From Inputs to Impact: Changing the Conversation

State of Research 2015

Caroline Whitacre, Vice President for Research
October 22, 2015
The Office of Research is:

- A unified voice for research at Ohio State
- Shaping the face of interdisciplinary research
- An advocate for research locally and nationally
INPUTS
- people,
- dollars,
- facilities

OUTPUTS
- data collected

OUTCOMES
- publications,
- invention disclosures,
- changes to policy

IMPACT
- changing lives
Ann Hamilton

National Medal of Arts
2 Ohio State professors

Members of the American Academy of Arts and Sciences

Tin-Lun Ho

Roger Ratcliff
6 Ohio State faculty

Fellows of the American Association for the Advancement of Science

Lynne Abruzzo
Daniel Herms
Bruce McPheron
Michael Oglesbee
Esther van der Knaap
Jessica Winter
Heather Allen
Humboldt Research Prize

Linda Saif
Wolf Prize in Agriculture
Ching-Shih Chen
Yasuko Rikihiisa
National Academy of Inventors Fellows
Wondwossen Gebreyes
Michael P. Malone International Leadership Award

Anita Hopper
Lifetime Achievement Award from the RNA Society
6 Ohio State faculty

Distinguished Scholar Award

Heather Allen
Rebecca Jackson
Thomas Kasulis
Dhabaleswar (DK) Panda
Steven Ringel
Amy Shuman
8 Ohio State faculty

CAREER awards from the National Science Foundation
Robert Baker, Cosmin Blaga and Yuejie Chi
Young Investigator Research Program Award
(Air Force Office of Scientific Research)

Yuejie Chi
Young Investigator Program Award
(Office of Naval Research)

Robert Baker
Department of Energy Early Career Research Award

Christopher Jaroniec
American Chemical Society Physical Division Early Career Award in Experimental Physical Chemistry
Joshua Goldberger
Camille Dreyfus Teacher-Scholar Award

Marcos Sotomayor
Sloan Research Fellow
Jonathan Timcheck
Churchill Scholar

Alexis Crockett and
Henry Tran
Goldwater Scholars
David Danesh
Truman Scholar

Nima Dahir
Beinecke Scholar
Chemical and Biomolecular Engineering and Chemistry Building (CBEC) shown above

James Cancer Hospital and Solove Research Institute shown below
10-Year Research Funding Profile 2006-2015
Dollars in Millions

- 2006: $652
- 2007: $720
- 2008: $703
- 2009: $716
- 2010: $756
- 2011: $832
- 2011: $934
- 2013: $967
- 2014: $983
- 2015: $962
RESEARCH OUTPUTS
TOP OHIO PUBLIC UNIVERSITY IN ACADEMICS

RANKED 16TH AMONG THE NATION’S BEST PUBLIC UNIVERSITIES BY U.S. NEWS & WORLD REPORT

12th IN THE NATION FOR SOUGHT-AFTER GRADUATES
- WALL STREET JOURNAL

29th WORLD’S MOST INNOVATIVE UNIVERSITIES
- REUTERS TOP 100 LIST

THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER NAMED ONE OF “AMERICA’S BEST HOSPITALS” FOR 23 CONSECUTIVE YEARS
- U.S. NEWS & WORLD REPORT
General Motors Innovation Challenge

Genetesis LLC
The real value of our research is the impact it has on society.
WHAT IS IMPACT?
RESEARCH HAS REAL IMPACT
Health is improved
Environment is cleaner
Food is accessible
When we work together, we have greater **impact**.
IMPACT: FROM ONE PERSON TO MILLIONS
Peter Mohler

Therapeutic strategy for arrhythmia
Ness Shroff, Chi-Chih Chen, Can Emre Koksal and Roland Tallos

Nikola Labs
IMPACT: FROM HIGH TECH TO LOW TECH
Yiying Wu

Solar-flow battery
Douglas Scharre

SAGE test
IMPACT: FROM BASICS OF MATTER TO OUR EVERYDAY LIVES
Louis DiMauro

First real-time image of two atoms vibrating
Brad Bushman

“Overvalued” kids
Bennett Tepper

Hostile bosses
IMPACT: SOMETIMES RESEARCH SURPRISES US
Geoffrey Durso, Andrew Luttrell and Baldwin Way

Acetaminophen and emotions
Stan Gehrt

Urban coyotes
IMPACT: FROM FOOD TO WATER
Michelle Kaiser

Food map of Columbus
Field to Faucet Initiative

Ensuring safe drinking water for all Ohioans
IMPACT: FROM THE U.S. TO THE WORLD
Collecting and disseminating data
Alison Norris

Health for life: Changing lives in Malawi
Global Water Initiative
IMPACT: FROM OUR BODIES TO THE HEARTS AND MINDS WE TOUCH
John Byrd

Life-saving drug for Waldenstrom’s macroglobulinemia patients
Ann Hamilton’s *the event of a thread*
Appalachian Project
IMPACT: FROM OUR STUDENTS
Jed Johnson

Nanofiber Solutions
A voice and advocate for research across this great institution.
HOW DOES YOUR RESEARCH IMPACT THE WORLD?
2015 Innovators of the Year

Recognizing research, creativity and entrepreneurship
Student Innovator of the Year Nominees

• Iti Patel
• Sarah-Jane Baserman, Megan Miller-Lloyd, Phillip Newman, Stephanie Ritchie and Hayley Townsend
Student Innovator of the Year

Sarah-Jane Baserman
Megan Miller-Lloyd
Phillip Newman
Stephanie Ritchie
Hayley Townsend
Early Career Innovator of the Year Nominees

- Melissa Bailey
- Randi Foraker
- Asimina Kiourti
- Zhong-Lin Lu
- Anupam Vivek
- Michelle Fennessy
Early Career Innovator of the Year
Melissa Bailey
Innovator of the Year Nominees

• Jim Davis
• Robert Lee
• Umit Ozkan
• Dehua Pei
• Yael Vodovotz
Join us in congratulating the winners and nominees at a reception across the hall in Woody’s Tavern.