MONTHLY NEWSLETTER

June 2023 Issue



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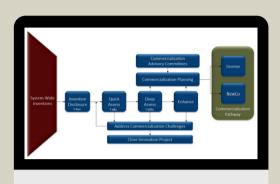




We will pause our newsletter in July. See you back here in August!

New Resource for A&M Inventors

In our May 2023 newsletter, Texas A&M Innovation highlighted the launch of our new website, intended to facilitate access to innovation resources for The Texas A&M University System community and beyond. This month, the team launched a new resource intended to provide transparency for its internal customers, the IP creators.



The site now provides a <u>simple process diagram</u> for what typically happens when a new disclosure is submitted, and then worked through commercialization, along with explanation of what is happening internally within each step of the process.

Pete ONeill, Chief Innovation Officer, describes the rationale behind this new addition. "Our inventors have requested an 'easy button' for interaction with our office and this resource is another step in that direction – intended to demystify the steps of the commercialization process and answer the common question, 'what happens with my disclosure once I click send?"

The diagram represents the process in simple form and aids in communicating what IP creators can expect from Texas A&M Innovation as their innovation project moves through the innovation "journey". The true detailed nature of evaluation and commercialization of an innovation can become quite complex and highly dependent on the specific project; therefore, ONeill points out that this depiction is the goal but, should be noted, is not always the case.

"We strive for efficiency through standardization of our processes that will work for the majority of projects, that way creators have a clear idea of the service they should expect from our team. That said, when a project warrants adjustments to these timelines or order of steps, we will be responsive to the specific needs", shares ONeill.

The Texas A&M Innovation team stands ready to partner with creators through this process, serving as commercialization experts to navigate the most appropriate path for each individual innovation.

Featured Inventor

Ambika Chandra, PhD

Dr. Ambika Chandra is a professor of turfgrass breeding and genetics with Texas A&M AgriLife Research, in the department of Soil & Crop Sciences. She completed both her Bachelor of Science in Agriculture and Master of Science in Plant Breeding and Genetics from the Punjab Agricultural University in India, and in 2007 received a PhD in Agronomy from The Pennsylvania State University. She has served as a faculty member with Texas A&M AgriLife Research since 2007 and works as the lead of the Turfgrass Breeding Program at the Texas A&M AgriLife Research and Extension Center in Dallas.



Dr. Chandra's primary responsibility and research interest is breeding (applied and molecular) and cultivar development of warm- and cool-season turfgrass species for home lawns, athletic fields and golf courses. Her work employs a holistic systems approach involving cultivar development, marketing, and commercialization through industry collaboration. She is an active contributor across the interdisciplinary functions of turfgrass science: genomics, physiology, entomology, pathology, soils and socio-economics.

Through her work in the Turfgrass Breeding Program, Dr. Chandra and her team develop improved turfgrass cultivars through an array of public and private partnership collaborations. Turfgrasses developed in the program are designed and tested for various turf-type performance characteristics, and also to be drought resistant, shade tolerant, and disease tolerant. New varieties undergo comprehensive research in several climatic zones across the United States and only the very best are proposed to be released for industry licensing.

The latest hybrid turfgrass developed by Dr. Chandra's team is 'DALSA 1618', marketed under the tradename Cobalt™, and it is one of the most drought-resistant St. Augustine varieties on the market. Compared to other St. Augustine varieties, it is darker green in color and shade tolerant. Cobalt has been exclusively licensed for commercial production through <u>Sod Solutions</u>. Learn more about Cobalt <u>here</u>.

Dr. Chandra is lead inventor on five other patented plant varieties: St. Augustinegrass 'DALSA 0605', Issued Nov. 2016; Zoysiagrass 'KSUZ 0802' (marketed under the tradename Innovation®), Issued Feb. 2020; Zoysiagrass 'DALZ 1308' (marketed under the tradename Lazer®), Issued Feb. 2021; Hybrid Bluegrass 'TAES 5701' (marketed under the tradename Sunbelt Blue™), Issued Jun. 2022; Hybrid Bluegrass 'DALBG 1201' (marketed under the tradename Southern Blue™), Issued Oct. 2022.



