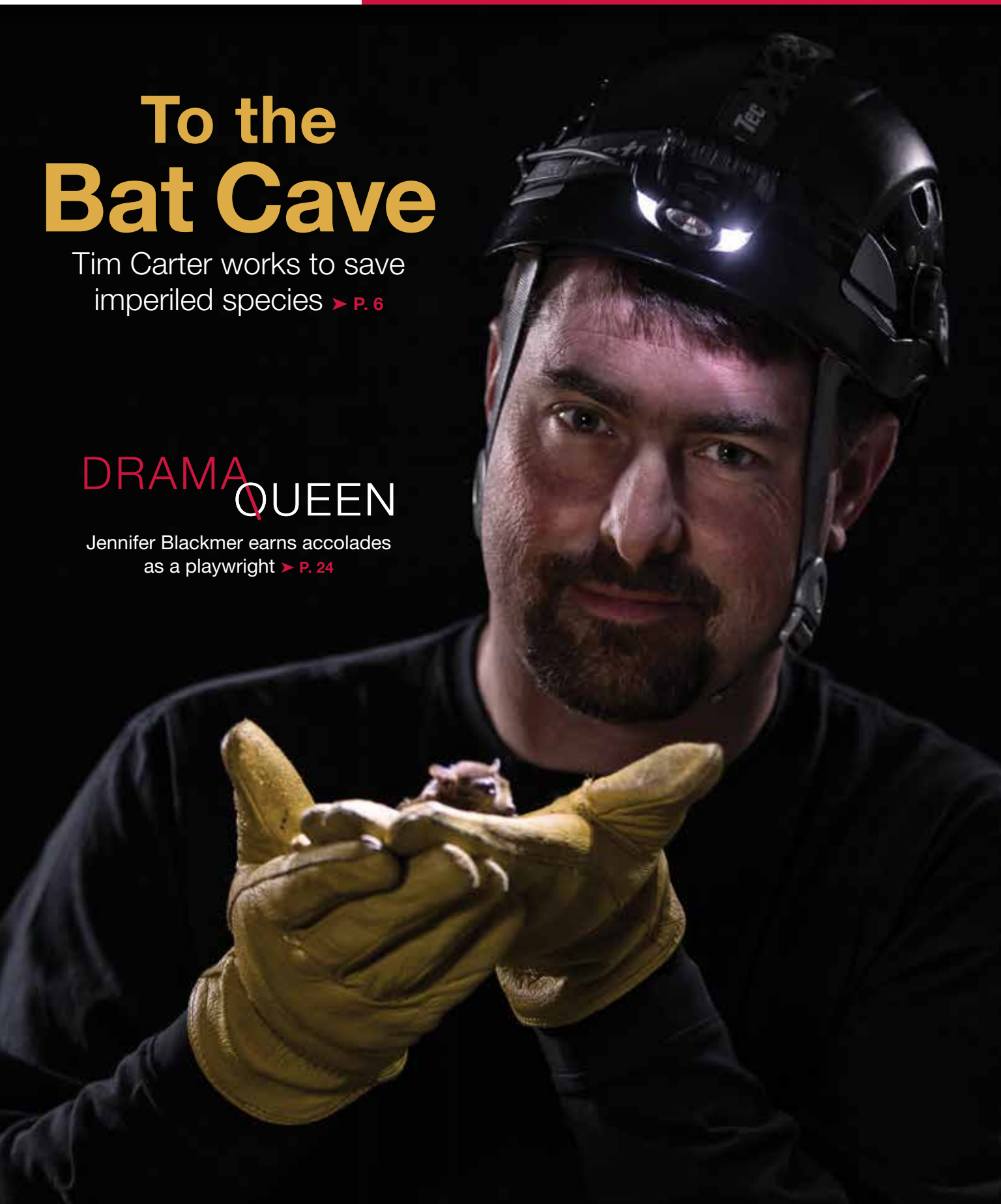
BALL STATE UNIVERSITY

FALL 2018

Research



To the Bat Cave

Tim Carter works to save imperiled species ➤ P. 6

DRAMA QUEEN

Jennifer Blackmer earns accolades as a playwright ➤ P. 24

WELCOME

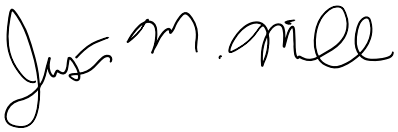
Sponsored Projects Administration (SPA) is again pleased to celebrate with the Ball State University community its accomplishments in research, scholarly, educational, and creative endeavors. Working with a wide variety of stakeholders, SPA continues to move forward on refining procedures and policies in its mission to provide the highest level of service possible throughout the sponsored projects lifecycle.

