

Marquette University  
Office of Research and Sponsored Programs

Annual Report for  
Fiscal Year 2019



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Office of Research and  
Sponsored Programs

## Executive Summary

This report summarizes Marquette University's activity in extramural grants, contracts, cooperative agreements, and licensing for fiscal year 2019 (July 1, 2018 through June 30, 2019).

This year, 132 Marquette faculty and administrators received 221 awards totaling \$33.7M for their research, instruction, and other projects. Of this amount, \$4.5M was awarded as Facilities and Administrative Costs. Two hundred and sixteen (216) Marquette faculty and administrators submitted 461 proposals requesting a total of \$66M for projects of all types.

Application dollars overall have increased by approximately \$4M within the past year (FY 2018 - \$61.7M) and have risen nearly \$14M in the past five years (FY 2014 - \$51.6M). Moreover, with the number of applications hovering around 400 prior to 2016, FY 2017 (470), FY 2018 (497) and FY 2019 (461) show sustained growth after a 20% initial increase. An increase in applications and application dollars is extremely important. Without these increases, there will not be an increase in awards and award dollars.

Research expenditures have increased as well. Marquette University has an ambitious goal to double research from FY 2015 to FY 2020 (i.e., \$25M to \$50M) per the university's strategic plan - *Beyond Boundaries: Setting the Course for Marquette's Future*. The doubling is measured by research expenditures. In FY 2018 Marquette's research expenditures were at \$32.5M, representing a 37% increase in the past five years (FY 2014).

Total licensing revenue equaled \$470,583 in FY 2019. Included in the FY 2019 licensing revenue are legal expense reimbursements of \$37,833. Adjusting for legal reimbursements, licensing revenue totaled \$432,750. The significant drop in licensing, from \$1M in FY 2018 is due to Marquette's leading revenue—generating unit, GasDay, spinning off from the university to form a new entity, Marquette Energy Analytics.

With the transitioning of technology transfer functions into the newly created Office of Corporate Engagement and Partnerships (OCEP), FY 2019 is the final year for which ORSP will provide comprehensive technology transfer activity data, including licensing revenue information.

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## 1. Overview

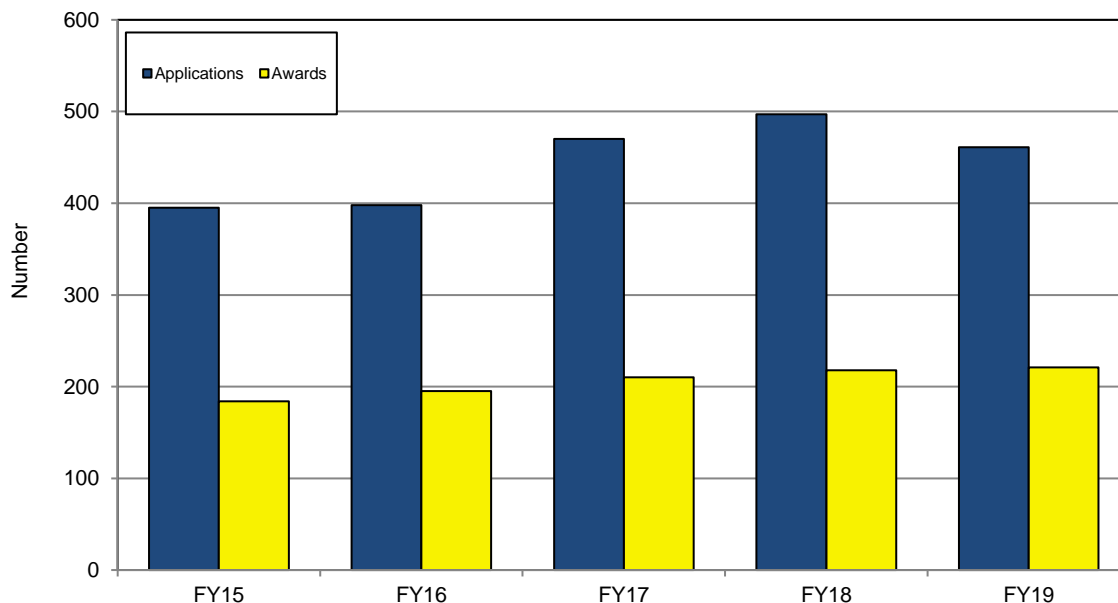
The number of applications decreased from the prior two years, but still reflect sustained and substantial growth. It is critical that serious efforts are made to reach a higher level of extramural support, particularly as the university looks to double research by FY 2020 per the university's strategic plan, *Beyond Boundaries: Setting the Course for Marquette's Future*. Marquette University has an ambitious goal to double research from FY 2015 to FY 2020 (i.e., \$25M to \$50M). The doubling is measured by research expenditures. In FY 2018 Marquette's research expenditures were at \$32.5M, which represents a 37% increase in the past five years (FY 2014). [See Section 2. Research Expenditures.](#)

Marquette must continue to increase the submission of competitive applications. There is a definite correlation between applications submitted and awards received; the best way to increase award dollars is to increase the number of applications. A good lesson was learned from the American Recovery and Reinvestment Act (ARRA) in FY 2010; program officers had the authority to "unreject" meritorious proposals that were not funded in regular competition and turn them into awards. The National Institutes of Health (NIH) has continued this practice in the years since; they will fund proposals with a fundable score or that were on the bubble but not funded during the standard competition timeframe with any extra funds left at the end of their fiscal year. With this sort of funding practice, also continued by the National Science Foundation (NSF), it is highly beneficial to have a grant application in the pipeline. As the university continues to move forward with its strategic plan, the *Beyond Boundaries* theme of "Research in Action" will need to focus on continuing to increase the number of competitive, larger-scale applications submitted.

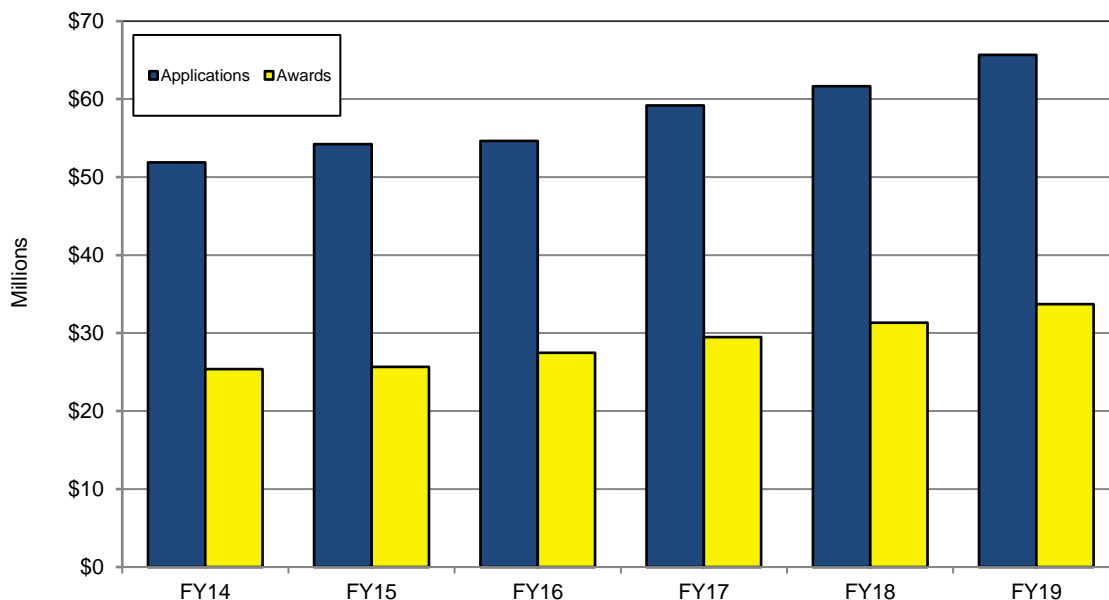
Award dollars have been slowly increasing over the past five years. Application dollars are on a rather steady upward trend. See Figure 2.

