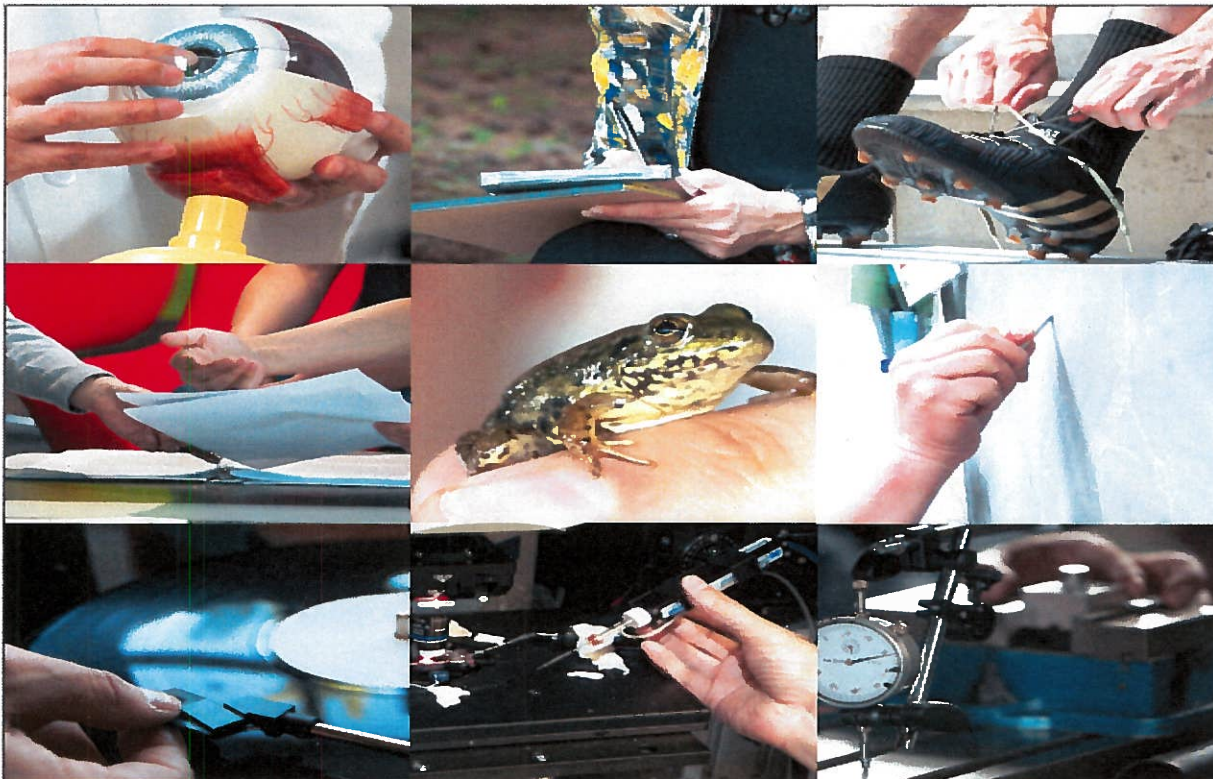


# Research at Oakland



**Presentation to the Board  
of Trustees**

October 16, 2017

David Stone, PhD  
Chief Research Officer

# Context



## Evolution of Higher Ed in America

1635-1850: Colleges: Harvard, William and Mary. Liberal Arts education for elites, training for clergy & civil service: **Knowledge Transmission**

1850: Henry Tappan, University of Michigan, German Research University Model. Conduct research & train students to be scientifically-minded:

### **Knowledge Creation**

1862: Lincoln, Morrill Act, research and training in agriculture and mechanical arts, extension services for farmers: **Knowledge Mobilization**

1957: Sputnik and OU launched. Response to US falling behind in Science and Engineering research & training: **Regional Comprehensive Research University**

# What Research Means



1. Attracting and retaining high quality **faculty**
2. Supporting **undergraduate** retention and completion; more competitive in the job market and graduate school placement
3. Supporting **graduate** programs where students need funded research experiences for career placement
4. Supporting **community engagement** (e.g., Carnegie designation) and **industry relations**
5. Supporting **fund raising**

# Research at OU FY 2017



## National Ranking

Oakland University:	284 of ~1000
Wayne State:	101
Central Michigan:	302
DePaul:	334
Bowling Green:	351
LTU:	482
Northern Kentucky	512

