DAMMED LIES, AND STATISTICS: ENSURING GRAPHICAL INTEGRITY IN THE DESIGN OF DATA VISUALIZATIONS
Jodie Jenkinson, MScBMC, PhD, Assistant Professor, Department of Biomedical Communications University of Toronto

CONTENT IN CONTEXT: DEVELOPING INFORMATION GRAPHS FOR SCIENTIFIC AMERICAN MAGAZINE
Jen Christiansen, BA, Art Director of Information Graphics, Scientific American

DIGITAL INTERPRETIVE VISUALIZATION
Daniel Newman, BS, Graduate Student, Department of Digital Media, Drexel University

RESILIENCY IN COMMUNICATING EVOLUTION
Viktor Deak, MFA, Paleo-artist

WHAT’S NEXT: MEET THE SPEAKERS + COFFEE BREAK
4 - 4:30pm | Heritage Hall, Kahler Hotel

AFTER THAT: AWARDS BANQUET, Sponsored by
7:30 – 9pm | Heritage Hall, Kahler Hotel

SESSION 8: FORGE

We are forging ahead. Speakers will demonstrate the complexities of organ transplantation through an innovative video atlas of 3D simulated procedures. Another will share stories of pioneering research and development of remote monitoring devices in extreme environments like Mount Everest. A team of Mayo Clinic plastic and neurosurgeons will provide amazing examples of revolutionary surgical approaches with case-based details that will astound.

Untangling And Re-spinning the Surgical Narrative: A Collaborative Effort Between Surgeons and Biomedical Communicators
Albert Fung, MScBMC, Medical Illustrator. The Toronto Video Atlas of Liver, Pancreas and Transplant Surgery
Paul Kelly, MScBMC, Medical Illustrator. The Toronto Video Atlas of Liver, Pancreas and Transplant Surgery

Surgical Treatment of Craniosynostosis
Nicholas M. Wetjen, MD, Pediatric Neurosurgeon; Associate Professor of Neurosurgery and Pediatrics, Mayo Clinic

Facial Transplantation
Samir Mardini, MD, Plastic Surgeon Program Director, Division of Plastic Surgery, Director, Facial Paralysis and Reanimation Clinic, Professor of Surgery Division of Plastic Surgery, Mayo Clinic

Remote Monitoring in Extreme Environments
Amine N. Issa, PhD, Research Fellow Human Integrative and Extreme Physiology Laboratory Division of Cardiovascular Diseases, Mayo Clinic

WHAT’S NEXT: MEET THE SPEAKERS + NETWORK
6 - 6:30pm | Windsor Room Cinema 4D Social Hub, Kahler Hotel

AFTER THAT: AWARDS BANQUET, Sponsored by
7:30 – 9pm | Heritage Hall, Kahler Hotel
SESSION 9: EVOLVE

Gross anatomy class—it’s a rite of passage in medical education. How has teaching the science of anatomy evolved over the years? We’ll build on what we’ve heard about teaching anatomy, but get ready to hear stories about ‘flipping’ the classroom or using anatomical body painting to enhance context for the learner. Explore boundless digital landscapes for anatomical reference, and learn a new ‘anatomical alphabet’. We’ll also look at where the future of anatomy instruction is headed with incorporation of 3D anatomical references.

(CEUs: 0.15 Art)

An Evidence-Based Reappraisal of Surface Anatomy
Stephen W. Carmichael, PhD, DSc

A Flipped Classroom Model for Teaching Anatomic Figure Drawing
Glen Hintz, MS, Medical Illustrator, Associate Professor. Department of Medical Illustration. Rochester Institute of Technology

Using Kickstarter to Publish a Children’s Anatomy ABC Book
Karen Bucher, MA, CMI, Medical Illustrator. Instructor. University of Illinois at Chicago

Dissecting With a Paintbrush
Danny Quirk, BFA, Anatomical Artist

The Digital Écorché
Andrew Cawrse, Anatomical Artist

WHAT’S NEXT: MEET THE SPEAKERS • COFFEE BREAK
10 – 10:30am | Heritage Hall, Kahler Hotel

SESSION 10: MINGLE

Playfully titled ‘mingle,’ this session explores a range of social media used by speakers who are not afraid to push the boundaries of communication and information exchange. We’ll hear about a new (small) online publication that highlights the importance of science-based art. In contrast, we’ll also hear about an established (big) organized system of social media tools designed to extend and enrich the Mayo Clinic brand. In both cases, they share the same goal—to start conversations.