Licensing revenue declined substantially. GasDay, which accounted for most of the university's licensing revenue shown in the figure below, spun out of the university and created a new company – Marquette Energy Analytics. Thus, this revenue is no longer coming through the university. Legal expense reimbursement of \$37,833 for FY 2019 is included in the licensing revenue totals. See Figure 3.

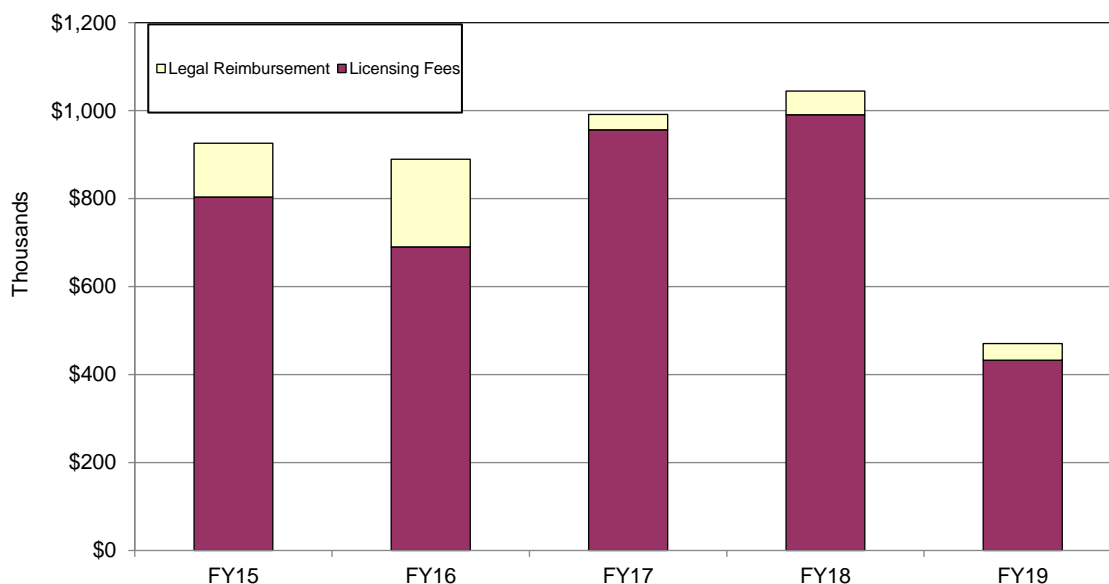
**Figure 1, Number of Applications and Awards, FY 2015-2019**



**Figure 2, Application and Award Dollars, FY 2015-2019**



**Figure 3, Licensing Revenue, FY 2015-2019**



## 2. Research Expenditures

Federal and State policy makers use research *expenditures* and not *awards* to gauge R&D activity at colleges and universities and to compare institutions. Table 1 shows Marquette's R&D expenditures as reported to the National Science Foundation by the Office of the Comptroller. It is likely that these numbers have been and continue to be underreported by Marquette University. Research expenditures should include all funds expensed on research, regardless of the source. Many individuals throughout campus have assisted and are continuing to assist with carefully reviewing restricted accounts for inclusion in this survey.

Marquette University is committed to maintaining its current Research University/High (RU/H) or "R2" Carnegie classification.

**Table 1, Marquette University Research Expenditures, FY 2014-2018**

FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
\$23,633,000	\$24,816,000	\$28,422,000	\$30,034,000	\$32,471,000

The institutions listed below in Table 2 are seen as “peer” institutions or as institutions to which Marquette aspires to be like. As Marquette does not have a medical school, some of the comparisons are skewed. However, the following table does show how Marquette University compares to other selected institutions overall. While there have been fluctuations, nearly all of the institutions listed below have increased their R&D expenditures over the five-year period, some quite substantially.

Therefore, in order to rise in the Carnegie rankings, Marquette will need to continue to not only maintain, but significantly increase, R&D expenditures. Looking internally has helped tremendously, but this can only take the university so far. An increase in research awards will help drive an increase in R&D expenditures. All disciplines will need to contribute for this to happen.

**Table 2, Total Research Expenditures of Selected Institutions, FY 2013 - 2017**

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>MARQUETTE UNIVERSITY</b>	<b>\$20,856,000</b>	<b>\$23,633,000</b>	<b>\$24,816,000</b>	<b>\$28,422,000</b>	<b>\$30,034,000</b>
<b>Baylor</b>	\$13,616,000	\$20,729,000	\$24,642,000	\$26,767,000	\$29,400,000
<b>Boston College</b>	\$50,702,000	\$49,724,000	\$47,761,000	\$54,469,000	\$58,088,000
<b>Brandeis</b>	\$76,060,000	\$74,992,000	\$74,700,000	\$73,435,000	\$68,437,000
<b>Creighton</b>	\$29,983,000	\$25,560,000	\$23,825,000	\$23,510,000	\$21,315,000
<b>De Paul</b>	\$5,524,000	\$6,415,000	\$9,479,000	\$9,558,000	\$8,561,000
<b>Denver</b>	\$19,26,2000	\$18,183,000	\$16,116,000	\$21,326,000	\$22,289,000
<b>Fordham</b>	\$18,822,000	\$17,961,000	\$20,939,000	\$25,374,000	\$20,807,000
<b>Georgetown</b>	\$178,995,000	\$172,726,000	\$176,131,000	\$183,788,000	\$212,319,000
<b>Lehigh</b>	\$35,220,000	\$37,066,000	\$36,788,000	\$32,941,000	\$36,969,000
<b>Loyola University – Chicago</b>	\$51,676,000	\$50,774,000	\$48,664,000	\$42,672,000	\$39,738,000
<b>Notre Dame</b>	\$175,220,000	\$182,228,000	\$190,954,000	\$202,216,000	\$212,823,000
<b>St. John’s</b>	\$2,401,000	\$2,507,000	\$2,558,000	\$2,307,000	\$2,542,000
<b>St. Louis University</b>	\$48,231,000	\$44,481,000	\$44,457,000	\$42,151,000	\$56,402,000
<b>Southern Methodist</b>	\$22,544,000	\$32,401,000	\$29,282,000	\$31,819,000	\$29,879,000
<b>Syracuse</b>	\$70,967,000	\$66,321,000	\$69,896,000	\$84,651,000	\$145,705,000
<b>Tufts</b>	\$156,525,000	\$160,825,000	\$168,314,000	\$189,085,000	\$223,409,000
<b>Tulane</b>	\$160,414,000	\$157,825,000	\$152,658,000	\$165,438,000	\$180,993,000
<b>University of Miami</b>	\$344,757,000	\$345,805,000	\$365,574,000	\$358,441,000	\$367,877,000
<b>University of Wisconsin – Milwaukee</b>	\$56,587,000	\$60,752,000	\$63,414,000	\$59,813,000	\$54,181,000
<b>Villanova</b>	\$7,049,000	\$13,700,000	\$14,512,000	\$14,903,000	\$19,037,000
<b>Wake Forest</b>	\$182,721,000	\$176,380,000	\$171,926,000	\$170,006,000	\$182,227,000

See NSF reports and rankings of Academic Research and Development Expenditures at <http://www.nsf.gov/statistics/nsf12330/>, and <http://www.nsf.gov/statistics/publication-series.cfm?seriesId=66>. The data provided in the above table are the most current data available.

