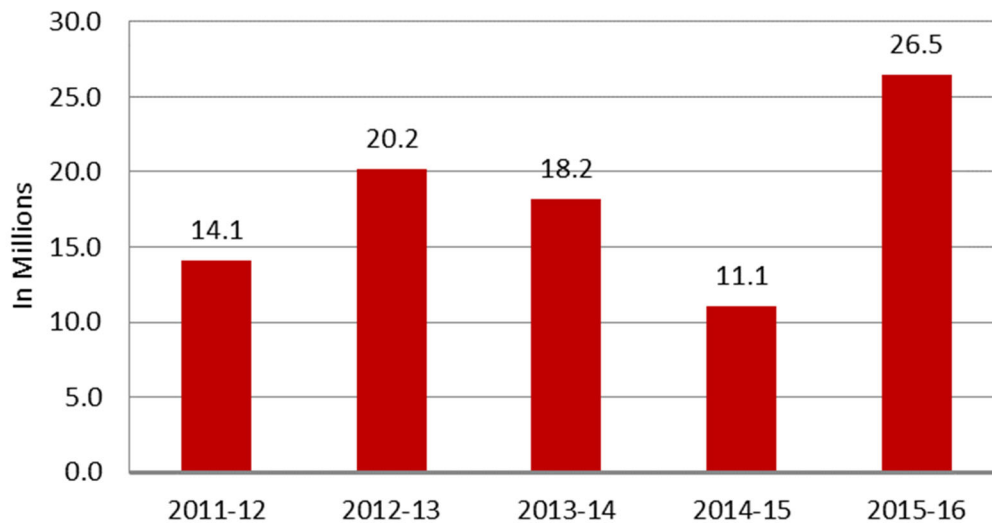


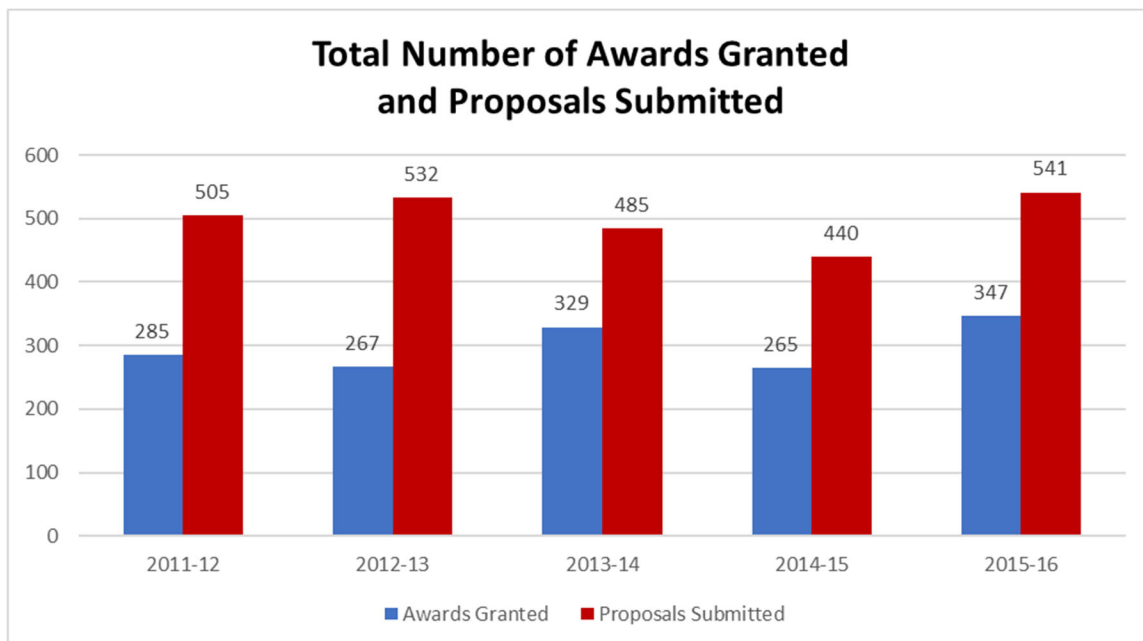
## External Funding Overview

Sponsored Projects Administration external funding totals include Ball State University Foundation funds that play out as externally sponsored projects, as well as funding self-administered by University Service Centers. The chart below, "External Dollars Received FY 2012 - 2016," reflects totals for all sources of external funding for Ball State projects, including Foundation support and Centers.

