

Schedule at a Glance

Conference or fee registration required		Included with all registrations unless indicated	
Monday, April 23			
Registration/Badge Pick-up 7:00 am – 5:00 pm			
Pre-conference Workshops 8:30 am – 2:00 pm			
<p>Regulatory & Quality System Considerations for 3D Printed Medical Devices WORKSHOP LEADER: Janelle Schrot, Materialise INSTRUCTORS: Matthew DiPrima, Food & Drug Administration; Kim Torluemke, 3D Systems, Jenny Jones, Materialise; Beatrice Ogembo, American Preclinical Services;</p>	<p>3D Printing in Hospitals: What You Need to Know WORKSHOP LEADER: Jonathan Morris, MD, Mayo Clinic & Frank Rybicki, MD, The University of Ottawa INSTRUCTORS: Andy Christensen, Somaden LLC; Amy Alexander, Mayo Clinic; Nicole Wake, NYU School of Medicine; Adam Jakus, DimensionInx</p>	<p>Biomaterials and Bioprinting Fundamentals & Applications <i>Room 320</i> WORKSHOP LEADER: Adam Jakus, Dimension Inx Stuart Williams, Bioficial Organs Program; Ken Church, nScript; James Hoying & Lehanna Sanders, Advanced Solutions; Thomas Hinton, Carnegie Mellon University</p>	<p>RAPID + TCT Workshops of interest:</p> <ul style="list-style-type: none"> • Fundamentals of Additive Manufacturing • Fundamentals of 3D Scanning and Modeling • Metal Part Fabrication Using Additive Manufacturing • Making the Business Case for Additive Manufacturing
3:00 pm – 5:00 pm RAPID + TCT Kickoff			
Additive Manufacturing Awards Todd Grimm – What's New at RAPID + TCT? Keynote Presentation			
RSNA 3D Printing Special Interest Group Meeting 5:00 pm – 7:00 pm			

Tuesday, April 24		
Registration/Badge Pick-up 7:00 am – 5:00 pm		
8:00 am – 9:45 am KEYNOTE PRESENTATION		
ITEAM Launch Keynote Presentation		
<p>MMI Clinical Applications I 10:10 am – 12:15 pm MODERATOR: Janelle Schrott, Materialise</p>	<p>RAPID+TCT Sessions of Interest 10:10 am – 12:15 pm</p>	<p>Exhibits and Other Activities</p>
<p>10:15 AM - 10:40 AM Predicting the Best-Fit Cardiac Guide-Catheter Prior to Transcatheter Mitral-Repair Using 3D-Printed Models <i>Clare Ward, Materialise</i></p>	<ul style="list-style-type: none"> • 3D Imaging & Scanning/CT Scanning • Direct Write Printed Materials/Electronics • Materials I 	<p>Exhibit Hours 10:00 am – 6:00 pm</p> <p>7:00 am – 6:00 pm Mayo Clinic/MMI Display <i>Lobby</i></p>
<p>10:45 AM - 11:10 AM Influence of Sterilization on Laser Sintered Polyamide Material <i>Laura Gilmour, EOS North America</i></p>		
<p>11:15 AM - 11:25 AM A Comparison of 3D Printed Urological Cancer Models Created with Different 3D Printing Technologies <i>Nicole Wake, New York University School of Medicine</i></p>		