OU: Research is 6% of total budget

UM: Research is 8.8% of total budget

**\$64.6 Million** \*22% Increase  
Funding Requested

**189** Proposals  
Submitted

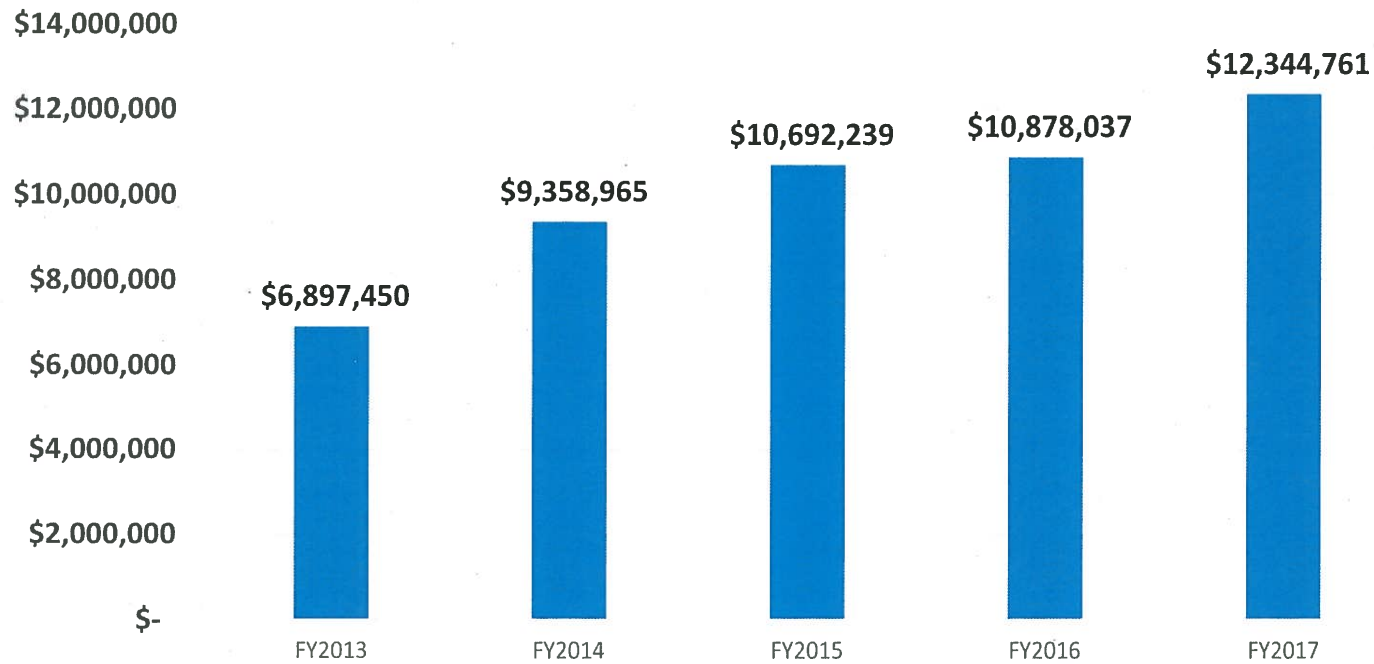
**79** Awarded  
New Awards

**\$12.3 Million** \*13% increase  
New Awards

\*Over FY2016



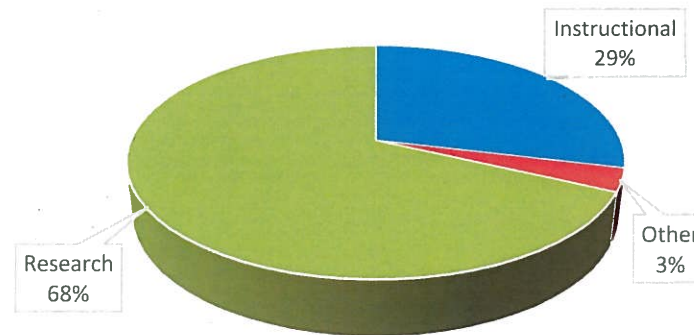
# New Awards



\*Four straight years of growth, 78% increase since FY2013

# New Awards by Type

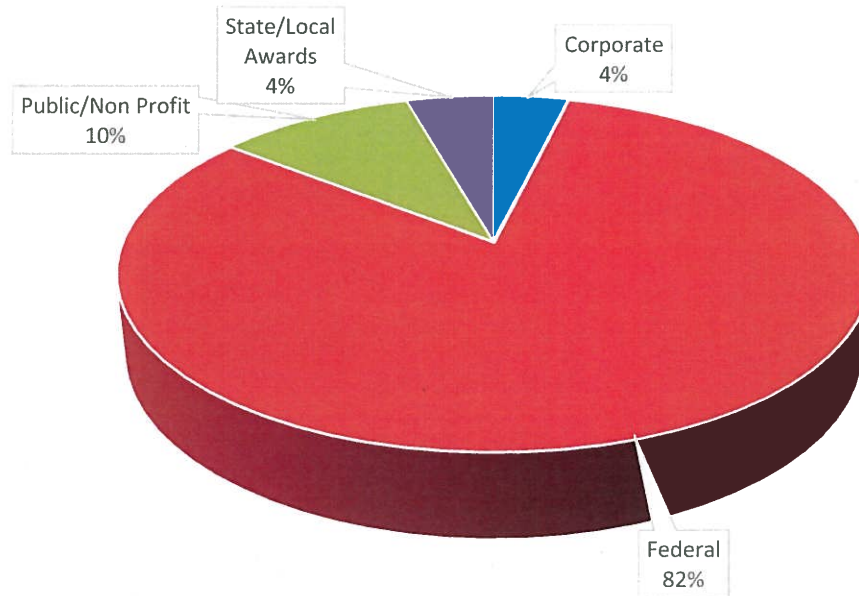
FY2017 • Funding Amount Percentages



Purpose of Funding	Number of Awards	Total
Research	59	\$8,126,866
Other Sponsored Activity	13	\$379,769
Instructional Programs	7	\$3,438,237
<b>Total</b>	<b>79</b>	<b>\$11,944,872</b>

# New Awards by Source

FY2017 - Funding Percentages



# New Awards by School



Purpose of Funding	FY2015	FY2016	FY2017	Total
College of Arts & Sciences	\$2,392,872	\$4,739,354	\$4,491,729	\$11,623,955
Eye Research Institute	\$1,839,321	\$2,220,027		\$4,059,348