In addition to sharing the accomplishments of many faculty, professionals, staff, and students, this magazine includes the fiscal year 2017–18 records pertaining to SPA. Figures include grant awards, contracts awarded to University centers and institutes, and funding to the Ball State University Foundation that resulted in sponsored programs.

As the briefest of executive summaries: FY 2017–18 resulted in more than $14.4 million in external funding to Ball State University, an increase over the previous year. 442 proposals were submitted during the fiscal year, and 300 funded awards were recorded.

As the University celebrates its first century and plans for its second, we extend our deepest thanks to all who carried out the challenging work of preparing and administering sponsored projects, both internal and external—awarded or not—and recognize the efforts and commitment represented by all who are actively engaged in the pursuit of extramural funding: faculty, professionals, staff, students, and administrators alike.

On behalf of the first-rate and hard-working SPA staff, we offer our warm regards and best wishes for continued success.



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Fall 2018

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BALL STATE UNIVERSITY

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Sponsored Projects Administration

ANNUAL REPORT 2017–2018

Sponsored Projects Administration (SPA) supports the University's mission by assisting Ball State personnel in the quest for external funding to carry out their research, scholarship, and creative activity as well as subsequent award administration. Support includes identifying potential funding opportunities, guidance in proposal and budget development, submission of proposals to funding agencies, award administration, and related compliance assurances.

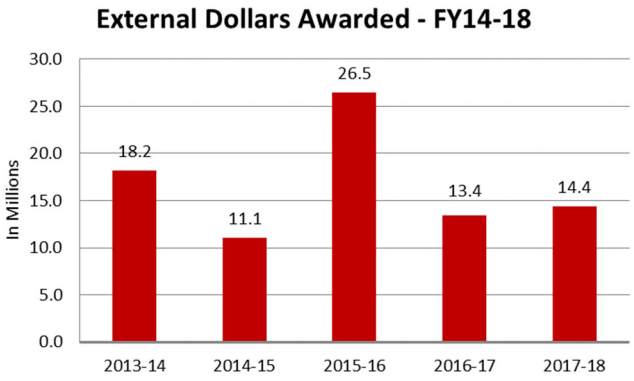
SPA offers workshops in sponsored projects development and administration, oversees the University's research incentive programs, and supports early seed funding through the ASPiRE and Advance internal grant programs.

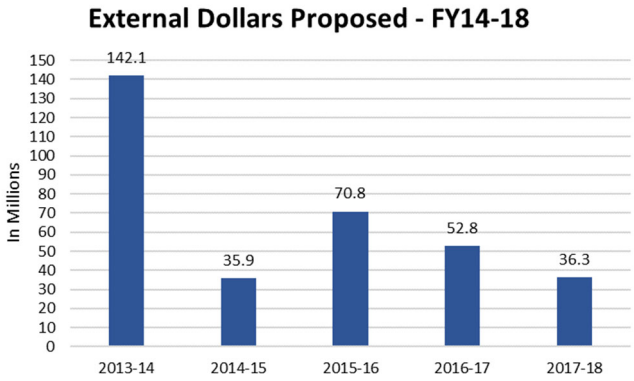
SPA fosters an atmosphere of academic, scientific, and creative inquiry; internal and external collaboration; cross-disciplinary teamwork; entrepreneurial thinking; and community engagement while promoting integrity, responsibility, and ethics in all phases of scientific, intellectual, and artistic inquiry.

