At a ceremony in Delhi, the new HiCARE LIMO device was officially launched. The device, created by 2009 Stanford-India Biodesign fellows, is a low cost splint for lower limb injuries.

Stanford-India Biodesign launches first product

The Stanford-India Biodesign program was started in 2008 with the goal of training in-country innovators to develop devices for India. Now, in its 5th year the first product launch has taken place. A device to splint lower-limb injuries was developed in the 2nd year of the program (2009) by Darshan Nayak, Pulin Raje, Rahul Ribeiro and Asokan Thondiyath. The device is now manufactured by HLL, Ltd. out of Delhi, a government owned manufacturing facility. Devices will be distributed through government hospitals and ambulances.

Other updates on our SIB fellows and interns:

SIB Alumni Pushkar Ingale (2010) and Siddhartha Joshi (2012) have joined forces with Laerdel to open a User Centered Lab in Pune. Sonakshi Pandey, a 2011 SIB intern, will also join the design team.

Ayesha Chaudhary, Chinmay Deodhar, Darshan Nayak and Nitin Sisodia (all SIB Fellows) were named Top 20 Innovators under 35 in India by MIT's Tech Review.

SIB 5 (5th Team of the fellowship) has been awarded first prize at the IIT Kharagpur Empresario B Plan competition for their invention of a liver biopsy device.

Abhinav Ramani, a 2013 Global Fellow, was awarded a Whitaker International Summer Fellowship to travel and study in India with the Stanford-India Biodesign fellows.

Business Standard published an article on Stanford India Biodesign entitled "A new paradigm in low-cost innovation across the seven seas."

December 6-7, 2013 marked the 7th Annual Indian Medtech Summit. The event continues to be a focal point for the building of a medtech industry in support of academia in India.

"This invention served as the cornerstone for automating the labor intensive process of counting and testing blood. With his vision and tenacity, Wallace Coulter, was a founding father in the field of laboratory hematology, the science and study of blood. His global viewpoint and passion for world cultures inspired him to establish over twenty international subsidiaries. He recognized that it was imperative to employ locally based staff to service his customers before this became standard business strategy."

Coulter Foundation website

Coulter 100th Birthday
Stanford, Coulter partner to celebrate

Stanford University, selected as a partner by the Wallace H. Coulter Foundation, supports collaborative translational research projects through an award managed by Biodesign and Bioengineering, one of nine such awards nationwide.

The Stanford-Coulter Translational Research Grants Program awards $800,000 a year to Bioengineering faculty members and their clinician researcher collaborators from the School of Medicine. Together, these teams of co-investigators work to develop new technologies that address unmet clinical needs, improve health care and lead to commercially available products.

Stanford University brings together top-notch clinical research and a tradition of innovation on its campus in the heart of Silicon Valley, the technology capital of the world. This unique position, along with support from the Coulter Foundation, allows awardees to quickly and expertly meet the challenges and needs facing medicine today.

In July, 2013, Stanford University and Coulter Foundation joined forces to celebrate the 100th Anniversary of the birth of Wallace H. Coulter, the driving force behind the foundation and the Coulter principle, among other inventions. A celebration was held in the Stanford d.school with President Hennessey of Stanford addressing the overflow crowd as well as a panel of CEOs from companies that started from Coulter funding.

A plaque was presented that shows both the man and his machine - the Coulter Principle which is the foundation of counting cells. Coulter's inventions led to the CBC or complete blood count, the most widely used medical diagnostic test today. Norbert Pelc, chair of Bioengineering and Paul Yock, Director of Biodesign, accept the plaque above.

Biodesign Alumni Fellows continue to innovate

Many of the projects that fellows start during their fellowship, both globally and at Stanford, continue beyond their Biodesign year. You can read more about them at our website under Alumni News, but some recent highlights:

NeoBreathe, a device launched from the SIB fellows in 2010-11, received a grant from the US-India Science and Technology Endowment Fund. The grant for $450,000 will allow the project to move into production and begin testing.