### External Dollars Awarded - FY12-16



### Total Number of Awards Granted and Proposals Submitted



<b>External Dollars Received by Type of Project Type</b>			
<b>Source</b>	<b>Number</b>	<b>Amount</b>	<b>Percentage</b>
Institutional Support	48	\$8,848,150	33.4%
Academic Support	87	\$6,543,166	24.7%
Public Service	106	\$5,566,280	21.0%
Research	91	\$4,802,075	18.1%
Instruction	15	\$695,719	2.0%
<b>Total</b>	<b>347</b>	<b>\$26,455,390</b>	<b>100%</b>

<b>External Dollars Received by Funding Source</b>			
<b>Source</b>	<b>Number</b>	<b>Amount</b>	<b>Percentage</b>
Foundation	99	\$13,319,055	50%
State (IN)	31	\$3,859,669	14.5%
Federal	22	\$2,339,187	8.8%
Non-Profit	84	\$2,181,423	8.2%
Industry	42	\$2,178,863	8.2%
Foreign Source	6	\$1,385,845	5.2%
College/university	26	\$721,910	2.7%
Local Govt Agency	34	\$432,938	1.6%
Other State (Not IN)	3	\$36,500	>1%
<b>Total</b>	<b>347</b>	<b>\$26,455,390</b>	<b>100%</b>

<b>Awards by College / Unit</b>		
<b>College/Unit</b>	<b>Amount</b>	<b>Number</b>
Academic Affairs	\$5,311,274	13
Applied Sciences & Technology	\$4,041,574	44
Architecture and Planning	\$629,204	24
Business	\$771,542	7
Communication, Information, and Media	\$273,888	8
Fine Arts	\$799,145	5
Governmental Relations	\$1,684,815	23
Information Technology	\$1,852,620	39
Sciences and Humanities	\$4,430,082	88
Student Affairs	\$285,178	5
Teachers College	\$3,464,962	52
University College	\$403,500	4
University Development	\$2,507,606	35
<b>Total</b>	<b>\$26,455,390</b>	<b>347</b>

<b>External Dollars Proposed by Type of Project Type</b>			
<b>Source</b>	<b>Number</b>	<b>Amount</b>	<b>Percentage</b>
Research	204	\$28,189,697	39.7%
Academic Support	142	\$18,730,462	26.4%
Public Service	119	\$11,894,414	16.7%
Institutional Support	50	\$9,277,923	13.1%
Instruction	26	\$2,775,434	3.9%
<b>Total</b>	<b>541</b>	<b>\$70,867,930</b>	<b>100%</b>

<b>External Dollars Proposed by Funding Source</b>			
<b>Source</b>	<b>Number</b>	<b>Amount</b>	<b>Percentage</b>
Foundation	203	\$29,148,001	41.1%
Federal	65	\$19,814,829	27.9%
College/University	31	\$6,733,666	9.5%
Foreign Source	12	\$5,319,155	7.5%
Non-Profit	130	\$4,452,846	6.2%
State (IN)	33	\$2,973,042	4.2%
Industry	38	\$2,015,857	2.8%
Local Govt Agency	28	\$408,034	>1%
Other State (Not IN)	1	\$2,500	>1%
<b>Total</b>	<b>541</b>	<b>\$70,867,930</b>	<b>100%</b>