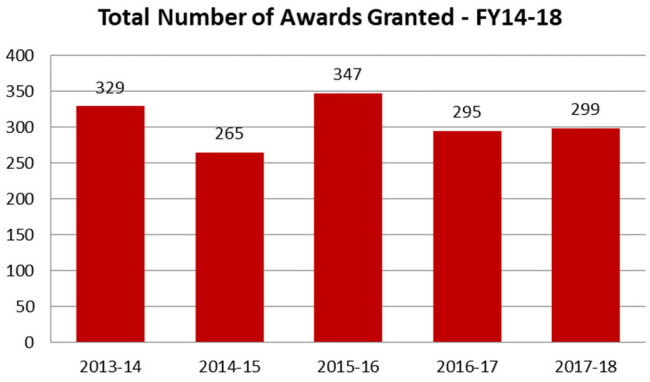
Photo by Louis Reed

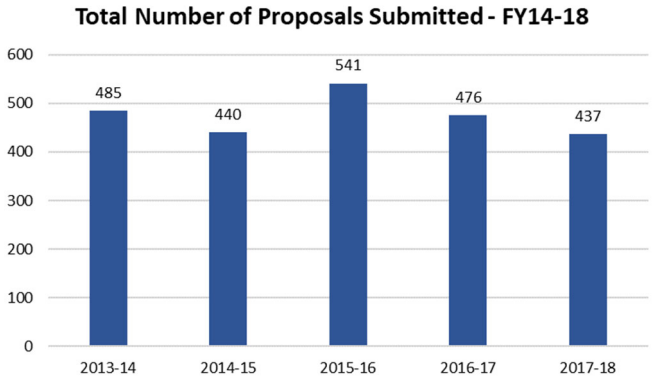
External Funding Overview

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 FY2014 - 2018" reflects totals for all sources of external funding for Ball State projects, including Foundation support and Centers.









Updated December 2019

External Dollars Received by Activity Type

Activity	# of Awards	Total Awarded	Percentage
Public Service	86	$4,535,882	31.3%
Research	96	$4,395,279	30.4%
Instruction	17	$2,388,203	16.5%
Academic Support	61	$1,608,569	11.1%
Institutional Support	39	$1,519,478	10.5%
Total	**299**	**$14,447,410**	**100%**

External Dollars Received by Sponsor Type

Source	# of Awards	Total Awarded	Percentage
Federal	58	$4,182,317	29.0%
State (IN)	24	$4,043,365	28.0%
Foundation	65	$3,125,789	21.6%
Non-Profit	64	$1,484,339	10.2%
Industry	51	$725,824	5.0%
Foreign Source	4	$404,466	2.7%
Local Govt Agency	24	$264,128	1.8%
College/University	7	$213,029	1.4%
Individual	2	$4,154	>1%
Total	**299**	**$14,447,410**	**100%**

Awards by College or Unit

College / Unit	Total Award	# Awards
Academic Affairs	$494,132	7
Architecture and Planning	$188,727	16
Business	$1,838,228	25
Business Affairs	$40,200	2
Communication, Information, and Media	$12,000	3
Fine Arts	$24,625	7
Health	$1,744,499	35
Information Technology	$1,199,098	24
Sciences and Humanities	$4,704,614	96
Student Affairs	$107,000	2
Teachers College	$3,072,238	59
University College	$249,916	3
University Development	$772,132	20
Grand Total	**$14,447,410**	**299**

Updated December 2019

External Dollars Proposed by Activity Type

Activity	# Proposals	Total $ Proposed	Percentage
Research	198	$24,544,721	67.6%
Academic Support	83	$3,625,814	9.9%
Institutional Support	52	$3,311,097	9.1%
Public Service	85	$3,198,107	8.8%
Instruction	19	$1,579,182	4.3%
Total	**437**	**$36,258,921**	**100%**

External Dollars Proposed by Sponsor Type

Source	# Proposals	Total $ Proposed	Percentage
Federal	94	$21,836,967	60.2%
Foundation	113	$5,150,372	14.2%
Non-Profit	95	$3,202,178	8.8%
State (IN)	31	$2,908,983	8.0%
Industry	60	$2,067,206	5.7%
College/University	18	$690,858	1.9%
Foreign Source	4	$213,536	>1%
Local Govt Agency	20	$184,667	>1%
Individual	2	$4,154	>1%
Total	**437**	**$36,258,921**	**100%**

Proposals by College or Unit

College / Unit	Total $ Proposed	# Proposals
Academic Affairs	$1,976,144	10
Architecture and Planning	$1,056,398	29
Business	$3,371,453	31
Business Affairs	$40,200	3
Communication, Information, and Media	$148,250	6
Community Engagement	$1,357	2
Fine Arts	$169,292	15
Health	$7,087,708	57
Information Technology	$1,371,098	23
Sciences and Humanities	$14,420,443	149
Student Affairs	$411,860	4
Teachers College	$5,032,524	82
University College	$395,062	5
University Development	$772,132	20
Online and Strategic Learning	$5,000	1
Grand Total	**$36,258,921**	**437**

Updated December 2019

Research Recognition

Student Symposium: The 2018 Symposium continued to serve as an important public forum for undergraduate and graduate students to display and present their research and creative projects. In all, 168 individual student participants presented 114 posters and 18 papers.