School of Business Administration	\$39,439			\$39,439
School of Engineering and Computer Science	\$2,903,907	\$2,536,276	\$2,813,107	\$8,253,290
School of Education and Human Services	\$502,000	\$398,000	\$625,994	\$1,525,994
School of Health Sciences	\$1,952,244	\$28,061	\$197,346	\$2,177,651
School of Medicine	\$3,350	\$11,568	\$63,984	\$78,902
School of Nursing	\$54,415	\$266,545	\$20,450	\$341,410
Other	\$1,004,691	\$678,206	\$3,732,262	\$5,415,159
<b>Total</b>	<b>\$10,692,239</b>	<b>\$10,878,037</b>	<b>\$11,944,872</b>	<b>\$33,515,148</b>



# New Awards by Unit



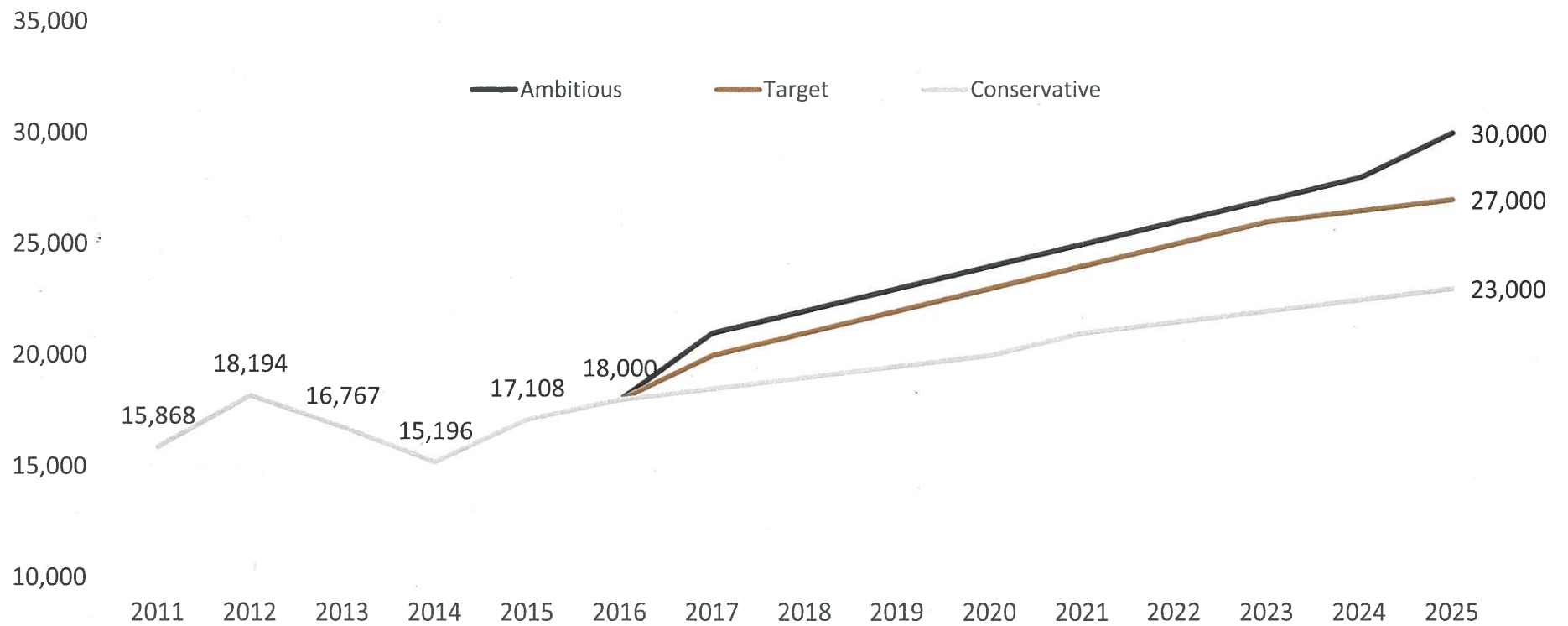
	Department/Unit	Dollars	Academic Unit
1	Biological Sciences	\$2,578,789	College of Arts & Sciences
2	Computer Science and Engineering	\$1,183,780	Engineering & Computer Science
3	Electrical and Computer Engineering	\$999,299	Engineering & Computer Science
4	Psychology	\$830,266	College of Arts & Sciences
5	Physics	\$675,829	College of Arts & Sciences

