Purdue Innovators Hall of Fame

As an internationally respected research institution, Purdue University is committed to doing more than innovate. We strive to create value through the commercialization of new technologies. Our defining reason to move innovations to society is to help people live longer, healthier, happier lives.

An important avenue for achieving this goal is through the research, development and commercialization of Purdue innovations – something the university already has a long, successful history in accomplishing. In fact, Purdue discoveries across many disciplines including life sciences, engineering, veterinary medicine, agriculture and computer technology are used in more than 100 countries and benefit millions of people around the world.

This booklet highlights some of the outstanding contributions Purdue innovators have made to our global society.

Dan Hasler
President and Chief Entrepreneurial Officer
Purdue Research Foundation
Applegate is helping to commercialize new pasteurization methods to extend the shelf life of milk by weeks and commercializing a technology for a rapid, inexpensive test for the detection of pathogenic E.coli.
Bertino’s research interests cover information security and database systems including security of IoT security, sensors, embedded systems and drones, digital identity management, data security and privacy on the cloud, privacy of mobile devices, and data trustworthiness.
Cosier is the academic director of the Entrepreneurship Bootcamp for Veterans with Disabilities, teaches the Student Managed Venture Fund and works with entrepreneurs of all levels to help advance entrepreneurship through a number of initiatives.
Cushman created two organic compounds that have shown promise as anti-cancer agents in clinical trials and are being developed by Linus Oncology, Inc. and the National Institutes of Health for marketing as life-saving treatments for cancer patients.
Davisson co-founded Amplified Sciences to commercialize his device to detect kidney damage earlier and help reduce the need for dialysis or kidney transplants.
Delp is leading an international effort for the DOD that will detect doctored images and video to determine if and how they are manipulated. His research interests also include image processing, computer vision, multimedia security, medical imaging and video processing.
HogenEsch is helping to develop biomaterial from sweet corn to use as an adjuvant in animal vaccines to improve their safety and performance.
Ileleji is developing an affordable, solar-powered crop drying device to help reduce post-harvest losses and add value to crops using renewable energy.
Jamieson’s work with EPICS has been recognized by the National Academy of Engineering’s Gordon Prize for Innovation in Engineering and Technology Education, IEEE’s Emberson Award, and the Anita Borg Institute’s Women of Vision Award for Social Impact.
Janick helped found the PRI Apple Breeding Program and has been directly involved with the development of 25 Purdue apple cultivars. Purdue apples are grown across the U.S. and in several other countries.
Knapp, a veterinary medical oncologist, works to find new cancer treatments to extend the lives of pets and other animals. Her research focuses on drugs that will attack tumors while leaving healthy cells intact.
Lowenberg-DeBoer led the development of the supply chain for the Purdue Improved Crop Storage (PICS) bags, a non-chemical, triple bagging hermetic method to preserve grain that is being marketed and used by smallholder farmers throughout Africa.

Kramer is working on next-generation robots based on soft, highly deformable materials with equally deformable actuators and sensors, which will produce robotic structures that are compactible, deployable and wearable.
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McCartney is an internationally recognized leader in information technology innovation, from driving Purdue’s implementation of the nation’s best cyberinfrastructure for research to creating big data-based applications for student success at the forefront of the burgeoning field of academic analytics.
Negishi's research on the discovery and development of transition metal-catalyzed organic reactions, their application in the health- and energy-related fields earned him the 2010 Nobel Prize for Chemistry.
Pipes research focuses at the intersection of simulation and carbon fiber composites manufacturing.
Ramirez directs the NSF Network Coordination Office for the NSF funded National Hazards Engineering Research Infrastructure at Purdue focused on making civil infrastructure safer and making communities more resilient against earthquakes, tsunamis, windstorms and coastal inundation.
NANCY RASCHE
Purdue Innovation

Rasche has created and is commercializing a technology that could help children with autism improve their ability to read, spell, and comprehend words with the mobile application, Literacy LABELS®.
Slipchenko’s research interest of quantum chemistry could help researchers understand the fundamental laws that control chemistry in a condensed phases of liquid and solid states.
Smith works to promote graduate student success, enhance collaborative cross-disciplinary research, encourage innovation in education and recruit talented and diverse students.
Tay is changing how surveys are conducted by social scientists, organizations, pollsters and marketers. Through the development of the Expimetrics web and mobile interface, interactive capture of experiences can be conducted on targeted respondents over time to provide immediate and accurate results.
Varma's research and innovations focus on hydrogen and other energy sources, and chemical and catalytic reaction engineering. He has developed new methods to generate hydrogen for fuel cells and to convert glycerol, waste product from biodiesel manufacture, to fuels and valuable chemicals.
Weaver champions research and training to proactively identify causes and prevention of diseases related to women including osteoporosis, women’s cancers, neurodegeneration and wellness.
Wereley is recognized assessing the 2010 Deepwater Horizon oil spill and received the U.S. Geological Survey Director’s Award for his work on the Flow Rate Technical Group that address oil spills and other ecological concerns.
Whittinghill is commercializing a virtual prosthesis technology through his startup Virtualis that reduces the severity of virtual reality sickness and improves virtual reality experiences.
Won is developing a radiation technology that could enhance cancer cell-killing effects of radiation treatment, thus reducing radiation doses and patient side effects.
Yao pioneers in the research and development of crop-based, highly functional biomaterials to meet the global needs for food and health. The new materials he developed can enable drug molecules, boost vaccine activities, and deliver active food ingredients. He also has generated multiple intellectual properties that have shown significant social and industrial impacts.
Purdue Research Foundation’s Innovator Hall of Fame recognizes the contributions Purdue researchers and innovators have made to positively impact our global society.

**Criteria for being named to the Purdue Innovator Hall of Fame**

» Filed patent(s) for innovation(s) through the Office of Technology Commercialization, or

» Discovered and developed a technology that is widely used to help the global society through licensing or partnering with a company, or

» Founded or co-founded a successful company to commercialize an innovation, or

» Named a Purdue Outstanding Commercialization Award winner, or

» Recognized by federal research support agencies as a national leader in research and development, or

» Received local, state or federal funding to research and develop life-changing innovations, or

» Recognized by Purdue as a strong facilitator of entrepreneurial activities
Send correspondence to:

Office of the President
Purdue Research Foundation
Herman and Heddy Kurz Purdue Technology Center
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Visit these Web sites for more information about the Purdue Research Foundation, the Office of Technology Commercialization, the Purdue Foundry, innovation and entrepreneurship and the Purdue Research Park:

» www.prf.org
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