MIT linQ names first IDEA^2 Global Awardees

12 finalist teams pitched diverse new healthcare technologies at Massachusetts Institute of Technology

CAMBRIDGE, MASS—MIT linQ, a healthcare innovation program at the technology university, recognized the first class of 2016 IDEA^2 Global and named four awardees. IDEA^2 Global is an international mentorship program that helps emerging innovators to develop their new technology ideas.

12 teams made their final presentations to a panel of judges. Their pitches included compelling descriptions of unmet medical needs, novel technologies to respond to those needs, and plans to achieve adoption. After the pitches, there was a panel on innovation, the awards ceremony, and a reception.

Their ideas ranged widely across medical areas and technologies. *Aortyx*, for example, is designing a novel approach to aortic dissection repair that changes the paradigm from a permanent device to a biomimetic, reabsorbable and bioactive graft. *Scoli-Pro* is developing a groundbreaking scoliosis prognostic kit based on patented epigenetic biomarkers to improve medical decisions and reduce the economic burden of the disease. Other teams looked at tissue engineering, preventable medical errors, and brain dysfunction in intensive care patients.

Though many of the project teams have been developing their ideas in hospital or university research centers before joining IDEA^2 Global (such as *Autologous Microspheres for Articular Cartilage Regeneration* and *ENRIC Platform)*, three of the teams emerged from medical hackathons—2-3 day events where people meet and generate new technology ideas from scratch at a fevered pitch. Teams *S-There* and *My Health Decision Tree* were formed at Hacking Chronic Disease, which was sponsored by AstraZeneca Spain in Bilbao in June, and *Near Miss Health* and *Echo Diagnostics* emerged from the Grand Hack in Boston in May.

Four teams were chosen for special recognition:

- FIPSE Medical Innovator Award, recognizing an IDEA^2 Global team that exemplifies a spirit of innovation and multi-sector collaboration, was given to *Assistant for Image-guided Interventions,* which is designing a virtual assistant system to help clinicians during interventional procedures.

- PDS Pathfinder Award, recognizing a team who has demonstrated a pioneering spirit and has provided a compelling impact proposition for the potential of their project to create a breakthrough solution to enhance healthcare outcomes,

was given to *Dura Lock,* which is developing a new device to avoid unintended *dura mater* perforations, saving patient suffering and costs.

- AstraZeneca Spain Innovation in Chronic Disease Award, recognizing a team whose product concept has the potential to improve the lives of people living with chronic disease, was given to *SuraMedical,* which is commercializing Bluetooth/Wi-Fi enabled wearable sensing and recording technologies in patients undergoing treatment for leg wounds in the setting of compression therapy.

- IMES Award, recognizing a student team for research in the field of medical engineering or science, was given to *SmartClot*, which is designing an affordable device for low-resource settings that leverages an average cellphone camera to determine the coagulation status, helping to avoid potentially fatal blood clots.

A diverse panel representing medical, technical, and business expertise evaluated the teams. The panel included Antonio Diaz, Director of Operations for FIPSE, the Spanish Foundation for Innovation and Progress in Health; Lauren Foster, Assistant Director of MIT's Technology Licensing Office; John Gilbert, Technology Licensing Officer at the TLO; Asif Naseem, President and CEO of PDS, a Milwaukee, Wisconsin based leader in information technology solutions; Alberto Rubio, Corporate Affairs Lead for AstraZeneca Spain; and Ronald Tompkins is a professor of surgery at Harvard Medical School, and he is the founding director of the Center for Surgery, Science, and Bioengineering at Massachusetts General Hospital.

While the jury deliberated, attendees asked questions of another expert panel who spoke about the challenges to innovation, and how to persevere. The panel, which was moderated by Dr Norberto Malpica of Universidad Rey Juan Carlos in Spain, included Elazer Edelman, a professor at the MIT Institute for Medical Engineering and Sciences, Isaac Castro, a technology entrepreneur and co-founder of Emerge, Inc., and Marta Fernandez Suarez, Vice President at Daktari Diagnostics.

Teams were recruited to the program in the spring, and were matched with technical experts and mentors who helped them develop their technologies and ventures. Over the next six months, they meet with these people, and also received training in innovation methods and communication skills.

Alex Krull, a mechanical engineer working at a medical device company and a member of *Echo Diagnostics*, said of the experience, "It's given me a new appreciation for the process that is the input to the design or entrepreneurial idea. As an engineer, a bit naively I thought an idea would strike me, and I'd start going on it. I learned there's much more involved at the front end to establish the clinical need."

Antonio Diaz, representing the sponsoring organization FIPSE, remarked on the team's evolution in the program. "Teams have significantly increased and improved their message, especially to investors and other partners, so now they are much

better prepared to develop their projects with others' help, through collaboration strategies which are very important to success in this business."

IDEA^2 Global, which is hosted by the MIT Institute for Medical and Engineering Sciences (IMES), was sponsored by FIPSE, AstraZeneca, and PDS. Organizers plan to launch a new round of recruiting in the spring. To learn more about IDEA^2 Global, please visit http://idea2.mit.edu or contact Sandra Widland at swidland@mit.edu.

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About MIT linQ

MIT linQ is a new collaborative initiative focused on increasing the potential of innovative research to benefit society and the economy. linQ's portfolio of international innovation programs demonstrate a new paradigm for technology research and training. Learn more at http://linq.mit.edu