	Department/Unit	Dollars
1	Upward Bound	\$3,075,850
2	Pre-college Programs	\$196,023
3	OU Inc.	\$119,025
4	Office of the Senior Associate Provost	\$100,000
5	Center for Multicultural Initiatives	\$91,364

# OU R&D Expenditures and Goals



**Total Research Expenditures**  
(in thousands of \$)



# Major New Initiatives



## Research

**PI Academy for Research and Engagement:** Year-long professional development program on how to become a successful researcher. Specific training in getting grants and managing research plus one year mentoring engagement with a highly successful senior researcher in their field from another institution. 30 PIA Scholars

**Research Development:** First two positions at the university intended to support faculty in seeking and obtaining external funding for research, scholarship, artistry, and engagement projects.

**Advanced Research Methodology Services (ARMS):** Developing faculty team to support proposals and projects with quantitative, qualitative, database, GIS, and other methods assistance.

# Major New Initiatives



## Mobilization Zone

### Economic Development

**Oakland Business Engagement Center:** Collaboration between Research Office, Advancement, Student Affairs, and Continuing Education to provide single “front door” to the university for all industry and corporate engagement.

**Goal:** turn individual engagements with industry into long-term strategic partnerships.

**I2B:** Collaboration with SBA, provides student teams to community-based entrepreneurs to conduct market analysis, provide basic business plan or prototype. Option to move into an incubator.



# MZ: Incubators



<u>Success Benchmark (5yrs. 2012-2016)</u>	<u>Oakland Incubator</u>	<u>Macomb Incubator</u>	<u>Combined</u>
High-tech Jobs Created	230	221	451
High-tech Jobs Retained	468	359	827
High-tech Companies Created	40	41	81
International Companies Chartered	12	7	19
Provisional and Pending Patents	22 (since 2015)	117	139
Patents Awarded	23 (since 2015)	30	53
Follow-on Funding via MEDC Funds	1,598,973	1,530,576	3,129,549
Follow-on Funding via Federal Funds	2,636,000	7,876,500	10,512,500
Follow-on Funding via Venture Capital	5,117,800	4,006,000	9,123,800
Follow-on Funding via Angel Funds	1,850,000	16,823,500	18,673,500
Follow-on Funding via Bank/Loans	634,000	5,329,284	5,963,284
Follow-on Funding via Owner Investment	3,394,500	20,494,648	23,889,148
Follow-on Funding via New Sales	12,729,461	26,243,253	38,972,714
Follow-on Funding via Other	3,755,822	1,366,500	5,122,322
<b>Total Economic Impact</b>	<b>31,716,556</b>	<b>83,670,261</b>	<b>115,386,817</b>

# Major New Initiatives



## Mobilization Zone

### Community Development

**Oakland COUNTS:** Web-based matching engine links community-based organizations that have research needs with faculty and students who have matching interests and the required methodological skills. All data developed will be made available to the community through the website.

QUESTIONS?