

Message from the Executive Director



2020 promises to be an exciting year for the MIT Deshpande Center. Our annual IdeaStream conference is on April 30, and the program will offer both something a little new and the classic draws that keep our attendees coming back year after year. We're also thrilled that the number of our spinout companies has climbed to more than 40, and that number will likely climb again soon. We have received proposals for our Fall 2020 grant cycle with promising innovations. Read on to see what our spinouts and grantee teams have been up to, and how their products will help improve the world.

- Leon Sandler, Executive Director

Upcoming Events



IdeaStream 2020 is coming April 30! This invitation-only conference at MIT showcases the research of our grantees, and will gather together the leading minds in innovation and entrepreneurship. <u>View Agenda and Speakers</u>

Catalyst Spotlight: Jeff Arnold

Fifteen years ago, Jeff Arnold was running a medical device company in his fifth CEO job. Looking at a long timeline to get this company's product through clinical trials and FDA approval, he decided he wasn't interested in this line of work anymore, hired his replacement, and resigned. As he was trying to figure out his next step, an acquaintance recommended mentoring as a "Catalyst" at the MIT Deshpande Center for Technological Innovation.

Around the same time he started investing as an "angel investor" often, he also became actively involved as an advisor to the CEO or as board member of companies he invested in. Of the 15 companies where he had invested and



became a formal advisor or board member, more than half have exited and most of the remainder are doing well. With his background, he has plenty of advice for researchers looking to start a company, and having mentors is at the top of the list.

"I can't say enough of the value of mentorship — finding people who have run companies, or who have invested in companies in your space, and asking them for help and advice is essential to success," he said. "There are so many things to learn about starting a company, funding a company, generating a business plan that are not obvious. Some are general, but many are very specific to your particular market or industry."

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SPINOUT & GRANTEE NEWS

Deshpande project spins out into Coagulo

has spun out into Coagulo. The company boasts the



Johnson & Johnson acquires spinout TARIS Biomedical

Johnson & Johnson announced the acquisition of TARIS Biomedical LLC,



a Deshpande spinout specializing in the development of a novel drug delivery technology for

first portable and connected precision-medicine platform for smarter management of coagulation. Coagulo combines a new set of patent-pending coagulation assays, cutting-edge microfluidic technology, and proprietary data analytics and digital connectivity.

New treatment from research backed by Deshpande could ease passage of kidney stones



Researchers at MIT and Massachusetts General Hospital have devised a potential treatment that could make passing kidney stones faster and less painful. They

identified a combination of two drugs that relax the walls of the ureter, and can be delivered directly to the ureter with a catheter-like instrument. Relaxing the ureter could help stones pass more easily, the researchers say. The research was part of the 2017 Deshpande project Local Drug Delivery for Facilitating Expedited Urinary Stone Passage. |

Spinout Inkbit raises \$12 million in equity financing round

Inkbit, the Deshpande spinout that built the first 3D printer driven by vision-based feedback control and artificial intelligence,



in November announced the closing of a \$12 million equity financing round led by Stratasys and DSM Venturing with participation from Ocado, 3M, and Saint-Gobain. Proceeds will be used to industrialize Inkbit's additive manufacturing system to fit the requirements of multi-material and volume manufacturing, expand the set of materials for medical, life sciences, and robotics applications, and install the first units for customers. | <u>Read More</u>

Mucus contains sugar molecules that tame microbes, Deshpande-backed study shows



An MIT study published in October in *Nature Microbiology* demonstrates one of mucus' unexpected beneficial

properties: It contains sugars that keep potentially harmful germs in check. The research was the focus of the 2016 Deshpande project <u>Mucin-Inspired</u> <u>Agents to Manage Infections</u>. | More from <u>Washington Post</u> | <u>MIT News</u>

US DoE awards spinout Akselos and partners \$3.6 million for floating offshore wind project



The US Department of Energy awarded Akselos, a Deshpande spinout company, and a consortium of partners \$3.6 million in September. The funding

will be used to develop, validate, and operate the world's first digital twin software on the WindFloat Atlantic Project, which will be one of the world's only existing floating offshore wind farms. | <u>Read More</u> the treatment of bladder diseases including cancer. The company's lead clinical-stage product, TAR-200, features a silicone-based drug delivery device that allows for the continuous release of medication into the bladder. Financial terms of the December transaction are not being disclosed. | <u>Read More</u>



Forbes names grantee Strobach to 30 Under 30 in Energy

Elise Strobach was named with Kyle Wilke, AeroShield cofounder, to Forbes' <u>30 Under 30 in</u> <u>Energy</u>. Strobach cofounded the company following the Deshpande 2017 project <u>Optically Transparent</u> <u>Thermally Insulating Retrofits for Single-Pane</u> <u>Windows</u>. Aeroshield's material is designed to insulate windows using an ultralightweight material made from silica that has the clarity of glass, but far better insulating properties. | <u>More from MIT News</u>

Double-sided tape could replace surgical sutures, project backed by Deshpande shows

A new adhesive that binds wet surfaces within seconds could be used to heal wounds or implant medical devices. MIT engineers hope this



tape could eventually be used in place of surgical sutures, which don't work well in all tissues and can cause complications in some patients. The study is drawn from research in the 2019 Deshpande project <u>High-Strength Tape for Surgical Sealing</u>, and appeared in *Nature*. | <u>More from MIT News</u>

FDA awards \$2 million to spinout Privo for oral cancer product clinical study



In October, the FDA awarded \$2 million to Deshpande spinout company Privo Technologies. The funding will further support the Phase II clinical study of PRV111, its nano-engineered chemotherapy and immunomodulatory product, in patients with oral cancer. | <u>Read More</u>

Grantees Varanasi and Damak on BBC's Follow the Food

Professor Kripa Varanasi and postdoc Maher Damak were interviewed on BBC's Follow the Food. They demonstrated the



pesticide drops at the center of their Deshpande project <u>Reducing Runoff and Environmental Impact</u> of <u>Agricultural Sprays</u>. Their segment begins at the 10:30 mark. | <u>Watch Video</u>

MORE DESHPANDE CENTER NEWS

IAP course covered legal issues of launching startups



Legal expert David Gammell of Gunderson Dettmer and entrepreneur Joshua Wachman joined Deshpande Executive Director Leon Sandler to form the panel for "Legal Dos & Don'ts: What to Know When Starting Your Startup." The Independent Activities Program course was held in January. Customer Discovery Workshop held in fall



Deshpande Center Innovation Manager Karen Golmer held a two-part workshop on customer discovery for grantee teams. Catalysts (above) Tom Pounds, George Mabry, and Steven Kelly contributed, sharing personal stories of how the customer perspective made a difference. Henkel joins Deshpande Center corporate program



Henkel, which operates worldwide with leading innovations, brands, and technologies in adhesive technologies, beauty care, and laundry and home care, is now a member of the MIT Deshpande Center for Technological Innovation's Corporate Program.

Innovation Showcase & Open House 2019



The 2019 Innovation Showcase was held in December at the MIT Media Lab. Thank you to all our guests who attended, and to our grantees for highlighting their research with a great poster session!

Supporting Innovation in Cyprus





Executive Director Leon Sandler (shown with Ambassadors to Cyprus Judith Garber of the United States and Sammy Revel of Israel) spoke to researchers and entrepreneurs in Nicosia in November about commercializing scientific research. Innovation Manager Karen Golmer (above right) led a two-day workshop in Cyprus in January on Market Discovery and Exploitation, organized by Cyprus Seeds.



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