Recent News

Accepting LOIs for Translational Investment Fund

Letters of interest are now being accepted for the Translational Investment Fund (TIF) and are due Monday, June 20th at 11:59 p.m. CST for consideration in the current funding cycle.

With the goal to de-risk early-stage Texas A&M technologies, the TIF provides investments up to \$75,000 to inventors for a 1-year period. This funding should bridge gaps in development of these early-stage technologies that have the potential to address a commercial or industrial need and ultimately impact lives.

The program follows a two-phase selection process supported by a committee made up of Texas A&M Innovation commercialization staff and faculty inventors across campus with diverse subject matter expertise and experience with the commercialization process. Submissions are evaluated based on demonstration of an unmet market need, identification of the competitive landscape and benefits to the market should the technology be introduced, a reasonable approach to development from a commercial perspective, and feasibility of project scope within the performance period.



As a result of the consolidation of commercialization offices under Texas A&M Innovation, the program has now expanded and is available to all inventors and creators across the 19 Texas A&M System members, including agency partners and other system universities such as A&M Corpus Christi, Prairie View A&M, West Texas A&M, etc. The total funding for this round of awards will also increase, allowing investment into a larger number of translational projects across the A&M System.

To be eligible to compete for investment, the PI must be a current A&M employee who is named as a lead or co-inventor on an invention disclosure that has been submitted to A&M. The technology must have some proof-of-concept data, and must be unlicensed at the time of proposal submission.

Dr. Wenshe Liu, from the Texas A&M University Department of Chemistry, received funding from the first TIF round. He discusses how the TIF funding helped accomplish important steps commercialization. "Although NIH and NSF provide substantial fundings for basic research, there are fewer funding mechanisms to support the transition between basic and translational research," said Dr. Liu. "The TIF fund is critical in promoting bench-to-bed transition research." Using the TIF funding, Dr. Liu and his team were able to advance their technology to a point where it was of interest for licensing to a commercial partner.

For more information or to submit a LOI, visit our webpage at https://innovation.tamus.edu/tif/.

2023 Texas A&M New Ventures Competition

Last month, the 2023 Texas A&M New Ventures Competition awarded more than \$525,000 in cash and in-kind prizes to Texas-based startups with highgrowth potential, to advance their innovations to market. The ninth annual event, co-hosted by Texas A&M Innovation and Texas A&M Engineering Experiment Station, took place on May 16-17, 2023 at the Texas A&M Conference Center and Hotel in College Station, Texas.

An initial applicant pool of over 60 was narrowed down to 20 companies representing a range of business sectors: medical devices and technology, therapeutics, transportation, software technology, and energy infrastructure. Of the 20 companies, 6 are based on technologies from The Texas A&M University System: Cellula Biopharma, Inc., HPTechAi, PIRvision Lens, Prosia Therapeutics, Inc., SageSpectra, and Circle Concrete Tech, Inc.

Continued on next page

Recent News

2023 Texas A&M New Ventures Competition, Continued

Over the two-day event, the teams presented their business plans to judges, received real-time feedback, participated in an elevator pitch competition, and networked with other entrepreneurs and business leaders. From the 20 companies, 6 were selected to advance to the finals.

First place, with a cash prize of \$35,000, was awarded to Corveus Medical, a Houston-based startup developing a novel medical device for treatment of congestive heart failure. Corveus Medical also received a \$10,000 sponsored legal services prize, for a total prize value of \$45,000.



Two Texas A&M startups also took home prizes. <u>SageSpectra</u>, developer of a low-cost, portable, rapid screening device for Peripheral Artery Disease, won prizes valued at \$25,000 including first place in the elevator pitch competition. <u>HPTechAi</u>, developer of a safe, self-driving truck technology, took home prizes valued at \$35,000. A complete list of the prizes awarded at the 2023 competition can be viewed on the <u>TNVC website</u>.