For information on research expenditures for non-Science, Technology, Engineering and Mathematics (STEM) disciplines in 2008-09 (the most recent timeframe available), please see the FY 2011 Annual Report <http://www.marquette.edu/orsp/reports/documents/FY11ORSPAnnualReport.pdf>.

The information was graciously provided by Rev. Thaddeus J. Burch, S.J., and was taken from the Carnegie Foundation's Classifications Data File <http://classifications.carnegiefoundation.org/resources/>.

### 3. Overview of Awards and Applications

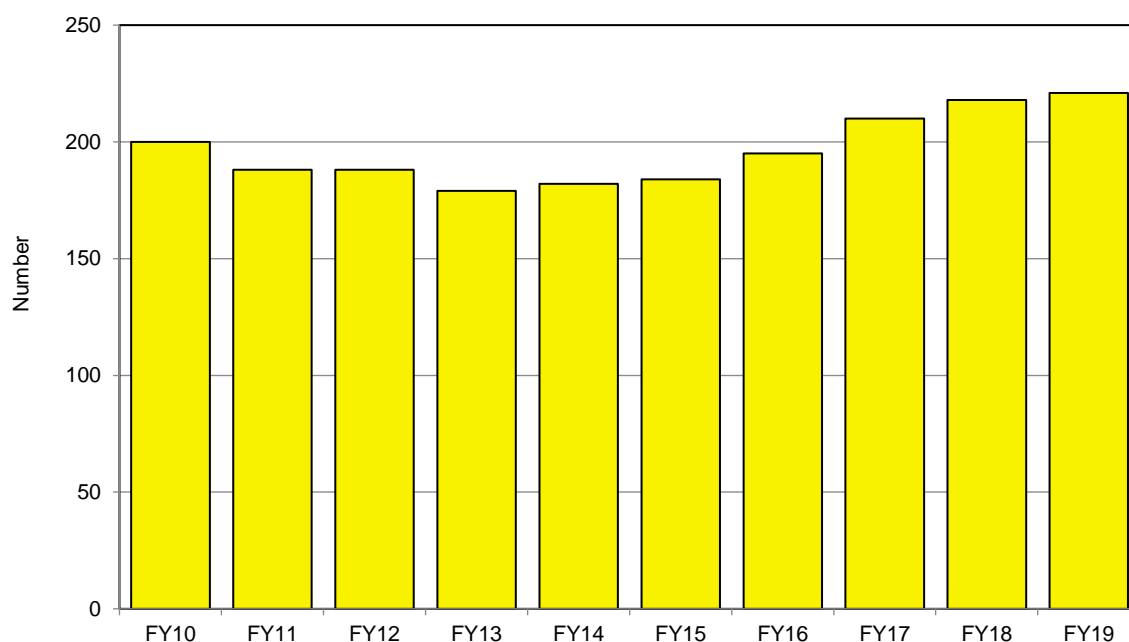
In FY 2019, Marquette faculty and administrators received 221 awards totaling \$33,725,642 for their research, instruction, equipment, and other projects. ORSP records funds as they are legally committed. For example, if a sponsor releases funds for a three-year \$300,000 project on an annual basis, then the funds would be recorded as a \$100,000 award in each of the three project years. Conversely, if that sponsor released all of the funds for that same three-year project up front, then the funds would be recorded in only the first year of the project. Most sponsors release funds for a multi-year project on an annual basis. To this end, in FY 2019, 33% of multiple year awards are in their first year, which is slightly lower than in past years.

FY 2010 saw unprecedented growth in award dollars from prior years that can be attributed to a large award from the State via WE Energies for the Discovery Learning Complex; the American Recovery and Reinvestment Act; a change to grant reporting; and a correction to ORSP reporting to include funds received from the State of Wisconsin for Dental Services.

FY 2013 saw another significant increase in award dollars despite sequestration which had and continues to have an impact on federal awards, Marquette's largest category of funding. Award dollars peaked in FY 2013 at \$29.4M due to an \$8M award to the School of Dentistry from the State of Wisconsin for facility expansion. Without this one-time funding, the award level would have been at \$21.4M, down from \$23.9M in FY 2012.

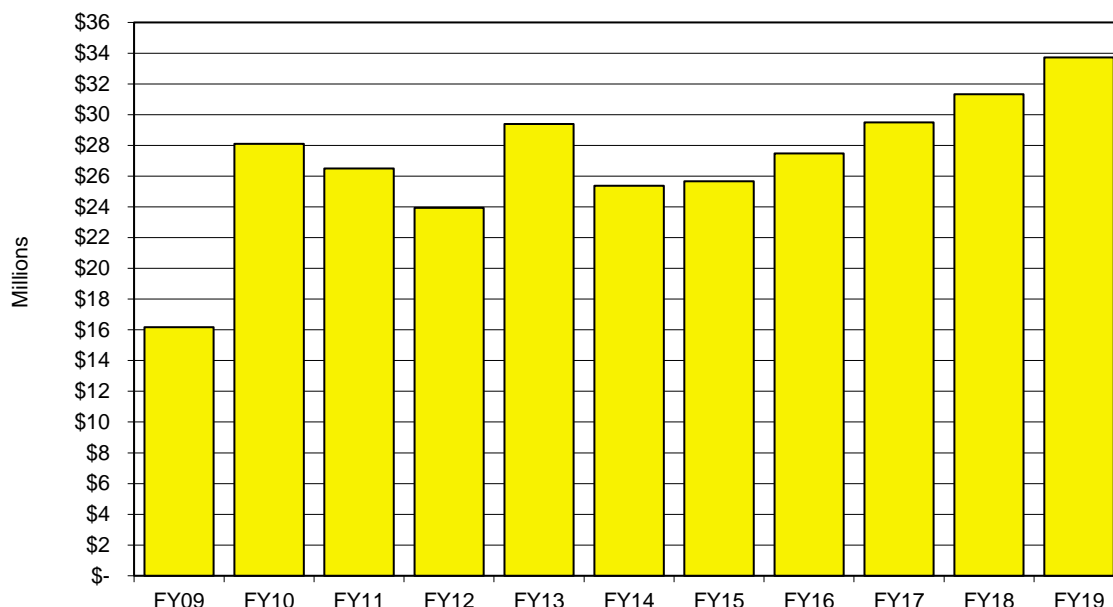
Figures 4 and 5 show the number of awards received and the dollar values of those awards over the past ten years.