Prescient Surgical, a company founded from the 2011-2012 Biodesign Innovation Fellowship White Team, was accepted into The Fogarty Institute for Innovation.

The Stanford-India Biodesign Intern team from 2009 invented a bedsheet that makes patient transfer easier to perform. TransferLife has been licensed to MGM Associates, a major supplier to ambulances for government and private hospitals, to be included in every emergency kit. Congratulations to Mansi Aggarwal, Shitij Malhotra and Pooja Singh.

iRhythm Technologies Inc, started by the fellowship invention of a lightweight monitor to diagnose arhythmia, recently raised a $16 million Series D round to expand commercially and develop new applications.

"I learned how to identify what the important problems to solve in Medicine are"

Pedram Afshar, Fellow, 2009-10

Sandy Ruggles, 2009-10 Fellow was named Sr Manager, Global Strategic Marketing at Acclarent.

Fellow 2010-11, Garrett Smith's dental implant start-up Nasseo submitted a 510(k) and raised $500K. He has also a new software start-up called CRIXlabs that is in the finals for the Rock Health Incubator.

Dan Azagury, Fellow 2010-11, will help the new Design Health Barcelona program that has been started in Catalonia region of Spain. The DHB program is modeled after Stanford Biodesign. Dan recently joined Stanford's Surgery Department.

Partha Ray (Fellow 2009-10) Entrepreneur-in-Residence, Life Science Angels spoke at the Center for Healthcare Innovation's (CHI) 4th annual China, India, & U.S. Life Science Markets Symposium in October, 2013.

Joelle Barral (Fellow 2010-11) co-authored: "Cost-effectiveness Landscape Analysis of Treatments Addressing Xerostomia in Patients Receiving Head and Neck Radiation Therapy", which has been accepted into the Oral Surgery Journal.

Biodesign Graduation
Every year we honor our fellows with a ceremony and party at the end of their fellowship year. Many come out to congratulate the fellows, partake of the offerings and enjoy the company.

Industry Outreach
sponsors allows us to stay connected to the medtech industry

Biodesign depends on the generosity and support of a number of organizations and people. Our thanks to those who have supported and continue to support Biodesign.

Corporate Sponsors
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Individual Support
- Thomas Fogarty
- Eberhard Grube
- Fred Khosravi
- Simon Stertzer

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BME-IDEA, our alliance with other similar academic programs, met in 2013. More than 80 professors of innovation, design and entrepreneurship came together to share best practices and create complementary resources.

Also new in 2013, BME-IDEA expanded to Europe! Eight programs met in Ireland for a one-day meeting.

Below, day two of our Executive Education workshop

From the Innovator's Workbench
For 2013, Biodesign had an amazing retinue of medtech pros - from Ferolyn Powell and Fred St. Goar of eValve to Howard Levin and Mark Gelfand (pictured) of Corldea to Omar Ishrak, CEO of Medtronic and John Dineen, head of GE Healthcare.

Executive Education
expands our offerings

Our Executive Education Workshop, entitled Managing Innovation, was held for the second time in March, 2013.

Managing Innovation is a hands-on course where senior executives come to develop a more disciplined approach to mentoring and managing the process of needs-based innovation in the medtech space. Drawing from our 13 years of experience with fellows, students and their companies, our faculty teaches how to identify the best concepts for development and execute new strategies for leading the innovation process from within your organization.

Executives and other academic program directors joined for 3 days in March. A major highlight for the attendees was the chance to re-design approaches to needs-based innovation in their own organizations.

We plan to offer the event on an annual basis - the next offering is in March, 2015.
http://biodesign.stanford.edu/execed/

Industry Sponsorship continued

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Our partners continue to support the program through financial means, but also with their skills, talents and knowledge of the industry. They often meet with our fellows to 'teach them the ropes' and assist in the assessment of technologies.

Global Programs continue to grow

Singapore-Stanford Program (SSB)

We're pleased to announce that Anthony Tang, SSB Fellow from 2011 and Pearline Teo, SSB Fellow from 2012, have joined the program in leadership positions. Anthony will lead the fellowship (a position recently vacated when Ruey Peh moved into the Director role) and Pearline agreed to lead the curriculum work for the graduate Biodesign course in Singapore. The Singapore Biodesign course is offered at NUS, NTU and Duke NUS Medical schools.