Since 2015, TNVC has been making an impact on the Texas economy with a cumulative prize pool of nearly \$3.5 million. Read more about the 2023 Texas A&M New Ventures Competition winner here.

Texas A&M Startup Wins 2023 Rice Business Plan Competition



Photo Credit: Rice University

<u>FluxWorks</u> LLC, a Texas A&M startup company and <u>winner of the 2022 Texas A&M New Ventures</u> <u>Competition</u>, continues to experience success on its path to market as it recently took home the top prize at the 2023 <u>Rice Business Plan Competition</u> (RBPC).

RPBC is the world's largest and richest intercollegiate competition for student-led startup companies, where teams pitch their business to investors and receive real-time feedback for advancing their startup. This year's competition hosted 42 companies from across the world competing for an impressive \$3.4 million in prizes.

The FluxWorks team, led by Dr. Bryton Praslicka and Mary Beth Graham, won first place in the overall competition for the \$350,000 grand prize.

FluxWorks is developing an innovative magnetic gear technology that offers greater efficiency and reliability compared to traditional mechanical gears. Their magnetic gears can perform in a wide-range of extreme conditions, including outer space, under the sea, and inside the human body. The gears can also "plug and play" retrofit existing mechanical gears. The FluxWorks technology was developed while Praslicka was a student in the Advanced Electric Machines & Power Electronics Lab at Texas A&M University.

The FluxWorks' magnetic gear technology has significant potential. Despite having just incorporated in 2021, FluxWorks already has several contracts with aerospace industry leaders and the military, including NASA, the U.S. Army, the U.S. Air Force, and the U.S. Department of Defense.

Partnerships and Patents

PIRvision Lens LLC



Texas A&M Innovation recently completed a license agreement with a startup company, PIRvision Lens LLC, for multiple technologies related to passive infrared (PIR) sensors used in occupancy detection. This technology was developed in the lab of Dr. Ya Wang, an associate professor in the Department of Mechanical Engineering with a joint appointment in the Department of Biomedical Engineering & Electrical and Computer Engineering at Texas A&M University.

PIR sensors are widely used in motion sensing devices, such as in lighting and HVAC control for building energy efficiency, but this technology cannot detect the presence of stationary occupants. The innovative PIRvision Lens technology augments existing PIR sensors to detect both moving and stationary objects and can effectively measure more than 200 variables including fall detection, activity tracking, and identification. The technology can be used by device manufacturers in a variety of markets, including energy, lighting, HVAC, defense, and more.

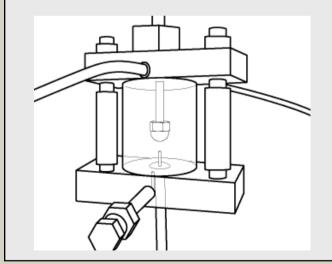




Patents Issued in May

- Compositions and Methods for the Delivery of Molecules into Live Cells
 - o Canada Patent No. 2923664
 - o Inventor: Jean-Philippe Pellois
- <u>Application of Polyelectrolyte Complex</u>
 <u>Nanoparticles to Fluid Loss Control of</u>
 Oil Well
 - United States Patent No. 11,649,392
 - Inventors: Ying-Ying Lin, Corbin Andersen, Jenn-Tai Liang
- <u>Submerged Methane and Hydrogen</u>
 <u>Mixture Discharge in Liquid</u>

 <u>Hydrocarbons</u>
 - o India Patent No. IN202017045343
 - Inventors: David Staack, Kunpeng Wang
- <u>Use of Wasted and Recycled Carbon</u>
 <u>Materials in the Manufacture of</u>
 Electrodes
 - United States Patent No. 11,646,165
 - Inventors: Hong Liang, Siddhi Mehta, Swarn Jha





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