MMI Clinical Applications I <i>(continued)</i>	RAPID+TCT Sessions of Interest <i>(continued)</i>	Exhibits and Other Activities <i>(continued)</i>
11:30 AM - 11:40 AM DLP Printing of Middle Ear Prosthesis for Otosclerosis: Proof of Concept <i>Gavin Carter, University of Florida</i>	<ul style="list-style-type: none"> • 3D Imaging & Scanning/CT Scanning • Direct Write Printed Materials/Electronics • Materials I 	
11:45 AM - 11:55 AM The Design Process of Patient Specific Surgical Guides for Head and Neck Reconstruction <i>Heather Logan & Suresh Nayar, Institute for Reconstructive Sciences</i>		
12:00 PM - 12:10 PM A Comparison of 3D Printed and Conventional Materials Used for Radiation Bolus Compensators <i>Peter Liacouras, PhD & Charlton Smith, MD, Walter Reed National Military Medical Center</i>		
MMI: Clinical Applications II 2:10 pm – 4:15 pm MODERATOR: William Weadock, University of Michigan	RAPID+TCT Sessions of Interest 2:10 pm – 4:15 pm	Exhibits and Other Activities
2:15 PM - 2:40 PM Seattle Children's Imagination Lab - Pediatric Innovation and Improvement Using an In-Hospital Service Model <i>Christopher Howard, Seattle Children's Research Institute</i>	<ul style="list-style-type: none"> • AM Design Considerations • 3D Imaging & Scanning/Surface Scanning • Direct Write Printed Materials/ Electronics • Post Processing 	2:15 pm – 4:15 pm Additive Manufacturing Standardization Forum Featuring updates from MITA (DICOM), AAMI, ASTM, ASME, AWS, SAE, and IEEE-PWG. Theater??
2:45 PM - 3:10 PM Leveraging the Data Behind 3D Printing: Additional Medical Applications of a 3D Lab <i>Justin Ryan, PhD, Phoenix Children's Hospital</i>		
3:15 PM - 3:40 PM Emerging Role of 3D Printing in Medical Device Development and Training <i>Beth Ripley, VA Puget Sound Health Care System; and Dmitry B. Levin, University of Washington Medical Center</i>		
3:45 PM - 4:10 PM The Medical Economics of 3D Printing for Surgical Planning <i>Michael Gaisford, Stratasys</i>		2:30 pm – 3:30 pm Tech Briefing: MMI 6:00 pm – 8:30 pm Welcome Event: River Ranch <i>(shuttles provided)</i>

Wednesday, April 25		
Registration/Badge Pick-up 7:00 am – 5:00 pm		
8:00 am – 9:55 am KEYNOTE		
Innovation Audition Finals and Award SME Medical AM3DP Annual Report KEYNOTE: Rise of Point-of-Care Manufacturing: Impacting More Patients with 3D Printing <i>Jonathan Morris, MD, and Amy Alexander, BME, MS, Mayo Clinic</i>		
MMI: Implants 10:10 am – 12:15 pm MODERATOR: Adam Jakus, Dimension Inx	RAPID+TCT Sessions of Interest 10:10 am – 12:15 pm	Exhibits and Other Activities
10:15 AM - 10:40 AM The Socio-Economic Dynamics of the Adoption of 3D Printed Patient-Matched Knee Implants <i>Amir Namin, Northeastern University</i>	<ul style="list-style-type: none"> • Research I • Materials II • Software & Modeling 	Exhibit Hours 10:00 am – 6:00 pm 7:00 am – 6:00 pm MMI Collaboration Center <i>Lobby</i> 10:30 – 12:00 DICOM WG-17 3D Manufacturing Meeting
10:45 AM - 11:10 AM Effect of Build Orientation on Axial/Torsional Fatigue Life of Ti-6Al-4V ELI <i>Matthew DiPrima, PhD, US Food and Drug Administration</i>		

MMI: Personalized Prosthetics 10:10 am – 12:15 pm MODERATOR: Beth Ripley, Puget Sound VA Hospital	RAPID+TCT Sessions of Interest 10:10 am – 12:15 pm	Exhibits and Other Activities
10:15 AM - 10:40 AM <u>Using Additive Manufacturing to Create Soft Tissue Prosthetics After a Sarcoma Diagnosis</u> <i>Irene Healy, New Attitude Prosthetic Designs</i>	<ul style="list-style-type: none"> • Applied Economic Research • Process Monitoring Control & Qualification • Material Properties II • New Processes II 	Exhibit Hours 10:00 am – 3:00 pm 7:00 am – 2:00 pm Mayo Clinic/MMI Display <i>Lobby</i>
10:45 AM - 11:10 AM <u>Specialized Orthotic and Prosthetic Componentry Through the Use of Advanced Digital and Conventional Techniques</u> Peter Liacouras, PhD & Jamie O. Gandert, Walter Reed National Military Medical Center		
11:15 AM - 11:40 AM <u>Creation of End Use Personalized Assistive Devices in US Veterans Affairs Hospitals by Clinical Rehabilitation Engineers</u> <i>Ben Salatin, New Mexico VA Health Care System</i>		
11:45 AM - 11:55 AM <u>Remote Fabrication of Prosthetic Sockets Using Computer Tomography Scanning and 3D Printed Molding Procedure</u> <i>Mohammad Abubasha, Texas A&M University</i>		
12:00 PM - 12:10 PM <u>Design Optimization and Additive Manufacturing of Custom-Fit Prosthetic Sockets</u> <i>Christiane Beyer, PhD, & Monica Robles, California State University-Long Beach</i>		