



FELLOWS PROGRAM

AUG IMMERSION

Specialties of Ophthalmology (red team) and ENT (white team) kept the group busy through their immersion phase.

DECEMBER NEEDS SELECTION

Both teams selected down to their favorite dozen needs. Some of these went to the Innovation class, others were kept by the fellows to work on.

JANUARY CONCEPTS

Each need generates several concepts, and prototyping and concept selection winnows that down to just a few. Those are moved further down the pipeline.

JUNE BUSINESS PLANS

Closing in on the end of the fellowship year, teams are busy proposing next steps. The red team will continue with two projects by way of a single team member remaining in Biodesign for a second year. The white team also hopes to move forward.

We celebrate ten years of innovation

Tenth Anniversary of Biodesign!

Our mission is to train students, fellows and faculty in the Biodesign Process: a systematic approach to needs finding and the invention and implementation of new biomedical technologies. We have spent the last 10 years perfecting this training program, graduating more than 90 fellows and over 600 students.

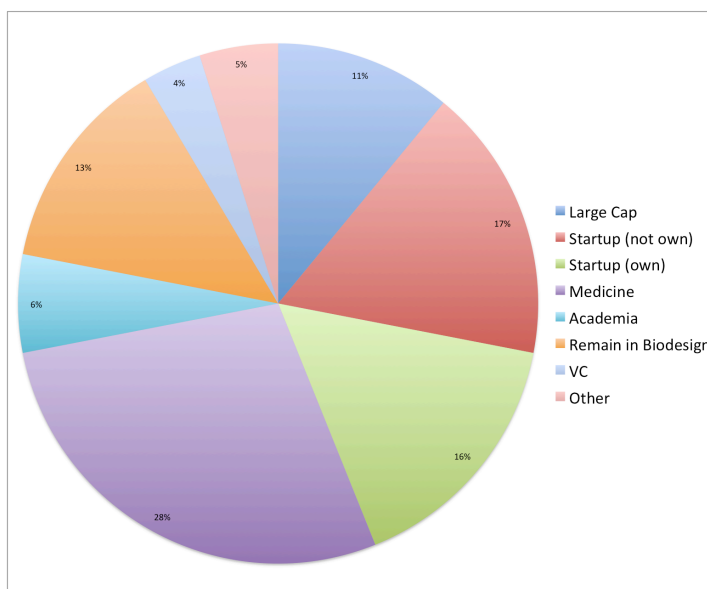
Graduation this year was also a celebration of our tenth anniversary. We invited illustrious sponsors of the initial program to join us for our ceremony and say a few words to our graduates. We were pleased that John Abele, Bob Croce, Ginger Graham and Simon Stertzler joined us.

Our 2010-11 Biodesign Innovation Fellows [pictured left] are [1st row] Michael Schaller, Garrett Smith, Joelle

Barral, Brandon Felkins, [2nd row] Ravi Pamnani, Sidhartha Sinha, Ashish Nimgaonkar, [3rd row] Michael Ackermann, and Victor McCray.

Training the next generation Where our Fellows go

As the chart illustrates, our alumni find themselves in various healthcare related sectors of medtech. Many start their own companies from the innovations they initiate at Biodesign, but just as many join other start-ups for the environment they provide. Since we train as many physicians as engineers, we also find many of our fellows returning to training or practice in their fields of medicine, but with a renewed interest in innovation. Many of those continue to innovate within their specialty.





ROUNDTABLE

GOVERNMENT INPUT

We initiated two roundtable sessions working with separate Government agencies to provide policy input to both the FDA and the USPTO.

Near Left: Intellectual Property and Entrepreneurship in Medical Devices: A Joint Conference between USPTO and Stanford University featuring David Kappos, Under Secretary of Commerce for Intellectual Property and Director of the USPTO and USPTO's Chief Economist Stuart Graham

Far Left: Jeffrey Shuren, Director, FDA's Center for Devices & Radiological Health (CDRH) on New Directions in U.S. Medical Device Regulation.

From the Innovator's Workbench Workbench Series

We kicked off our Workbench season with Dr. Robert Langer, Professor of MIT and one of the most prolific inventors of his time. David Cassak, of Windhover Information, interviewed Dr. Langer who described his career and the many companies he has started from his research.

Next we hosted Lonnie Smith of Intuitive Surgical to an enthusiastic crowd.

Our third event of the year featured Rich Meelia, CEO of Covidien which proved to be a fascinating look at healthcare business transitions.

Community Outreach Executive Education

Biodesign faculty presented for a 2nd year at the Trans-Catheter Therapeutics Conference (TCT), the world's largest educational meeting specializing in interventional cardiovascular medicine, on the Biodesign Innovation Process.

Biodesign has also partnered with the California Health Care Foundation (CHCF) to offer innovation training as part of CHCF's Health Care Leadership Program.