The SSB Special Lecture for 2013 featured distinguished guest speaker, Mr. William A. Hawkins, III. Mr William Hawkins is current CEO of Immucor Inc. He served as Chairman and CEO of Medtronic (NYSE) from 2007 to 2011.

Our Singapore faculty and alumni fellows have created a device to preserve vascular access for hemodialysis. Two Singapore patents have been filed and Exploit Technologies Ltd is awarding SSB a S$1.5M grant to further the project.

Affiliate Program Announced

Biodesign is pleased to announce that BioInnovate of Ireland has become the first Biodesign Global Affiliate. The affiliate came after a thorough review of the program that has been running since 2010. Modeled after the Biodesign fellowship, Bioinnovate hosts four fellows per year in each of three cities: Galway, Limerick and Cork. The fellows rotate for their clinical immersion between the three cities. Dr. Mark Bruzzi, Professor of Mechanical and Biomedical Engineering at NUI Galway, spent six months at Stanford Biodesign learning the process before initiating the BioInnovate program.

STANFORD biodesign AFFILIATE

Biodesign Awards
recognized contributions to the field

The AWAIR team (Specialty Fellows, 2012-13) have been chosen for an E-Team award from NCIIA. They also took second place in the BME-IDEA award. In addition, they took first place in the Stanford eChallenge Business Plan Competition for their AWAIR respiratory device. Biodesign-funded projects Anjna and AdaptAir also took prizes in the Social Challenge.

The 2012-13 Innovation White Team (John Paderi, Kate Rosenbluth and Vijay Rajasekhar) took first place in the Santa Clara University Boomers Business Plan Competition for their essential tremor device. They took second place in the Stanford eChallenge Business Plan Competition for their device. On the other side of the bay they took first place in the Berkeley Business Plan Competition. They won both the Life Science Award and the Overall award

Avijit Bansal and Ayesha Chaurdhary, 2010 SIB Fellows, have received an India Science & Technology Endowment Fund Award for their device, NeoBreathe. The grant, will fund the development of the device toward point of sale. Also awarded: D-Rev for the Jaipur knee device, developed at Stanford through a Biodesign grant.

SIB Fellow Nitin Sisodia and Neeti Kailas (Sohum) and Biodesign Innovation Fellows (White Team) John Paderi, Kate Rosenbluth and Vijay Rajasekhar (Resido) won the Robert Howard Next Step Award for 2013. The award comes with 100 hours of consulting time with Lunar, a design firm in San Francisco, for each team.

The Red Team from 2011-12 received a Spectrum grant for "A Novel Device to Prevent Surgical Wound Infections: A Pilot Clinical Study" The team is Jonathan Coe, Insoo Suh, Jeremy Koehler and Swami Gnanashanmugan.

Outcomes from a Postgraduate Biomedical Technology Innovation Training Program: The First 12 Years of Stanford Biodesign was published in September in the Annals of Biomedical Engineering. The article is available on the Springer website.

Innovation Fellows
Fellows spend many hours in the brainstorming room developing concepts that satisfy the needs they identify in the first half of their year.

Biodesign Update
We welcome new members

Gordon Saul is our new Executive Director for Biodesign and will lead the Coulter and CTSA seed-grant funding programs, spearhead some of our global efforts and manage fundraising and operations for Biodesign. Gordon joined from InterWest Partners, a leading Silicon Valley venture capital firm.

Lyn Denend, formerly of the Stanford Graduate School of Business, has joined Biodesign to spearhead curricular development efforts. Her first project will be to lead the creation of a 2nd edition of the Biodesign textbook, expected out in early 2015.

Chris Queen joined as our new Program Manager, overseeing day-to-day operations, including finance, and human resources. Chris comes to us from the Center for Comparative Studies on Race & Ethnicity where she was Center Manager for 9 years.

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