

NSF Workshop on Additive Manufacturing for Health

March 17-18, 2016, Holiday Inn Grand Ballroom, 4610 N. Fairfax Drive, Arlington VA 22203

<http://nsfam.mae.ufl.edu/AM4Health.htm>

Workshop agenda

Time		Event	
		Each presentation is followed by a Q&A session (5 minutes long in the morning and 3 minutes long in the afternoon)	
Day 1 (March 17)	Morning	8:00 – 8:25 am	Introduction and opening remarks Pramod P. Khargonekar (NSF), Yong Huang (Univ. of Florida), and Steven R. Schmid (Univ. of Notre Dame)
		8:25 – 8:45 am	Ralph L. Resnick (NCDMM): Accelerating the Transition and Insertion of Additive Manufacturing Research for Health
		8:45 – 9:15 am	Hod Lipson (Columbia): 3D Printing: The Next 25 Years
		9:15 – 9:45 am	Jennifer Lewis (Harvard): Additive Manufacturing of 3D Vascularized and Functional Tissue Constructs
		9:45 – 10:15 am	Coffee break
		10:15 – 10:45 am	Anthony Atala (Wake Forest): Regenerative Medicine: Current Concepts and Applications for Additive Manufacturing
		10:45 – 11:15 am	Scott Hollister (Univ. of Michigan): 3D Printed Patient Specific Medical Devices: There is a Paradigm, But is There a Path?
		11:15 – 11:45 am	Wei Sun (Drexel University): 3D Bioprinting - Challenges and Opportunities
		11:45 am – 12:15 pm	Panel discussion Panelists – Day 1 morning speakers Moderators – Yong Huang and Steven R. Schmid
	Lunch	12:15 – 1:30 pm	Working lunch (Provided by the workshop)
	Afternoon	1:30 – 1:45 pm	Amit Bandyopadhyay (Washington State University): Additive Manufacturing of Hard Biomaterials
		1:45 – 2:00 pm	Shaochen Chen (University of California at San Diego): Rapid Scanningless 3D Printing: Vision, Status, and Research Needs
		2:00 – 2:15 pm	John P. Fisher (University of Maryland): Current Status and Future Perspectives of 3D Printing and Bioprinting for Regenerative Medicine
		2:15 – 2:30 pm	Ola Harrysson (North Carolina State University): How Additive Manufacturing is Changing Healthcare
		2:30 – 2:45 pm	Bradley R. Ringeisen (Naval Research Laboratory): 3D Bioprinting for DoD, Government and Commercial Applications

		2:45 – 3:00 pm	Albert Shih (University of Michigan): Cyber-Physical Design and Additive Manufacturing of Custom Orthoses
		3:00 – 3:30 pm Coffee break	
		3:30 – 3:45 pm	David Wallace (MicroFab): Additive Manufacturing of Functional Materials in Health Applications using Ink-Jet Technology
		3:45 – 4:00 pm	Michael J. Yaszemski (Mayo Clinic): Current and Future Uses of Additive Manufacturing in Neuro-Musculoskeletal Spinal and Oncologic Surgery
		4:00 – 4:15 pm	Kaiming Ye (Binghamton University): Cell and Tissue Therapeutics Manufacturing
		4:15 – 4:30 pm	Lijie Grace Zhang (George Washington University): 3D Bioprinting and Nanobioinks for Complex Tissue and Organ Regeneration
		4:30 – 5:15 pm	Panel discussion Panelists – Invited participants Moderators – Yong Huang and Steven R. Schmid
Day 2 (March 18)	Morning	8:00 - 8:05 am	Introduction / announcements
		8:05 – 8:35 am	Deborah J. Goodings (NSF): NSF Overview of Additive Manufacturing for Health
		8:35 – 9:05 am	Rosemarie Hunziker (NIH NIBIB): Cells, Cells, and More Cells: The Weakest Link in Regenerative Medicine
		9:05 – 9:35 am	Carrie Laurecot (US Army): Delivering Mission Ready Medical Solutions to the Warfighter
		9:35 – 10:00 am Coffee break	
		10:00 – 10:30 am	James Coburn (FDA): FDA Perspectives on 3D Printing: Technical Considerations
		10:30 – 11:00 am	Anne Plant (NIST): Additive Manufacturing for Health: a NIST Perspective
		11:00 – 11:55 am	Presentation and panel discussion Opening presentation – Megan Brewster (OSTP) Panel discussion Panelists – Day 2 morning speakers Moderator – Megan Brewster
		11:55 am – 12:00 pm	Closing remarks – Yong Huang and Steven R. Schmid
	Lunch	12:00 – 1:00 pm	Working lunch (Provided by the workshop)