

# BoldMoves



## BoldIdeas BoldResearch BoldImpact



### The University of Arizona®

## Growing the Research Enterprise

- Research expenditures exceeded \$600M for the first time
- UA ranked #18 nationally in R&D expenditures among all public universities
- UA ranked #1 in the nation for R&D expenditures in Astronomy and Planetary Sciences
- The ASU Center for Measuring University Performance places the UA at 16th among public universities
- Over 4,000 publications per year, generating 25,000 citations in 5 years



The National Science Foundation awarded a grant of \$9.9 million to develop 'Super Rice.' Dr. Rod Wing, professor of plant sciences, leads the \$9.9 million project, which will support development of drought- and diseaseresistant rice.



## **Strategic Directions for Investment**

- Translational Agricultural & Biomedical Sciences
- Space Sciences
- Optical & Information Technology
- Environmental Sciences, Engineering & Policy
- Southwest Cultures, Languages & Borders



Biomedical Engineering faculty, collaborators, and students test a novel optical imaging device in the operating room

## Growing Community & Economic Impact

- Tech Transfer FY2011: a record 80 licenses & 8 new startups
- Tech Launch Arizona & BIO5 Oro Valley
- Eller College: McGuire Entrepreneurship Program ranked #5, and Management Information Systems ranked #3
- 53% of our NRC-rated PhD programs ranked in the top 20
- Focused investments in:
  - Solar & Water Technologies
  - Optical Technologies
  - BioTech

The Solar Zone @ UA Tech Park won 3 US and State awards for innovation & economic development



### THE UNIVERSITY OF ARIZONA®

## Academic Excellence

- UA Regents' Prof. Roger Angel received the Kavli Prize in Astrophysics
- Our faculty includes over 175 national and international fellows & honorees:
  - National Academies of Sciences, Engineering, Education, & Institute of Medicine
  - American Academy of Arts & Sciences
  - American Association for the Advancement of Science
  - Guggenheim
  - MacArthur
  - Fulbright
  - Pulitzer
  - Nobel

UA alumnus Prof. Brian Schmidt was awarded the 2011 Nobel Prize in Physics



## BoldPrograms BoldLearning BoldSuccess

Working on a research project with a faculty member contributes to student persistence and is a particular benefit for first generation and at-risk students (Nagata et al., 1998).

# Matt Bunting Graduate Student Electrical and Computer Engineering

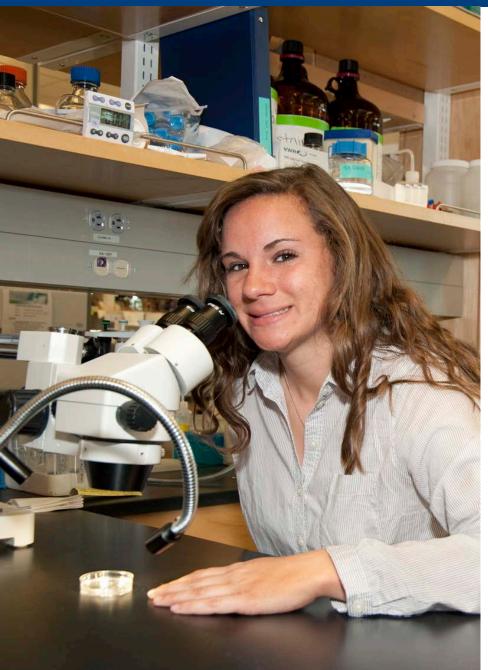


## Zero G the weightless experience

## **Space Sciences**

Two undergraduate student teams conducted experiments in zero gravity as part of NASA's Reduced Gravity Student Flight Opportunities Program. The teams are among 14 from universities across the nation whose projects were selected by NASA.

## **A THE UNIVERSITY OF ARIZONA**®



## Translational Biomedical Research

- Jessica Regan (Senior, Physiology)
- Undergraduate Biology Research Program (UBRP) participant
- Research examined relationship between heart disease and protein expressed in the heart
- Examined cardiomyopathy as part of the BRAVO! Program in Amsterdam, Netherlands
- Conducted medical surveys in service learning project, Costa Rica
- Current Fulbright Fellowship finalist



## Social Science

- UA has one of the largest and strongest groups of social network scholars in the world
- "Dark Network" project studies behavior of covert networks of terrorists and violent insurgents across the globe
- Project is funded by Air Force and Defense Threat Reduction Agency
- Students and faculty in Sociology and in the School of Government and Public Policy collaborate to combine historical analyses with innovative mathematical models





## BoldMoves 100% Engagement Research & Creative Activity Professional Internships Community Service