Award Winners:

Kerstyn Hall, Kinesiology | *A Novel Approach of Performing Gait Analysis Using Radar Technology* | Mentor: Henry Wang, College of Health

Malachi Henry, Speech Pathology and Audiology | *Sequential Production Abilities with Multiple-Symbol Utterances: Implications for Redesigning Speech Generated Devices (SGDs) for Children* | Mentor: Barry Wagner, College of Health

Marcy Simpson, Nutrition and Health Sciences | *The Effect of Medical Mistrust on the Efficacy of Prostate Exams among Black American Men* | Mentor: Jean Marie Place, College of Health

Betsy Kemp, Biology | *Assessing the Role of Trophic Interactions on Peatland Biofilm Development Under Varied Nutrient Availability* | Mentor: Kevin Wyatt, College of Sciences and Humanities

Deborah Mattson, Landscape Architecture | *A Piece of the Limberlost* | Mentor: Susan Tomizawa, College of Architecture and Planning

Jason Avedesian, Kinesiology | *Biomechanical Analysis of Unilateral Landings in Female Volleyball Players after a Dynamic and Combined Dynamic-Static Warm-Up* | Mentor: Clark Dickin, College of Health

Avery Kirschbaum, Biology | *A Potentially General Role for a Conserved Protease in Translocon-Associated Quality Control* | Mentor: Eric VJ Rubenstein, College of Sciences and Humanities

Anamarie Booher, Nutrition and Health Sciences | *The Impact of Perceived Barriers to Accessing Prescription Birth Control Among Female College Students: A Qualitative Study* | Mentor: Jean Marie Place, College of Health

Benefacta Day

The 27th annual Benefacta Day was celebrated October 23, 2017 in the Ball State Alumni Center. This annual event for recognizing faculty and professional personnel active in submitting proposals and carrying out sponsored projects brought together more than 100 attendees.

Outstanding Research & Creative Endeavor Awards

The annual lecture and reception featuring the Outstanding Creative Endeavor Awardee took place on October 27, 2017 in Bracken Library. The awardee, nominated by his peers and chosen by the Creative Arts Committee was Chris Flook, a lecturer in telecommunications, who shared his creative process and integration of students and community.

The 2017 Outstanding Research recipient, as nominated by his peers and chosen by the University Research Committee, was Scott Trappe, John and Janice Fisher Professor of Exercise Science. During his lecture, held on February 2, 2018 at the Ball Brothers Foundation Hospitality Suite in Emens Auditorium, Dr. Trappe spoke on his research agenda and, specifically, HPL's impact on the space station.

Staff Updates

SPA was happy to officially and permanently welcome Dr. Sue McDowell as vice provost of research. During the Summer of 2018, we also celebrated the retirement of Dr. Stan Geidel, now-campus liaison emeritus and wished all the best to Jessie Roark, outreach and education coordinator, who left Ball State to pursue doctoral studies at Ohio University.

Program Offerings & Support Programs

Research Week, 2017

This campuswide initiative entered its fourth year in FY 2018 with a change. Instead of a wide variety of activities, workshops, and lectures, each day of Research Week focused on a specific faculty honoree. For 2017, we celebrated the accomplishments of:

Janay Sander (Educational Psychology)

Cathy Whaley (NEI-AHEC)

Eric (VJ) Rubenstein (Biology)

SPA Fellows Program

A keystone program for new faculty developed by Campus Liaison Stan Geidel continued during academic year 2017–18 with two cohorts of a hand-selected group of 11 faculty members chosen by the provost, AVPR, colleges, and SPA staff to participate in a yearlong intensive 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 one-hour intensive session allows six to eight participants to get hands-on, one-on-one time with the SPA 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 $1,006,125 in indirect costs recovered by the University, currently: 5 percent goes to principal investigator(s), 10 percent to departments/units, and 5 percent to the college. During the past year, the following amounts were transferred: $27,405 to PIs, $130,232 to departments/centers, and $43,591 to colleges—which makes a total distribution of $201,228.

SPA Professional Development

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

- Federal Demonstration Partnership Meetings
- Grants Resource Center virtual conferences
- Indiana University Social Media Summit
- Midwest Research and Graduate Administrators Forum
- National Institutes of Health Conference
- National Council of University Research Administrators Annual Meeting
- National Organization of Research Development Professionals Annual Meeting
- National Science Foundation Regional Conference
- SkillPath Administrative Assistant Conference
- Society of Research Administrators Metrics Workshop
- Society of Research Administrators Midwest Meeting
- Society of Research Administrators Ohio Chapter Meeting
- Various webinars on specific topics or sponsors
- 2018 Women Working in Technology 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, CREATE, 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.