<b>Proposals by College / Unit</b>		
<b>College/Unit</b>	<b>Amount</b>	<b>Number</b>
Academic Affairs	\$8,365,532	26
Applied Sciences and Technology	\$11,726,961	85
Architecture and Planning	\$1,909,230	21
Business	\$1,597,091	13
Business Affairs	\$284,357	1
Communication, Information, and Media	\$2,750,700	18
Fine Arts	\$1,058,932	8
Governmental Relations	\$1,343,696	18
Health	\$10,486	2
Information Technology	\$1,363,979	32
Sciences and Humanities	\$25,702,919	177
Student Affairs	\$876,385	5
Teachers College	\$6,573,297	84
University College	\$4,420,284	14
University Development	\$2,482,606	34
Online and Strategic Learning	\$401,475	3
<b>Total</b>	<b>\$70,867,930</b>	<b>541</b>

## Initiatives & Accomplishments

Progress on the Ball State Strategic Plan (2012-17):

	Baseline FY12	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Actual
Increase by 125% external funding for scholarly work	\$14M	\$20.2M	\$18.2M	\$11.1M	\$25.7M
Increase by 40% the number of contract and grant proposal submissions.	505	532	485	440	679
Increase number of contract and grant proposal submissions totaling more than \$25,000 by 25%	183	205	210	180	301

### Notable Funded Proposals

#### International Projects

- Kabul University BBA/MBA, Kenneth Holland, Center for International Development, FHI360/US Dept. of State: \$1,000,000
- Sindh Workforce Development, Kenneth Holland, CID, US Dept. of State: \$250,000
- IYLEP 2016, Larry Gerstein, Center for Peace & Conflict Studies, Meridian International Center / US Dept. of State: \$157,526
- PAYLP 2016, Kenneth Holland, CID, Meridian International Center / US Dept. of State: \$157,306

#### Sciences

- Skeletal Muscle Health with Aging and Life-Long Exercise, Scott Trappe, Human Performance Lab, National Institutes of Health: \$424,149
- Reading Intervention, Academic and Behavioral Outcomes for Adolescents: A Community Agency and University Partnership Project, Janay Sander, National Institute of Justice: \$388,478
- Software & Security Engineering Center (S2ERC), Wayne Zage, Computer Science, Multiple Sponsors:

\$681,370

- MRI: Acquisition of a Liquid Chromatography-Mass Spectrometry System for Research and Research Training, Sundee Rayat, Chemistry, National Science Foundation: \$196,968
- MRI: Acquisition of a Ground Penetrating Radar for Interdisciplinary Studies in Anthropology and the Geosciences, Kevin Nolan, Applied Anthropology Lab, National Science Foundation: \$43,419
- Collaborative Research: Hierarchical Functioning of River Macrosystems in Temperate Steppes - From Continental to Hydrogeomorphic Patch Scales, Mark Pyron, Biology, National Science Foundation: \$190,788
- Dynamics and Models of the Yellow Perch in Indiana Waters of Lake Michigan, Thomas Lauer, Biology, Indiana Dept. of Natural Resources: \$149,746

#### Public Service

- VSTOP: 2015-17, Joseph Losco, Political Science, Indiana Secretary of State: \$1,190,000
- Launch Indiana, Julie Halbig, Governmental Relations, Indiana Office of Small Business and Entrepreneurship: \$650,000
- Northeast Indiana Area Health Education Center

(NEI-AHEC) Operational Support, Julie Halbig, Governmental Relations, Indiana University: \$220,000

- Small Business Development Center, Julie Halbig, Governmental Relations, Indiana Office of Small Business and Entrepreneurship: \$202,353
- MuncieP3: Maximizing Promise and Potential in Preschool-Primary Grades through Collaboration with Community-Based Organizations, Pat Clark, Elementary Education, Indiana Department of Education: \$159,897
- Hometown Collaboration Initiative (HCI), Brian Blackford, Indiana Communities, Indiana Office of Community & Rural Affairs: \$150,000

### Institutional Support

- Creation of the “John H. Schnatter Institute for Entrepreneurship and Free Enterprise”, Michael Goldsby, John H. Schnatter Family & Koch Foundations: \$3,250,000
- O.W.L. Pride - Onward with Learning at Burriss Laboratory School - Phase II, Dawn Miller, Burriss Laboratory School, Ball Brothers Foundation: \$250,000
- Center for Autism Spectrum Disorders, David McIntosh, Special Education, Ball State University Foundation: \$1,382,030
- Conn-Selmer School Partnership Program for Musical Instruments, Ryan Hourigan, School of Music, Conn-Selmer, Inc.: \$196,764
- Ball State University's Residential Property Management SkillUP Indiana! Project Proposal, Sotris Hji-Avgoustis, Family & Consumer Sciences, Indiana Dept. of Workforce Development: \$158,881