*Figure 4, Number of Awards, FY 2010-2019*





**Figure 5, Annual Award Dollars, FY2010-2019**



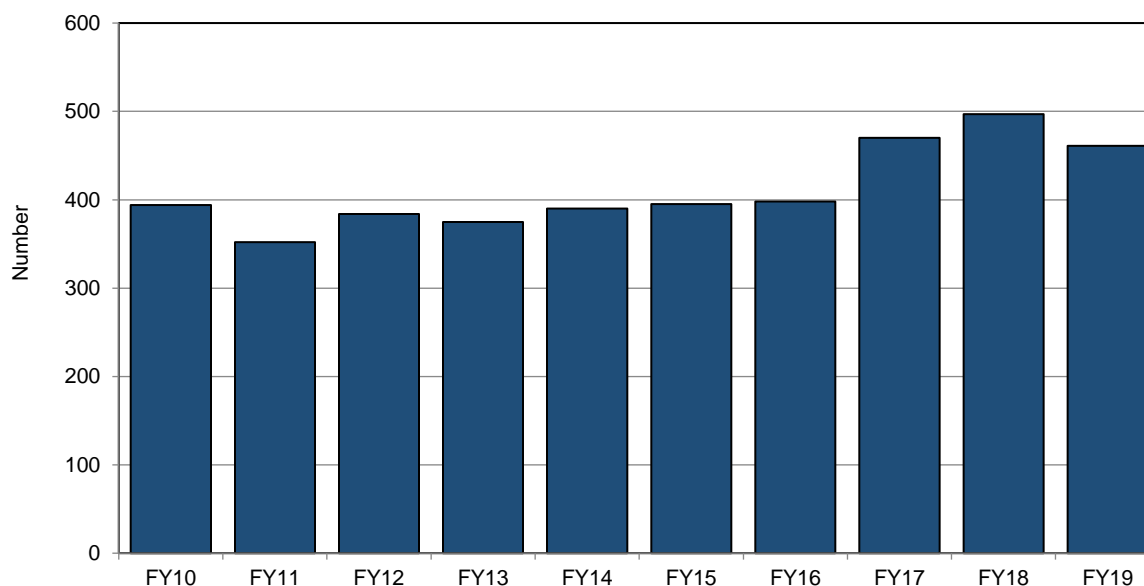
In the FY 2019 reporting period, 216 applicants submitted 461 requests totaling \$65,826,459. Each of the years on a funded multi-year project will show an application for that specific year. Eighty-six percent (84%) of the FY 2019 applications are new applications, and 16% represent applications for continuing projects. This is nearly identical to FY 2017 and FY 2018, where there was also unprecedented growth in applications. These recent years are significantly different than FY 2016 when 70% of applications were new v. 30% continuing. Figures 6 and 7 compare application numbers and dollar value totals for the past ten years.

As with awards, FY 2010 applications and application dollars are significantly higher than in prior or following years. Again, this is due in large part to applications to the State via WE Energies for the Discovery Learning Complex and additional grant competitions being held due to the American Recovery and Reinvestment Act.

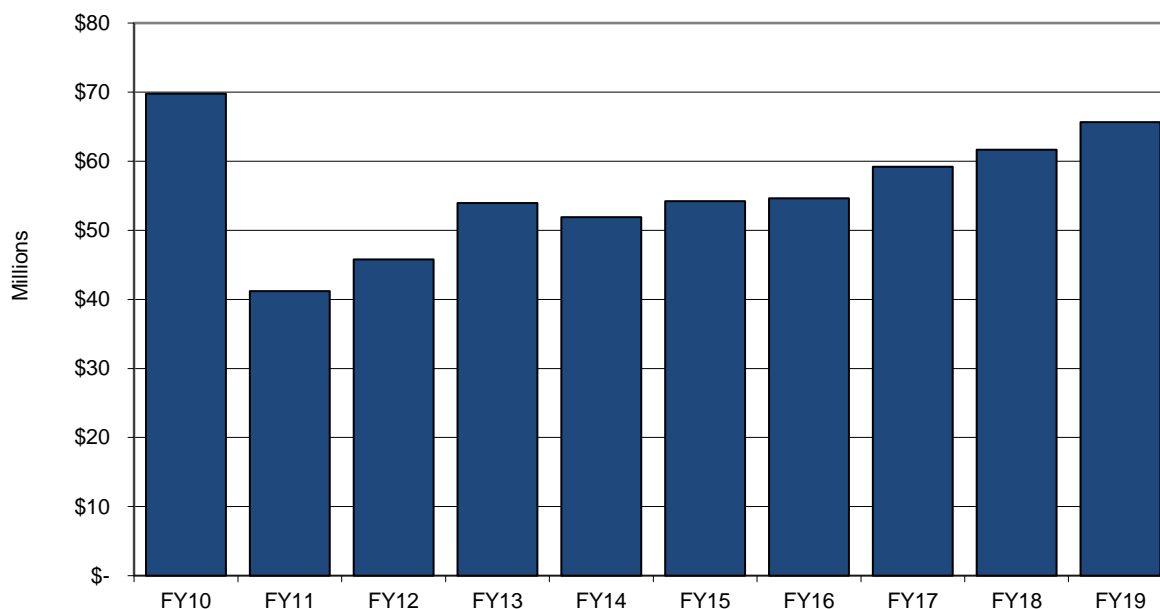
The increase in the application dollars in FY 2013 can be contributed in large part to the School of Dentistry facility expansion project. It is important to note that research application dollars have been steadily rising from \$38M in FY 2014 to \$51M in FY 2019. Submitting applications is the key to growth. It is promising to see that the number of applications overall rose from 398 in FY 2016 to 470 in FY 2017, 497 in FY 2018 and 461 in FY 2019.

In order to grow the research enterprise at Marquette, the number of applications submitted must grow substantially. In addition, larger projects need to be proposed. We also need to work to increase the number of applicants. Growth in this area has been substantial, particularly in the last two years. There were 216 applicants in FY 2019, down from 229 in FY 2018 but higher than any other year in the past ten years. This compares to a five-year average of 202 and a ten-year average of 188. We must work to continue to expand the applicant base; it can't be the same applicants who do all of the work if we expect growth. In addition to quantity, applications must continue to be competitive.

**Figure 6, Number of Applications, FY 2010-2019**



**Figure 7, Annual Application Dollars, FY 2010-2019**



The most successful researchers understand that it is crucial to always have an application in the pipeline. Table 3 states the number of tenured and tenure track faculty in each unit, the number of people in each unit who received or requested extramural awards from all sponsor types, the number of their awards or requests, and the total dollars awarded or requested in FY 2019.

Departments that did not have any applications or awards in FY 2019 are not reflected individually in the table. Their faculty numbers have been included in the college total. Also, applicants and awardees are not necessarily tenured or tenure-track faculty. Staff, adjunct faculty, and postdoctoral fellows, as examples, are included in the applicant and awardee totals. Thus, it is possible to have more applicants or awardees than tenured and tenure-track faculty.

Also note that these figures do not include applications submitted and awards received by individuals. This information is included in [Section 7: Individual Awards](#).

**Table 3, Awards and Applications by Unit: People, Actions and Dollars in FY 2019**

Awardees and Awards				
Unit	Tenured/Tenure Track Faculty	Awardees	Awards	Award Totals
ACAD	0	0	0	\$0
CSC	0	0	0	\$0
ARTS	231	39	66	\$7,521,614
ARTS	0	2	5	\$739,162
BSCI	18	7	13	\$1,802,756
CHEM	13	8	9	\$2,943,924
ENGL	24	0	0	\$0
HIST	20	0	0	\$0
LLAC	19	0	0	\$0
MSCS	27	10	20	\$1,321,197
PHIL	22	0	0	\$0
PHYS	7	3	3	\$145,000
POSC	17	1	2	\$65,000
PSYC	19	8	14	\$504,575
SOCS	18	0	0	\$0
THEO	27	0	0	\$0
BUAD	51	1	2	\$160,702
ACCO	5	0	0	\$0
ECON	12	1	2	\$160,702
MARK	8	0	0	\$0
COMM	24	4	6	\$247,300
CMST	0	0	0	\$0
COMM	0	1	1	\$3,300
JOUR	0	3	5	\$244,000
STCM	0	0	0	\$0
DENT	21	5	10	\$3,785,221
CLSE	0	1	2	\$164,585
DENT	0	2	6	\$3,531,830
DISS	0	1	1	\$35,000
DSCH	0	1	1	\$53,806
EDUC	19	4	8	\$1,533,895
CECP	8	3	5	\$176,895
EDPL	11	0	0	\$0
ITOL	0	1	3	\$1,357,000
ENGR	46	35	63	\$7,439,359
BIEN	9	9	22	\$3,295,073
CEEN	9	7	11	\$783,175
EECE	14	12	17	\$1,491,711
ENGR	0	1	2	\$1,000,000
MEEN	14	6	11	\$869,400
GOCA	0	1	1	\$4,630
PUAF	0	1	1	\$4,630
GRAD	0	2	4	\$394,598
GRAD	0	1	1	\$20,483
TRIN	0	1	3	\$374,115
HSCI	47	19	26	\$3,542,647
BISC	15	7	9	\$1,969,728
CLLS	3	2	4	\$112,485
PHAS	14	1	1	\$39,200
PHTH	10	6	9	\$945,278
SPPA	5	3	3	\$475,956
LAW	29	4	5	\$136,271
NURS	18	7	8	\$2,468,248
Awardees and Awards				