SciArt in America
Jula Buntaine, MFA, Founder and Editor-in-Chief. SciArt in America

Applying Social Media in Health Care
Lee A. Aase, BS, Director. Mayo Clinic Center for Social Media

Visualization: An Essential Component to the Health Care Innovation Process
Marnie Meylor, MD
Service Designer. Mayo Clinic Center for Innovation

Making the Ugly World of Online Illustration Pretty Again
Glendon Mellown, BFA, Blogger for Symbiart. Scientific American Blog Network

WHAT’S NEXT: MEET THE SPEAKERS • NETWORK
12 – 12:30pm | Heritage Hall, Kahler Hotel

SESSION 11: EMPOWER

An image and its creator—there is empowerment in that combination. Focus on just those two things while you listen to fascinating details about historical visuals in medicine. From the position of creator, find out about certain rights protection strategies. And, be inspired by the careers of two legendary medical illustrators—one of whom will share his insights on the liberation of being a retired artist.

Imaging the Heart from Leonardo to the Late Nineteenth Century: 350 Years of Artistry
W. Bruce Fye, MD. Eminent Professor of Medicine. Mayo Clinic

To Catch a Thief: Stories of Infringements, Pursuit, and Outcomes Part I and II
William B. Westwood, MS, CMI, FAMI, Medical Illustrator
Tori J. McDermott, MA, CMI, FAMI, Medical Illustrator

Medicine’s Michelangelo: The Life & Art of Frank H. Netter
Francine Mary Netter, MA, MBA, Author. Medicine’s Michelangelo: The Life & Art of Frank H. Netter, MD

Muriel McLatchie Miller Lecture: Can’t Wait to Get up in the Morning!
Robert Demarest, Medical Illustrator. Director Emeritus. Center for Biocommunications, Columbus University

WHAT’S NEXT: MEET THE SPEAKERS • COFFEE BREAK
4 – 4:30pm | Heritage Hall, Kahler Hotel

SESSION 12: PUSH

This final session will offer some inspirational stories by speakers who have pushed beyond obstacles to achieve amazing results in both scientific advancement and biomedical visualization. We hope these stories—along with all the other stories shared at AMI 2014—inspire the work we do in illuminating science.

The Embodied Cell
David Odde, PhD. Professor of Biomedical Engineering. University of Minnesota

Achieving Medical Accuracy
Nicolas Wiederhold, Director of Technical Content. Ghost Productions, Inc.

Visualizing the Nanoscale: A 3D Animation of Targeted Anti-cancer Drug Delivery Using Polymeric Nanoparticles
Karyn Ho, BSc, PhD. (MScBC candidate for 2014) Vesalius Trust Scholar. University of Toronto

An Exploration of 3D Visualization and Interactive Media to Describe Super-Resolution Microscopy as Applied to Neurobiology
Andrew Tran, BS. (MScBC candidate for 2014) Vesalius Trust Scholar. University of Toronto

Meandering to a Finish
David Bolinsky
Founder & Creative Director. e.mersion learning company

WHAT’S NEXT: MEET THE SPEAKERS • NETWORK
6 – 6:30pm | Plaza (rain: Elizabethan Room, Kahler Hotel)

WHAT’S NEXT: VESALIUS TRUST AUCTION
6:30 – 9pm | Plaza (rain: Elizabethan Room, Kahler Hotel)