In addition to the above awards, SPA was integral to assisting faculty and staff with the development and submission of proposals as part of the University's Academic Excellence Grant competition (AEG). In all, over 100 proposals were submitted and 16 chosen to share in over \$4.2M in funding via the Ball State University Foundation. Awardees and executive summaries can be viewed on the University's Centennial Commitment website.

### Research Recognition

*Student Symposium:* The 2016 Symposium continues to serve as an important public forum for undergraduate and graduate students to display and present their research and creative projects. This year continued a new feature with panel presentations scheduled in addition to posters. 200 individual student participants presented 149 posters and 25 papers, which drew an over 400 total attendees.

- Display Award Winner:
  - o Jelena Petricevic (Biology) and Maren Orchard (History)  
Title: Work- Family Conflict in American Women: Association with Health Risk Behaviors and Health Outcomes  
Mentor: Jagdish Khubchandani (Physiology & Health Science)
- Content Award Winners:
  - o Cody Bennett (Biology)  
Title: Glycogen Metabolism in Mice Generated by the Cre-Lox System  
Mentor: Bartholomew Pederson (Medical Education)
  - o Josh Bock (Kinesiology)  
Title: Establishing the Reliability of Several Consumer-Based Physical Activity Monitors  
Mentor: Alex Montoye (Kinesiology)
  - o Seth Higgins (Kinesiology)  
Title: The Influence of Incline Walking and Stair Ascending on Lower Extremity Mechanics in Older Adults  
Mentor: Henry Wang (Kinesiology)
  - o Christopher Indovina (Biology), Sarah Engle (Biology), Ashleigh South (Biology), and Jacob Davis (Biology)  
Title: Determining Genes Required for Degradation of Translocon-Clogging Proteins  
Mentor: Eric Rubenstein (Biology)
  - o Samuel Lawson (Psychology), Sarah Birkhead (Psychology), and Alexis Hamilton (Psychology)  
Title: Using Twitter to Examine Male Aggression in Culture of Honor States  
Mentor: Thomas Holtgraves (Psychology)
  - o Daniel Smith (Chemistry)  
Title: The Role of Glycogen in Hypoglycemia-induced Memory Loss  
Mentor: Bartholomew Pederson (Medical Education)
  - o Jeremy Walls (Biology)  
Title: Exploring Environmental Controls on Toxic Algal Blooms to Promote Problem Solving and Quantitative Reasoning Skills in STEM Courses  
Mentor: Allison Rober (Biology)

### ***Benefacta Day***

The 25th annual Benefacta Day was celebrated November 18, 2015 in the BSU Alumni Center. This annual event for recognizing faculty and profession personnel active in submitting proposals and carrying out sponsored projects brought together over 100 attendees who enjoyed wine, cheese, and hors d'oeuvres, as well as remarks from the President, Associate Vice-President for Research, and SPA Associate Director, Pre-Award Services.

### ***Research & Outstanding Creative Endeavor of the Year***

The annual lecture and reception featuring the Outstanding Researcher of the Year and Outstanding Creative Endeavor Awardee took place on April 29, 2016 in the Student Center Forum Room. The 2015 Research recipient, as nominated by her peers and chosen by the University Research Committee, Susan McDowell, professor of biology, spoke on her research agenda and the impact of students on her research. The Outstanding Creative Endeavor award, also nominated by their peers and chosen by the Creative Arts Committee, were, Drew Vidal and Michael Elliott, both assistant professors of Theatre, shared their creative process in creating the work *Frankenstein*, as well as their approach to improvisation, complete with student actors.

## **Staff Updates**

SPA is happy to share that it has been fully staffed since early 2016 with the addition of Mark Combs as Proposal Manager.