Applicants and Applications			
Unit	Applicants	Applications	Application Totals
ACAD	1	2	\$26,000
CSC	1	2	\$26,000
ARTS	72	140	\$19,702,247
ARTS	2	5	\$1,183,801
BSCI	13	33	\$7,620,849
CHEM	11	25	\$5,290,879
ENGL	4	4	\$195,000
HIST	2	2	\$59,000
LLAC	2	2	\$69,843
MSCS	12	35	\$3,401,940
PHIL	4	4	\$349,215
PHYS	4	5	\$299,814
POSC	3	4	\$233,559
PSYC	13	19	\$644,074
SOCS	1	1	\$349,051
THEO	1	1	\$5,222
BUAD	4	5	\$635,488
ACCO	1	1	\$10,000
ECON	2	3	\$615,488
MARK	1	1	\$10,000
COMM	8	10	\$470,408
CMST	3	3	\$288,192
COMM	1	1	\$8,800
JOUR	3	5	\$169,000
STCM	1	1	\$4,416
DENT	5	14	\$4,060,129
CLSE	1	3	\$366,499
DENT	2	9	\$3,629,697
DISS	1	1	\$35,000
DSCH	1	1	\$28,933
EDUC	6	10	\$1,211,310
CECP	2	3	\$172,782
EDPL	3	4	\$86,528
ITOL	1	3	\$952,000
ENGR	50	155	\$20,480,730
BIEN	17	50	\$6,149,610
CEEN	8	34	\$3,239,235
EECE	14	43	\$7,483,665
ENGR	1	3	\$1,002,400
MEEN	10	25	\$2,605,820
GOCA	1	1	\$2,500
PUAF	1	1	\$2,500
GRAD	4	6	\$570,754
GRAD	2	2	\$51,119
TRIN	2	4	\$519,635
HSCI	34	65	\$9,796,046
BISC	14	27	\$5,970,790
CLLS	3	9	\$328,292
PHAS	2	3	\$72,992
PHTH	12	23	\$2,946,514
SPPA	3	3	\$477,458
LAW	4	6	\$141,270
NURS	14	18	\$2,444,841
Applicants and Applications			

Unit	Tenured/Tenure Track Faculty	Awardees	Awards	Award Totals
OMM	0	1	2	\$1,250,000
PRES	0	0	0	\$0
ATHL	0	0	0	\$0
PROV	0	3	3	\$526,004
OIE	0	1	1	\$299,077
ORI	0	2	2	\$226,927
STAF	0	3	4	\$1,299,138
OSDE	0	1	1	\$70,421
SHS	0	1	1	\$10,000
STAF	0	1	2	\$1,218,717
STDE	0	0	0	\$0
UGRA	0	4	13	\$3,418,145
EOP	0	3	11	\$3,405,565
HMA	0	1	2	\$12,580
<b>Total</b>	<b>486</b>	<b>132</b>	<b>221</b>	<b>\$33,725,642</b>

Unit	Applicants	Applications	Application Totals
OMM	0	0	\$0
PRES	1	1	\$4,452
ATHL	1	1	\$4,452
PROV	3	5	\$1,045,187
OIE	1	1	\$299,983
ORI	2	4	\$745,204
STAF	4	5	\$1,486,147
OSDE	1	1	\$96,457
SHS	1	1	\$10,000
STAF	1	2	\$1,218,717
STDE	1	1	\$160,973
UGRA	5	18	\$3,746,685
EOP	4	15	\$3,708,685
HMA	1	3	\$38,000
<b>Total</b>	<b>216</b>	<b>461</b>	<b>\$65,826,459</b>

Table 4 states the number of people, actions, and dollars that comprise Marquette's grant and contract activity over the past ten years. The application and award dollar amounts have been steadily increasing over the past ten years, with the exception of the spikes in FY 2010 and 2013. These increases have been explained previously. Note that the number of applicants has remained relatively steady until FY 2017 where there are big jumps in the numbers of applications. Work must continue to maintain and expand the pool of applicants if significant, sustainable increases are to be achieved.

**Table 4, Extramural Activity: People, Actions, and Dollars in Fiscal Years 2010-2019**

Fiscal Year	Number of Awardees	Number of Awards	Total Award Dollars	Number of Applicants	Number of Applications	Total Application Dollars
2010	116	200	\$28,101,796	186	394	\$69,776,286
2011	111	188	\$26,491,630	159	352	\$41,194,147
2012	106	188	\$23,932,872	177	384	\$45,782,596
2013	104	179	\$29,388,986	180	375	\$53,942,165
2014	106	182	\$25,378,818	171	390	\$51,607,789
2015	107	184	\$25,658,792	177	395	\$54,214,489
2016	114	195	\$27,476,129	182	398	\$54,632,175
2017	124	210	\$29,493,372	206	470	\$59,197,451
2018	138	218	\$31,321,321	229	497	\$61,312,259
2019	133	221	\$33,725,642	216	461	\$65,826,459

Appendices A and B provide a tabular summary of the number of people, actions, and dollars that comprise FY 2019 award and application totals. Appendices C and D provide a three-year history of extramural activity by college or school and department. Appendix E provides a multi-year breakdown of activity by College and department and also includes information regarding faculty and their participation. A detailed list of awards and applications from FY 1994 to the present is available at [www.marquette.edu/orsp/reports](http://www.marquette.edu/orsp/reports).

## 4. Awarded Facilities and Administrative Costs

Facilities and Administrative (F&A) dollars are the indirect costs applied pursuant to rules established by the U.S. Department of Health and Human Services (DHHS), the university's cognizant audit agency, based on rates established with them. In some cases, F&A is limited or prohibited by the

sponsor. Even in cases where full indirect costs are allowed, the F&A rate is only applied to modified total direct costs (MTDC). Essentially, this means that indirect costs are not taken on items including student tuition remission and student support costs, patient care costs, capital expenditures, and that portion of a subaward over \$25,000. The growth in awards yields an increase in F&A awarded and recovered as project funds are expensed. These funds are of benefit to the university along with other items such as salary savings, fellowship support, travel, and equipment that are included in sponsored program budgets. In FY 2019:

- 84% of awarded F&A costs came from federal sponsors.
- 75% of awarded F&A costs came from federal research grants.
- 42% (93) of all awards recovered full F&A costs; 22% (48) recovered a reduced percentage; and 36% (80) recovered no indirect costs.

In the last bullet point, “full F&A costs” indicates that our federally negotiated on-campus or off-campus rate was applied. Every effort is made to recover the university’s full indirect costs. “A reduced percentage” typically means that the sponsor has set a cap on the percentage of F&A that can be awarded. For example, many of the awards made by the U.S. Department of Education limit F&A costs to 8% of the modified total direct costs. In these situations, the full amount of F&A costs allowed is requested. Finally, there are sponsors who have written guidelines specifying that they will not support any F&A costs. These typically include fellowship awards or awards from smaller organizations.

Tables 5 and 6 show the awarded and requested F&A costs, respectively.

Figure 8 shows the awarded F&A as compared to all award dollars.