Institute of Medicine Policy Making

Josh Makower, Consulting Associate Professor in Biodesign, testified before an Institute of Medicine panel to the challenges of building a successful medical technology company in today's regulatory and political environment.

Expanding Globally and Locally New Programs

Biodesign announced a new global program: Singapore-Stanford Biodesign. The program will encompass a fellowship and courses in Singapore in the teaching of the Biodesign program. The fellowship, modeled after our Stanford-India Biodesign fellowship, will include six months at Stanford and six months to one year in Singapore to do needs finding and device innovation in an Asian setting.

Our first Singapore fellows joined in January, 2011.

New Partners

The Experien Group has joined as a Community Partner. Terumo Medical and Olympus have joined as corporate partners.

New Faculty

Chris Shen has joined the faculty of Biodesign as Executive Director for the Singapore-Stanford Biodesign program. In this capacity Chris will oversee the development of this joint program and will supervise the Singapore fellows while they are here and continue to mentor them while they are in Singapore.

Stanford-India Biodesign Program

We hosted our 3rd year of Stanford-India Biodesign fellows who were here for the first half of 2010 before returning to India to complete their fellowships at AIIMS.

They are Nitin Sisodia, Dr. Gita Handa, Pushkar Ingale and Ritu Kamal.



We launched indiabiodesign.org to help catalyze a community through social networking. The site now has over 500 members. Please join our community and participate in the global medtech discussion.

Awards

Nish Chasmawala, 2008 Stanford-India Biodesign Fellow, was awarded the India TR35, MIT's award for the top 35 innovators under 35 in India.

The Jaipur Knee, designed by students in Tom Andriacchi's class as the Biodesign-sponsored project, has been selected as one of Time Magazine's Top 50 Inventions for 2009 and by CNN as one of the top 10 inventions for 2009.

We congratulate Srinivas Jaggu, a 2008-10 Stanford-India Biodesign fellow, chosen as a TEDIndia Fellows for 2009.

Biodesign was awarded an \$80K grant from St. Jude Medical in support of the Biodesign Innovation Fellowship.

Paul Yock is one of four honorees (the others are Tom Fogarty, Julio Palmaz and John Simpson) at the Annual Pulse of the City Gala event, sponsored by the Cardiovascular Research Foundation. "Honoring the achievements of four visionary individuals whose innovative spirit and creative talent have transformed interventional cardiovascular medicine, touching the lives of countless individuals suffering from heart disease and improving patient care around the world."

The Biodesign program will participate in an \$8 million NIH Director's award to help establish a global health consortium at Stanford geared to accelerating progress in diagnostics, drugs and devices. Michele Barry, the Senior Associate Dean of Global Health, is the Principal Investigator. The Fogarty International Center will administer this

important effort that is designed to encourage integration of the university's business, design, medicine and engineering programs to cultivate new collaborations and expand scientific progress in global health.

Balram Bhargava, Executive Director of SIB in India, received an award of the Indian Science Congress Association at the 98th Indian Science Congress. He was one of 26 persons receiving an award, recipients of which included five Nobel Laureates.

Stanford Student Biodesign and Biopharma won the Dean of Students Award for Outstanding Achievement.

Alumni News

InSite Medical Technologies, maker of a medical device used to safely deliver epidural anesthesia during childbirth and other procedures started by the 2007 Fellows, brought in \$1.06 million of an expected \$2.08 million round of equity, according to a filing with the SEC.

The Alumni Fellows have created an alumni organization and now have a blog and website: biodesignalumni.com.

Matthew Callaghan's OneBreath ventilator is featured in Stanford Magazine. Read the article: [Helping the World Breathe Easier](#).

Two of the 2008 SIB Fellows, Nish Chasmawala and Amit Sharma, have founded ConSure Medical, which was recently recognized as one of the Top 75 startups in India to bet on by DARE magazine.

A 2009-2010 Fellowship Team took first place for the 2-minute elevator pitcher for their Intimal Solutions Project, a minimally invasive way to restore valve competency in patients with venous stasis ulcers due to deep venous reflux.

FACULTY & STAFF

The Biodesign Program is made possible by the contributions of a stellar faculty and highly-committed staff.

FACULTY

Paul Yock
Tom Krummel
Todd Brinton
Josh Makower
Craig Milroy
Jan Pietzsch
Richard Popp
Paul Wang
Stefanos Zenios
Rajiv Doshi
Uday Kumar
Anurag Mairal
Chris Shen

STAFF

Ari Chaney
Roula El-Asmar
Mary Gorman
Justina Kayastha
Christine Kurihara
Andrea Mattison
Athena Reyes

Contact us:

biodesign@stanford.edu

Biodesign Program

James H. Clark Center
Stanford University
318 Campus Drive, Rm E-100
Stanford, CA 94305-5428

<http://biodesign.stanford.edu>