## **Program Offerings & Support Programs**

### ***Research Week, 2015***

This campus-wide initiative entered its second year in FY15/16, and continued to focus on providing high quality professional development opportunities for faculty and staff all concentrated over one week. Sessions included: a panel on “Community-Engaged Research”, “What is Entrepreneurial Learning?”, a webinar from the Grants Resource Center, and “NIH Tech Tools for Grantmanship”, among other presentations. An archive of presentation materials is available on the SPA website.

### ***SPA Fellows Program***

A keystone program for new faculty developed by Campus Liaison, Stan Geidel, continued during academic year

2015/16 with two cohorts of a hand-selected group of faculty members chosen by the Provost, AVPR, Colleges, and SPA staff to participate in a year-long intensive educational program. Knowledge base and grant-writing skills are developed in order to obtain external grants in support of fundable endeavors more successfully.

### ***Focus on the Search***

This 1-hour intensive session allows 6-8 participants to get hands-on, one-on-one, time with the SPO Research Information Coordinator to first sign up for COS Pivot and then how to utilize this power tool to develop a search – all with the help of a Pivot expert.

### ***Indirect Cost Recovery Distribution***

Per University policy, of the \$1,311,622 in indirect costs recovered by the University, currently: 5% go to Principal Investigator(s), 10% to Departments/Units, and 3% to the College (when their four-year average is met, with 20% on amounts over that average). During the past year, the following amounts were transferred: \$60,468 to PIs, \$175,052 to departments/centers, and \$74,119 to colleges – which makes a total distribution of \$309,639.

## **Communication & Information**

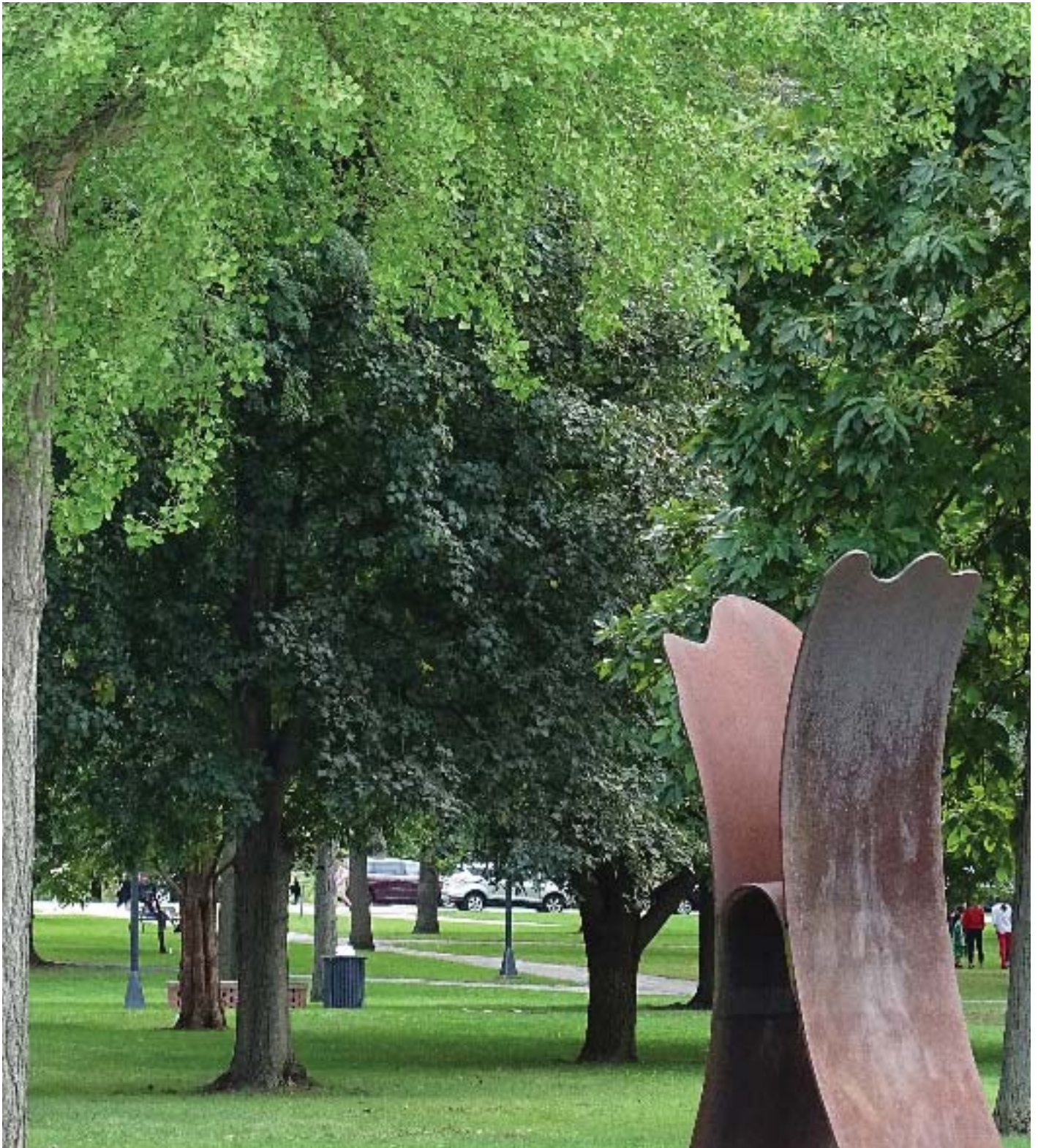
SPA continues to share information through a number of social media outlets including the SPA Research Newsletter Blog, Facebook page, and Twitter account. In addition to funding opportunities, SPA events, and news related to external funding, these mechanisms have also allowed for the ability to share funding successes quickly with the campus community.