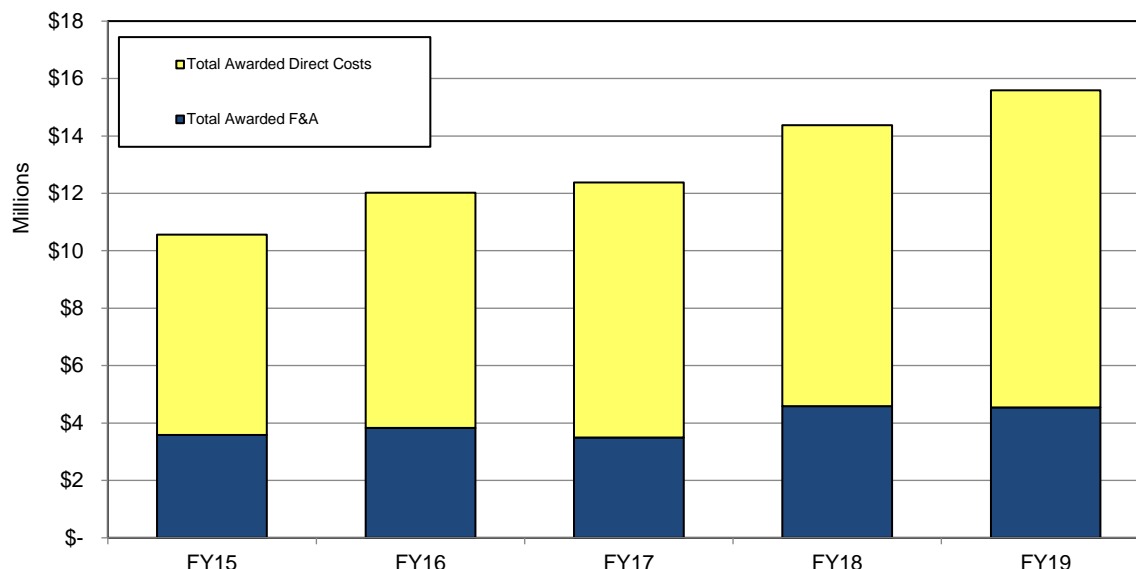
**Table 5, Awarded F&A Costs by Type of Sponsor and Type of Activity, FY 2019**

	Federal	State	Foundation	Corporation	Total
Research	\$3,413,716	\$162,707	\$125,470	\$256,781	\$3,958,674
Instruction	\$314,489	\$6,607	\$0	\$0	\$321,096
Equipment	\$0	\$0	\$0	\$0	\$0
Other	\$89,882	\$24,231	\$145,487	\$0	\$259,600
Total	\$3,818,087	\$193,545	\$270,957	\$256,781	\$4,539,370

**Table 6, Requested F&A Costs, by Type of Sponsor and Type of Activity, FY 2019**

	Federal	State	Foundation	Corporation	Total
Research	\$10,824,444	\$487,468	\$213,233	\$416,301	\$11,941,446
Instruction	\$342,597	\$6,607	\$0	\$0	\$349,204
Equipment	\$0	\$0	\$0	\$0	\$0
Other	\$205,900	\$8,077	\$42,171	\$0	\$256,148
Total	\$11,372,941	\$502,152	\$255,404	\$416,301	\$12,546,798

**Figure 8, Awarded F&A Costs, FY 2015-2019**



## 5. Awards and Applications by Sponsor and Activity Type

Tables 7 and 8 show FY 2019 award numbers and dollars by type of sponsor and type of activity.

Tables 9 and 10 show FY 2019 application numbers and dollars by type of sponsor and type of activity.

Of special note:

- Federal sponsors account for 65% (116 awards) of this year's total award dollars and 77% (256 applications) of this year's application dollars. Federal sponsors have accounted for 64% of the total award dollars over the past five years.
- Research awards (162) account for 56% of total award dollars received and research applications (382) account for 77% of application dollars requested. Research awards have accounted for 55% of total award dollars over the past five years.
- Instruction awards (20) account for 21% of total award dollars received and instruction applications (27) account for 12% of application dollars requested. Instruction awards have accounted for 26% of total award dollars over the past five years.
- Federal sponsors account for 43% (93 awards) of Marquette's research award dollars and 12% (14 awards) of instruction award dollars. Federal sponsors have accounted for 75% of Marquette's research award dollars and 58% of Marquette's instruction award dollars over the past five years.

**Table 7, Number of Awards by Activity and Sponsor Type, FY 2019**

	Federal	State	Foundation	Corporation	Total
Research	93	6	43	20	162
Instruction	14	4	1	1	20
Equipment	0	0	0	1	1
Other	9	7	20	2	38
Total	116	17	64	24	221

**Table 8, Award Dollars by Activity and Sponsor Type, FY 2019**

	Federal	State	Foundation	Corporate	Total
Research	\$14,586,986	\$603,176	\$1,950,388	\$1,550,206	\$18,690,756
Instruction	\$4,079,738	\$2,463,011	\$500,000	\$39,200	\$7,081,949
Equipment	\$0	\$0	\$0	\$9,985	\$9,985
Other	\$3,205,035	\$714,102	\$3,978,815	\$45,000	\$7,942,952
Total	\$21,871,759	\$3,780,289	\$6,429,203	\$1,644,391	\$33,725,642

**Table 9, Number of Applications by Activity and Sponsor Type, FY 2019**

	Federal	State	Foundation	Corporate	Total
Research	220	15	103	44	382
Instruction	18	4	1	4	27
Equipment	4	0	0	1	5
Other	14	6	24	3	47
Total	256	25	128	52	461

**Table 10, Application Dollars by Activity and Sponsor Type, FY 2019**

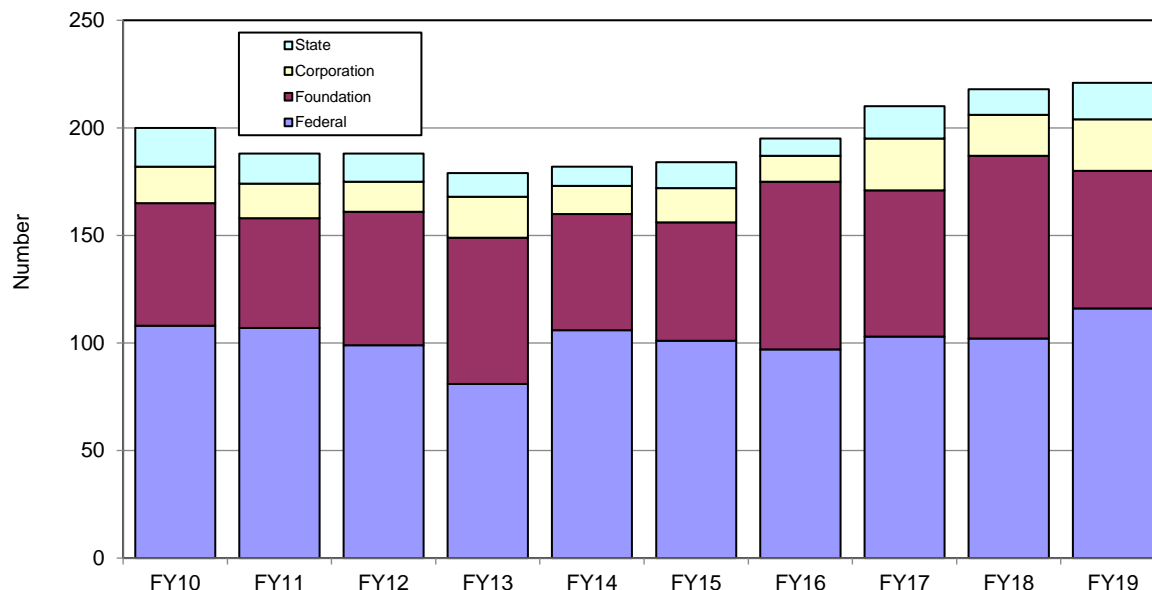
	Federal	State	Foundation	Corporation	Total
Research	\$42,002,653	\$2,233,096	\$4,008,399	\$2,762,500	\$51,006,648
Instruction	\$4,541,818	\$2,467,981	\$500,000	\$75,200	\$7,584,999
Equipment	\$658,858	\$0	\$0	\$9,985	\$668,843
Other	\$3,134,570	\$252,992	\$3,123,407	\$55,000	\$6,565,969
Total	\$50,292,899	\$4,954,069	\$7,631,806	\$2,777,685	\$65,826,459

