October 21 FORUM

3D Printing: It’s Changing Everything

The October Forum of MDG will address this innovative marriage of software and machine printing, to understand the underlying influences and needs . . . as well as hype from reality.

Program Description
The technology for 3D printing has been growing in leaps and bounds during the past decade. No longer considered a novelty, it has blossomed in the health care environment, stemming from imaginative personal software to patient diagnostics, surgical planning, specialized instrumentation, implantable devices . . . and now the fun stuff - creating new body parts!

But has 3D printing (developing objects in three dimensions using successive layering of substrates) actually arrived in health care, or is it merely a fad, providing substance to existing technologies?

Setting the tone with: materials used, printing machinery and production capabilities (referred to as additive manufacturing), our expert panelists will address; new developments for printing applications, the software/hardware used to used for these applications and clinical research that has gained a great deal of media hype.

Mark Schonfeld sets the stage for the 3D industry & speakers, clarify key areas of “additive manufacturing” and the high degree of research being conducted, possibly dropping in a few legal anecdotes regarding the market.

Michael Gaisford will speak to the hardware/software issue within 3D printing, focusing on what is available (popular) with companies within this space and what hardware is being developed for future applications.

Adam Hayden will cover the successful path of his orthopaedic company's product commercializing using 3D printing and provide some highlights to future product development.

Forrest Fuller will take us into the next level of using 3D printing for cellular constructs, discussing bioprinted human tissue models and how they have commercialized this technology.

Finally Jeffrey Morgan will wrap up the discussion with his current and future vision on what can be expected in the near and far term.

Upcoming Events
Forum:
Wed, Nov 4 5:30 – 8:30 PM
Medical Technology Product Development: From Concept to Commercialization
(Constant Contact)

View a brief video introduction from Eugene Gregerson to the entrepreneurial perspective of the November MDG Forum at www.mdgboston.org

Forum:
Wed, Dec 2 5:30 – 8:30 PM
Mobile Health Applications: Supporting the Changing Healthcare Environment
(Constant Contact)
**Moderator**

**Mark Schonfeld**  
Partner, Burns & Levinson

As a partner with Burns & Levinson, Mark concentrates his practice in complex business and intellectual property litigation, especially protection of corporate intellectual property through effective methods of trademark, copyright and patent litigation. He has extensive experience in protecting the world’s leading brand names from infringement and is responsible for the seizure of millions of dollars in counterfeit merchandise from distribution centers, retail operations and factories that manufacture counterfeit products. He is highly skilled in preventing and stopping “gray market” imports by using innovative techniques. He also serves as counsel to the Imaging Supplies Coalition, an organization formed by prominent computer companies to combat counterfeiting and unfair and deceptive trade practices.

**Presenters**

**Michael Gaisford**  
Director of Marketing, Stratasys

Mike joined Stratasys Medical Solutions Vertical Business Unit as the Marketing Program Director. He oversees global marketing programs, collaborations with physicians and hospitals and medical application development after 8 years with Boston Scientific in Marketing and Program Management roles. He led the business development and partnering strategy development for the Healthcare Solutions business unit, drove post-merger integration for BSC’s acquisitions of Bard EP and American Medical Systems and managed the corporate restructuring programs. Mike oversaw all therapeutic franchises managing the global product launch for novel cardiac ablation system, supported clinical trials for FDA approval. He developed the business case leading to BSC’s entry into the deep brain stimulation market. He holds an M.B.A. from the Tuck School of Business at Dartmouth and a B.S. in Industrial Engineering from Stanford University.

**Adam Hayden, MS, MBA**  
Sr. VP Marketing, Conformis

Adam has served as Senior VP, Marketing, for Conformis since April 2015, with responsibility for international sales, product management, corporate communications, meetings and events and medical education outreach. Previously he was VP of Marketing. Adam has also held various senior marketing positions at Smith & Nephew, including director of marketing responsible for the global biomaterials franchise. Before that, he held senior marketing positions at Johnson & Johnson’s Orthopaedic Division, now DePuy Orthopedics, Inc., or Depuy. Prior to his career in orthopedics, Adam served as a Captain in the U.S. Army. He has a BS in Mechanical Engineering from Cornell University, an MBA from the University of Colorado and an MS in Biomedical Engineering from the University of Michigan.