## **SPA Professional Development**

SPA Staff attended and/or presented at the following conferences and professional meetings:

- Indiana Forum for Research Administration (IFRA)
- Midwest Research and Graduate Administrators Forum (MRGAF)
- National Council of University Research Administrators (NCURA) Fundamentals Class
- Butler Undergraduate Research Conference
- National Council of University Research Administrators, Region IV
- Federal Demonstration Partnership

- Society of Research Administrators Annual Meeting
- National Council of University Research Administrators (NCURA) Annual Meeting
- Evisions Research Conference
- National Institutes of Health Regional Seminar
- National Science Foundation Grants Conference
- Women Working in Technology
- 2016 BSU Copyright Conference



## ASPiRE Internal Grant Programs

Ball State University's Internal Grants Program was created in 1965 to provide funding to faculty and students and to support and develop projects in the areas of research and creative endeavors. ASPiRE Internal grants are intended to supplement and strengthen the support for research and creative endeavors that comes both from departmental and college resources along with other university programs.

Ball State Internal Grants program offerings consisted of the following competitions this fiscal year: Junior Faculty Research, Junior Faculty Creative Arts, ADVANCE, New Faculty Start-Up, Reprint/Publication Support, Travel Support for External Funding for faculty, International Travel Support, Hollis as well as Graduate Creative Arts, Graduate Research, Undergraduate Creative Arts, Undergraduate Research, and Travel Support for Professional Meetings for students.

### 2015-16 Program Participation

The ASPiRE Internal Grants program processed 147 student proposals and awarded \$24,745 to support 120 projects; 135 faculty proposals and awarded \$269,819 to support 101 projects. Details of the 2015-16 ASPiRE Internal Grants program are summarized in the table, "Internal Grants Program 2015-16." Three of the Junior Faculty awardees are featured in the 2016 issue of Ball State Research: Matt Moore from Social Work, Tom Collins of Architecture, and Zhihai Li from Chemistry. §`