## 5.1. Marquette's Sponsors

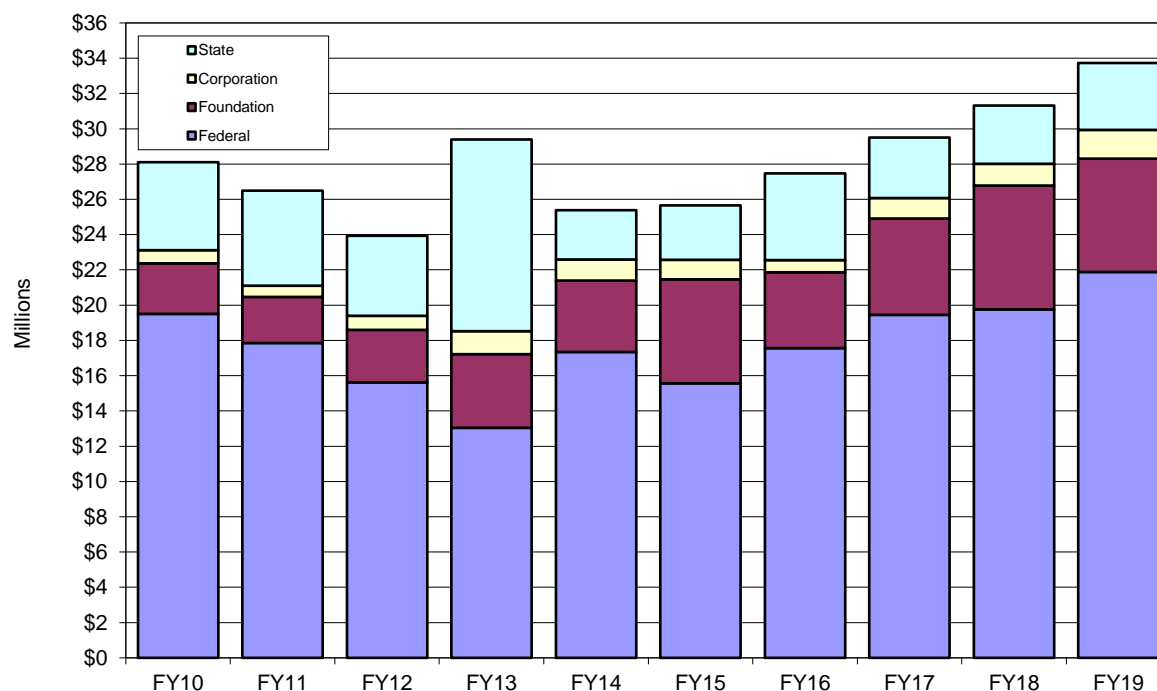
Figures 9 and 10 illustrate the relative contribution of different sponsor types to the number and dollar totals of awards received.

The surge in State award dollars in FY 2010, 2011 and 2012 can be attributed to large awards from the State via WE Energies for the College of Engineering's Discovery Learning Complex. FY 2012 was the end of the project period for this particular award. In 2013, an \$8M award was received from the State for the Marquette University School of Dentistry expansion. It is not anticipated that State awards will reach this level post 2013.

**Figure 9, Awards by Sponsor Type, FY 2010-2019**



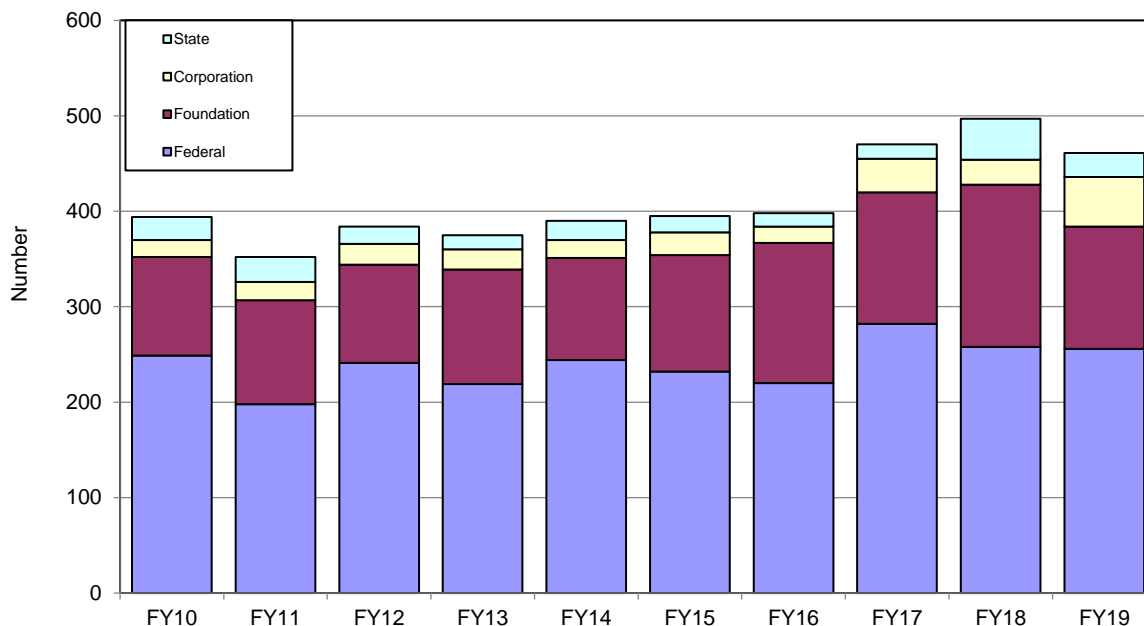
**Figure 10, Award Dollars by Sponsor Type, FY 2010-2019**



Figures 11 and 12 illustrate the relative contribution of different sponsor types to the number and dollar totals of applications submitted. Again, the large State application dollar amounts in FY 2010 – 2013 can be attributed to the College of Engineering's Discovery Learning Complex and Dental building projects.