2017–18 Program Participation

The ASPiRE Internal Grants program processed 191 student proposals and awarded $25,145 to support 148 projects; 114 faculty proposals and awarded $280,592 to support 84 projects. Details of the 2017–18 ASPiRE Internal Grants program are summarized in the table, "Internal Grants Program 2017–18." Two of the Junior Faculty awardees are featured in the 2018 issue of *Ball State Research*: Ben Bascom from English and Laura Bassette of Special Education. See pages 19 and 20.

Faculty Programs – Research	Requests Submitted	Proposals Awarded	Award Amount
ADVANCE	13	7	$64,237
Junior Faculty Research	11	8	$100,170
Total Research	24	15	$164,407

Faculty Programs – Creative Arts	Requests Submitted	Proposals Awarded	Award Amount
Create	5	5	$27,500
Junior Faculty Creative Arts	3	3	$42,500
Total Creative Arts	8	8	$70,000
Hollis	1	0	-
International Travel	28	27	$10,600
New-Faculty Start-Up	26	10	$28,275
Reprint/Publication Support	23	20	$5,910
Travel Support for External Funding	4	4	$1,400
Total Faculty Programs	114	84	$280,592

Graduate Student Programs	Requests Submitted	Proposals Awarded	Award Amount
Creative Arts	5	3	$1,500
Research	24	10	$4,965
Hollis	20	14	$6,630
Travel Support for Professional Meetings	89	81	$6,875
Total	138	108	$19, 970

Undergraduate Student Programs	Requests Submitted	Proposals Awarded	Award Amount
Creative Arts	5	3	$900
Research	15	7	$2,100
Travel Support for Professional Meetings	33	30	$2,175
Total	53	40	$5,175

Total Student Programs	191	148	$25,145
Total Internal Grants	305	232	$305,737

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 leadership of President Wil Davis, directs commercialization and licensing activities related to Ball State's works of intellectual property: everything from mobile apps to curriculum to scientific patents.

Three of the performance indicators of the recently completed Ball State 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 percent (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 2018, 19 disclosures of intellectual property were made, while FY 2018 royalties totaled $84,379.69. Itemized listing of those IP products is below. For additional information on the IP process at Ball State, contact Stephanie Roof; for Information on the specific products available, contact Linda Swartz.

In addition to disclosures and royalties, we were also pleased to celebrate another patent for Drs. Sue McDowell and Rob Sammelson for their continued work in treating bacterial infection, specifically from Staphylococcus aureua and Streptococcus pyogenes.

	Author(s)	Project Title	Income
DVD	Michael O'Hara, Judith Sebesta	Explore Theatre: A backstage Pass - DVD	$22,033.70
	Teresa Matlock	Child Care Collection, LLC	$951.94
	Hans Sturn	The Art of the Left Hand	$470.00
	Hans Sturn	The Art of the Bow	$420.00
	Hans P. Kellogg	Legacies of Perfection Auburn Cord Duesenberg	$195.21
	Linda Siktberg, Ann (Burford) Bilodeau	Safe Swallowing	$39.95

	Author(s)	Project Title	Income
CD	Eric Lassister	Kiowa Hymns	$187.63

	Author(s)	Project Title	Income
Books	Ronald Morris	Crossroad Connect - Indiana 4th Grade Textbook	$13,904.48
	Janet Ross	Understanding	$272.00

	Author(s)	Project Title	Income
Miscellaneous	Mike Goldsby, Rob Mathews	Entrepreneurship Curriculum Licenses	$40,141.18
	Dayna Thompson, Monique Gabb, Ron Kaitchuck	Halloween: Celestial Origins	$5,700.00
	Dayna Thompson, Monique Gabb, Ron Kaitchuck	Saturn & Beyond	$63.60

BALL STATE
UNIVERSITY

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The Association of Public and Land-grant Universities has named Ball State the winner of the 2018 C. Peter Magrath Community Engagement Scholarship Award in recognition of the success of our Schools Within the Context of the Community program. During this annual 16-week immersive learning experience, 20 elementary education majors spend their days teaching and learning in a low-income, predominantly African-American neighborhood in Muncie. They learn about children's lives outside school, which helps them meet their students' needs in the classroom.