**Forrest Fuller, PhD, CLP**  
VP, Business Development, Organovo

As VP of Business Development at Organovo, Forrest is bringing over thirty years of early stage biotechnology experience. Forrest previously held key business development or scientific leadership positions at Bionomics, *S*BIO, TargeGen, Elitra Pharmaceuticals, Trega Biosciences, NPS Pharmaceuticals and Scios. He has negotiated and managed multiple external collaborations and M&A transactions. Forrest has extensive experience in intellectual property portfolio management and has helped launch numerous entrepreneurial companies through his work with such programs as UCSD CONNECT and the Governor’s Advisory Counsel to the Utah Centers of Excellence Program (COEP). He holds a BS in Chemistry (University of Utah) and a PhD in Biochemistry and Molecular Biology (Harvard University).

**Jeffrey Morgan, PhD**  
Professor of Medical Science & Director of Biomedical Engineering, Brown University

Jeffrey is Professor of Medical Science and Engineering and Co-Director of the Center for Biomedical Engineering at Brown University. Jeffrey has received numerous awards and patents for his research in gene therapy and tissue engineering. He has co-founded three companies including his latest, Microtissues, Inc. His latest work is focused on a new instrument for tissue engineering; the Bio-Pick, Place and Perfuse (BioP3). The Bio-P3 supersedes 3D printing because it builds living tissues of high cell density by picking up and stacking large living tissue parts that fuse into a macrotissue. He holds a BS from Syracuse and a PhD from Harvard with postdoctoral training at MIT and the Whitehead Institute.

**Co-Champions**

**Bill McIlhargey**  
Principal, WPM Enterprises

**Peter Fuchs**  
MDG Treasurer and Financial Executive
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We would like to thank the hundreds of volunteers who help to make this organization a success.

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MDG Boston 2015-2016 Program Calendar

**Forum Panels**
(Location: Constant Contact Headquarters, Waltham, unless noted otherwise)

**Sept 16** Diabetes Today: Discipline, Devices & Development  
*Co-Chairs: Dick O’Brien, Shweta Sharma, Aaron Cohen, Peter Madras*

**Oct 21** 3D Printing Is Changing Everything  
*Co-Chairs: Bill McIlhargey, Peter Fuchs*

**Nov 4** Med Tech Product Development: From Concept to Commercialization  
*Co-Chairs: Paul Hartung, Keith Kowal*

**Dec 2** Smartphone apps to engage healthcare at home  
*Co-Chairs: Kevin Franck, Jeff Karg*

**Feb 3** Solutions Looking for Problems  
*Chair: Peter Madras*

**Mar 2** Nanotechnology in the Healthcare Industry  
*Co-Chairs: John O’Gara, Jim O’Connor*

**Apr 6** Med device start-ups and companies in China  
*Co-Chairs: Paul White, Grace Fu Palma*

**May 4** FDA's Winchester Engineering and Analytical Center (WEAC)  
*Co-Chairs: Hank Allard, Rich Nadeau*

**June 1** Surgical Navigation Systems for Image Guided Surgery  
*Chair: Randy Chinnock*

**Member News**
MDG welcomes these new members:  
Scott Brechbiel  
Paul Chang  
Derick Daley (Sponsor)  
Federico Izzia  
Kyle Jarger  
Deborah M Johnson  
Thomas Jozefiak  
Chris Kokkinos  
Karen Lamkin  
Kristie Nagpal  
George Perros  
Barbara Piper  
Peter Rizzo  
David Schultz  
Marlene Schwarz  
Vaibhav Shah  
Gautam Shah  
Varun Shrimali  
Anthony Souza  
Steven Stanton  
Andreas Weiss  
Ravi Yasa  
Robert Zanghi

In addition, we welcome back those who have renewed their MDG membership:  
Christopher Auld  
Mark Bates  
Edward Berger  
Mark Bonifacio (Sponsor)  
Steven Colbert  
Annette Coleman  
Joyce College  
Kristian Dimatteo  
Nancy Finn  
Donald Freeman  
David Funnell  
Ninad Gujar  
Kathleen Hagan  
Michael Mills  
Alan Raider  
Trish Robertson  
Charisse Sebastian  
Jerrold Shapiro  
Crispin Weinberg

Explore the NEW MDG Boston website at www.mdgboston.org

**About MDG Boston**
MDG is the professional association for career building, knowledge acquisition and mutual support for New England medical technology professionals.

MDG sponsors Forums, Networking, SIGs (Special Interest Groups), Workshops and Special Events where diverse industry leaders can share their experience and knowledge as presenters and peer-to-peer.