<b>Internal Grants Pgm 2015-16</b>	<b>Requests-Submitted</b>	<b>Proposals Awarded</b>	<b>Award Amount</b>
<b>Faculty Programs - Research</b>			
ADVANCE Research	10	6	\$78,720
Junior Faculty Research	16	7	\$100,266
<b>Total Research</b>	<b>26</b>	<b>13</b>	<b>\$178,986</b>
<b>Faculty Programs - Creative Arts</b>			
ADVANCE Creative Arts	5	4	\$20,000
Junior Faculty Creative Arts	1	1	\$15,000
<b>Total Creative Arts</b>	<b>6</b>	<b>5</b>	<b>\$35,000</b>
Hollis	4	1	\$ 400
International Travel	30	30	\$11,200
New Faculty Start-Up	35	19	\$36,800
Reprint/Publication Support	33	33	\$6,932.53
Travel Support for External Funding	1	1	\$ 500
<b>Total Faculty Programs</b>	<b>135</b>	<b>101</b>	<b>\$269,819</b>
<b>Graduate Student Programs</b>			
Creative Arts	3	2	\$800
Research	36	23	\$10,210
Hollis	12	12	\$ 4,310
Travel Support for Prof. Meetings	69	64	\$5,475
<b>Total</b>	<b>120</b>	<b>101</b>	<b>\$20,795</b>
<b>Undergraduate Student Pgms</b>			
Creative Arts	3	1	\$ 300
Research	16	10	\$3,000
Travel Support for Prof. Meetings	8	8	\$ 650
<b>Total</b>	<b>27</b>	<b>19</b>	<b>\$3,950</b>
<b>Total Student Programs</b>	<b>147</b>	<b>120</b>	<b>\$24,745</b>
<b>Total Internal Grants</b>	<b>282</b>	<b>221</b>	<b>\$294,564</b>



## Intellectual Property

Intellectual property development remains an integral component to the research enterprise at the University. SPA is responsible for both receiving initial disclosures of potential intellectual property and in serving as the University liaison with the Ball State Innovation Corporation (BSIC). The BSIC, under the continued leadership of President Wil Davis, directs commercialization and licensing activities related to BSU's works of intellectual property: everything from mobile apps to curriculum to scientific patents.

Three of the performance indicators of the BSU Strategic Plan directly relate to SPA and BSIC's IP efforts, under Goal 4, Objective 5: "Enhance commercialization with new opportunities and strategies." Those indicators are to increase royalty by 50% (to \$405,606), create a total of five start-up companies that generate significant net revenue, and increase the annual number of IP disclosures to 20.

During Fiscal Year 2016, 11 disclosures of intellectual property were made,

while FY16 royalties totaled \$224,440.24. Itemized listing of those IP products are below. For additional questions on the IP process at Ball State, contact Stephanie Roof; for questions on the specific products available, contact Linda Swartz.

Author(s)	Project Title	Income
<b>DVD</b>		
Michael O'Hara, Judith Sebesta	Explore Theatre: A Backstage Pass - DVD	\$12,706.77
Teresa Matlock	Child Care Collection, LLC	\$1,129.00
Hans P. Kellogg	Legacies of Perfection Auburn Cord Duesenberg	\$513.33
Nancy Carlson, Ann Eldridge, Mark Warshaw	Gene Stratton Porter	\$160.00
Rob Bell	Mental Toughness Training for Golf	\$86.90
Ronald Morris	Madison, Indiana	\$85.00
Linda Siktberg, Ann (Burford) Bilodeau	Safe Swallowing	\$39.95
<b>CD</b>		
Eric Lassister	Kiowa Hymns	\$57.89
<b>Software</b>		
Sherry Woosley, Donald Whitaker	MAP: On-line (Making Achievement Possible: On-line)	\$174,996.07
Frog Baby Apps, LLC	Campus Hub	\$15,000.00
Matthew Stuve, Mark Lora	rGrade	\$3,000.00
Jason Doll, Thomas Lauer	Back-Calc (FishBC)	\$70.70
<b>Books</b>		
Ronald Morris	Crossroad Connect - Indiana 4th Grade Textbook	\$6,285.69
<b>Miscellaneous</b>		
Dayna Thompson, Monique Gabb, Ron Kaitchuck	Saturn & Beyond	\$9,549.60
	The Traveler App	\$500.00
Rodger Smith	My Name is Jerry	\$259.34



**SPONSORED  
PROJECTS  
ADMINISTRATION**  
BALL STATE UNIVERSITY