

Northwestern's Products Reach Market Milestones

Tangible Haptics, LLC. Established in 2011 by **J. Edward Colgate** and **Michael Peshkin**, (McCormick School of Engineering, Department of Mechanical Engineering). As of spring 2013, **Tangible Haptics, LLC** received seed investment from a large organization to round out the core team, complete the technology development, and identify applications for initial product offerings. Their "surface haptics" technology enables people to feel what they see on a screen, e.g., edges of keys, the snap of a toggle switch, the feel of swiping pages.



Advanced Suture, Inc. Established in 2012 by **Gregory Dumanian** (Feinberg School of Medicine, Chief of Plastic Surgery). **Advanced Suture, Inc.** has successfully manufactured a fully functional commercial prototype. Their improved surgical suture design reduces stress concentration at suture puncture points, significantly lowering the rate of suture pull through in all tissues. They are set to begin pre-clinical testing and studies in large animals and will be representing the company at two large meetings over the summer that will be well-attended by physicians and industry executives. Samples of their device will be on hand.



A suture prototype.
Photo Courtesy of Advanced Suture, Inc.

Center for Developmental Therapeutics (CDT). Established in 2009 by Chemistry of Life Processes Institute (CLP), **Lurie Cancer Center** and **INVO** under the leadership of its Founding Director, **Andrew Mazar**. **CDT** has been collaborating with **Steven Rosen** (Feinberg, Director of Lurie Cancer Center) to advance 8-Cl-Adenosine into a phase I clinical trial in refractory acute myelogenous leukemia (AML). An active pharmaceutical ingredient was recently manufactured under cGMP by Ash-Stevens. They are set to have a pre-IND meeting with the FDA to confirm clinical plans and to begin their phase I study this summer. 8-Cl-Adenosine is a unique nucleoside analog that blocks RNA synthesis, working through a unique mechanism of action. It will be the first inhibitor of this type to be evaluated in AML.



Nanosphere, Inc. Established in 2000 by **Chad Mirkin** (Weinberg, Dept of Chemistry). In March, **Nanosphere, Inc.** obtained a CE IVD Mark in Europe for its Gram-Negative Blood Culture test (BC-GN) on its automated sample-to-result Verigene® System. With its automated test, the Verigene BC-GN test provides for rapid genus and species level detection for a broad panel of clinically significant gram-negative bacteria. The BC-GN expands its approved infectious disease test capabilities.



NU at BIO International Convention 2013



BIO is the largest global event for the biotech industry, attracting the biggest names in biotech, offering key networking and partnering opportunities, and providings insights and inspiration on the major trends.

ACADEMIC ZONE. Northwestern University will have a booth at the The Academic Zone. One-on-One Partnering meetings with INVO, Corporate Relations and NU Faculty are facilitated by Jim Bray at NUCATS (j-bray@northwestern.edu). More details may be found at: <http://invo.northwestern.edu/bio2013>.

TRANSLATIONAL RESEARCH FORUM. **Milan Mrksich** (Weinberg School of Arts & Sciences, Department of Chemistry and Cell & Molecular Biology; McCormick School of Engineering, Department of Biomedical Engineering) will be one of four speakers presenting "Funding Models for Transformational Research" on April 22.



INTERNATIONAL CANCER CLUSTER SHOWCASE 2013. Sponsored by Astellas Pharmaceuticals, this satellite event will showcase cutting edge cancer R&D activities and startups from six regions around the world. The Robert H. Lurie Comprehensive Cancer Center will host on April 21 at Prentice Women's Hospital. Investors/company representatives can attend for free. For more info, visit <http://www.internationalcancercluster.org/>.

NU Startup Recognition



Northwestern University was recognized by the US Patent and Trademark Office (USPTO) with an Honorable Mention in the Patents for Humanity Program, for Northwestern Global Health Foundation's development of the LYNX p24 Antigen Test, a technology invented by **David Kelso** (McCormick School of Engineering, Dept of Biomedical Engineering).



SiNode Systems was awarded funds from a SBIR grant, NCIIA, various business plan competitions and ISEN. SiNode gained recent press in the Business Section of the *Chicago Tribune* in January. The technology invented by **Harold Kung** (McCormick School of Engineering, Dept of Chemical & Biological Engineering), is a combination of silicon nanoparticles and porous graphene layers, increasing battery capacity and conductivity and decreasing battery weight.

Innovation & Entrepreneurship at NU

EXPLORE



INVO, Kellogg, McCormick, and Farley Center collaborated to add the "INNOVATION" tab and content to NU's homepage.

e@nu

SAVE THE DATE

INVO and cross-campus schools & offices join **Farley Center** to organize the 2013 e@nu Conference "Pivot to Success" on May 8.

New US Patent Law is Now in Effect

The last set of **American Invents Act (AIA)** laws have been enacted, and the U.S. is now a first-to-file country. Leading up to the transition, INVO has updated processes to effectively operate under the new laws. INVO has also reached out to the university community to educate inventors about changes to the patent laws. There was also a flurry of activity right before the transition to the new laws, and INVO filed **200%** more provisional and utility applications in the week prior to the transition than in any other week in its history. The number of new disclosures also increased by **40%** since last year. Despite the activity, the transition went smoothly as possible. If you have any questions about how the new laws affect patent practice, please contact INVO.

Meet the Fellows at CD2



After a rigorous application and interview process, the **Center for Device Development (CD2)**, a joint initiative between McCormick, INVO, and FSM has selected one

physician and two engineers to be its first fellows. They bring a variety of backgrounds in medicine, industry, and startups and will work together to create, develop, and commercialize medical devices. **Adam Piotrowski** brings a unique experience and knowledge of the regulatory processes and venture capital aspects of the industry, having been a biomedical reviewer at the FDA and holding engineering, marketing, and operational management positions within medical device startup companies. Adam earned his BS and MS in Materials Science & Engineering at Stanford University. **Joan Apolinario** was involved in product development, design and process risk analysis and validations at Angiotech Pharmaceuticals. Joan earned her BS and MS in Biomedical Engineering at Northwestern University. **Whitney Halgrimson** is a general surgery intern in Colorado with interests in orthopaedic surgery. In addition to his experience in clinical research, he has over five years of experience in the medical informatics industry as well. Whitney earned his BS in Biomedical Engineering and a BA in Economics at Northwestern University and his MD from University of Colorado School of Medicine.



Adam Piotrowski



Joan Apolinario



Whitney Halgrimson

For more information, email maryam-saleh@northwestern.edu

2013 INVO Interaction with over 30 Industry & Investor Groups

INCLUDING:	Abbott Ventures	BASF	GE	Nidus Partners
	Advanced Thin Films	Baxter	Honeywell	Novozymes
	Amgen	Boeing	ITW	Samsung Electronics
		Bruker	Johnson & Johnson	St. Jude's