

Research at The University of Akron

Research Fact Sheet

University of Akron Research

- \$48 million in sponsored research awards in 2009 up from \$34 million in 2008, 115 active sponsored projects
- #2 polymer science and polymer engineering program and #6 industrial/organizational psychology program in the nation, according to *U.S. News & World Report*
- Founding member of the BioInnovation Institute in Akron and the Orthopaedic Research Institute of Northeast Ohio
- One of the five fastest growing engineering colleges in the country
- 25,000 students and 735 full-time faculty

UA's Office of Technology Transfer

- Files for patents based on inventions created in UA labs and licenses the rights to use and develop these patented technologies to independent companies
- #1 in the world in patents per research dollar in a five year study by the Milken Institute with 450 active and pending patents
- # 1 in Ohio in licensing revenue among public universities and # 7 in the U.S. in total licensing revenue for universities without a medical school, according to a 2007 Association of University Technology Managers report
- \$2.1 million in average annual licensing revenue over the past five years
- 37 startup companies based on UA research
- Recognized by the National Science Foundation, Association of University Technology Managers and Ohio Board of Regents for excellence in research commercialization and community engagement

University of Akron Research Foundation

- Nonprofit organization to assist startup companies and facilitate quick transfers of technology to corporations and research sponsors, including interfacing with business by hosting industry executives as advisors
- 450 companies and entrepreneurs assisted with business plans, funding referrals and connection to partners, customers, suppliers and mentors
- 48 early stage companies presented to 450 investors, community leaders and service providers, attracting \$48 million in follow-on funding through the Akron Regional CHange Angels (ARCHAngels) investment network
- Akron Innovation Campus (AIC) tests a new model of mixed-use buildings where university startups and independent companies share space adjacent to campus

Current Research Projects

- Artificial pancreas – coin-sized polymer device filled with insulin-producing cells that could replace finger prick tests and insulin injections for diabetics
- Silvamist™ – silver based drug candidate that can fight cancer and infections, now in clinical trials
- Gecko tape – super-strong tape modeled after the tiny foot hairs geckos use to climb up walls and across ceilings, a UA nanotechnology project
- Spider silk muscle – based on the UA discovery that spider silk contracts when wet, thin strands can be used to lift heavy objects
- Clean coal fuel cell – coal and air react with the help of catalysts to generate power twice as efficiently as coal burning power plants and easily trap carbon dioxide
- Glucose sensing contact – diabetics could monitor their blood sugar levels with this prototype contact lens which changes colors as sugar levels rise
- Fast Fourier Transform – greatly speeds up a computer's ability to process pictures and sound, through a new mathematical formula
- Polymer for medical devices – newest in a line of UA developed polyurethanes for medicine boasts unprecedented biostability when implanted

To learn more, visit uakron.edu/research or email uarf@uakron.edu.