**Figure 11, Applications by Sponsor Type, FY 2010-2019**



**Figure 12, Application Dollars by Sponsor Type, FY 2010-2019**

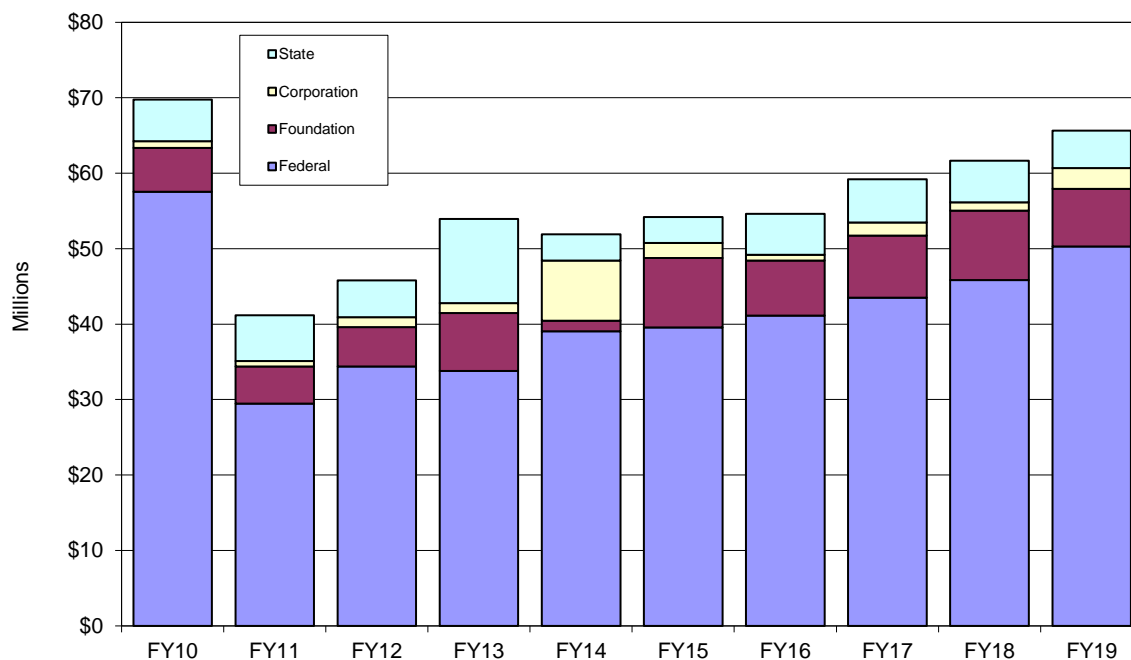


Table 11 lists Marquette's five largest sponsors, which account for 41% of all awards received and 61% of FY 2019 award dollars.

The "Five Largest Sponsor" tables for the past five years include the same list of sponsors. The National Institutes of Health has predominantly been in the top spot, with the exception of FY 2013 when the State of Wisconsin was the largest funder.

**Table 11, Five Largest Sponsors, FY 2019**

Sponsor	Number of Awards	Award Dollars	% of Total Award Dollars
National Institutes of Health	46	\$7,780,148	23%
National Science Foundation	26	\$4,463,970	13%
U.S. Department of Education	11	\$3,595,335	11%
State of Wisconsin	3	\$2,434,707	7%
Bureau of Health Professions	4	\$2,140,457	6%

Table 12 states the number of faculty receiving NIH awards, the number of awards they have received, and the award totals for the past five years. Similar data is included for applications. Application and award figures include noncompeting and competing actions. In some actions, Marquette is a subrecipient.

**Table 12, National Institutes of Health Awards and Applications, FY 2015-2019**

Fiscal Year	Awardees	Awards	Award \$	Applicants	Applications	Requested \$
2015	37	52	\$6,440,347	59	110	\$20,566,182
2016	34	45	\$7,550,428	52	107	\$22,088,764
2017	33	45	\$6,905,546	60	139	\$16,377,060
2018	33	47	\$8,581,208	73	124	\$16,158,099
2019	34	46	\$7,780,148	69	119	\$24,579,334

Marquette has been making a concerted effort to encourage and prepare more faculty members to submit competitive NIH Research Project Grant (R01) applications. The R01 is the original and historically oldest grant mechanism used by NIH. The R01 provides support for health-related research and development based on the mission of the NIH. R01s can be investigator-initiated or can be in response to a program announcement or request for application.

These efforts are paying off and need to continue. In FY 2019, Marquette received five new R01 awards. There are many benefits to submitting an R01 to the NIH as an Early Stage Investigator (ESI; within 10 years of receiving the PhD). The university, at all levels, needs to determine what new hires need in order to be able to submit a competitive proposal while still in the ESI stage. Established faculty should also be encouraged to routinely submit R01s. An R01 incentive program, funded by a private donor, encourages competitive R01 submissions.

Table 13 states the number of faculty receiving NSF awards, the number of awards they have received, and the award totals for the past five years.

**Table 13, National Science Foundation Awards and Applications, FY 2015-2019**

Fiscal Year	Awardees	Awards	Award \$	Applicants	Applications	Requested \$
2015	18	20	\$2,981,590	45	61	\$8,725,899
2016	17	21	\$3,665,317	43	51	\$7,749,562
2017	17	23	\$4,094,475	38	59	\$11,593,104
2018	15	19	\$2,596,999	50	72	\$7,139,527
2019	21	26	\$4,463,970	45	58	\$9,672,716

Changes that were made three years ago at the National Science Foundation are continuing to have an impact. Several directorates stopped having two deadlines per year, opting instead for one

deadline per year. Some have opted for a rolling deadline, with no specific due date. Other directorates implemented a letter of intent policy. As the letters of intent do not contain budget information, proposal registration forms are not routed at that point in time and the letters of intent are not counted as applications in the ORSP records. Registration forms are routed at the time of the full proposal and are entered into the ORSP system at that point.

Another important point to note about NSF is that there is variation in how funds are awarded. Marquette has received awards in which all funds are released at the onset of the project period and awards in which funds are released in yearly increments. Thus, there may be significant fluctuation between years depending on how large awards were legally obligated.

## **5.2. Sponsored Activities**

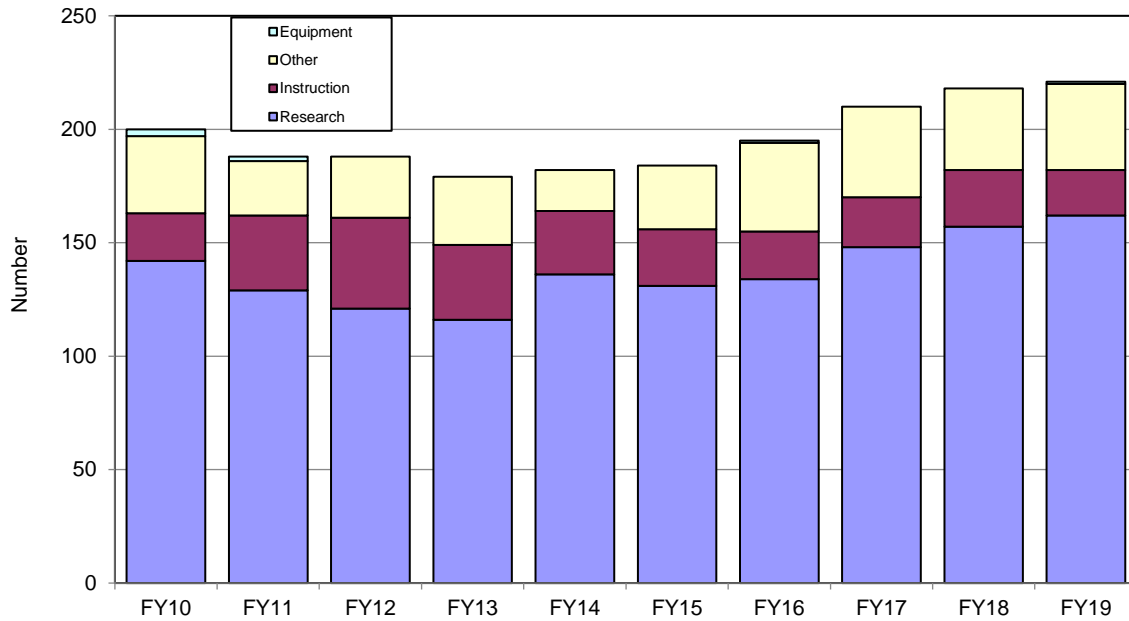
Figure 13 provides a historical comparison of award totals by type of activity. Figure 14 compares award dollars by type of activity. Figures 15 and 16 respectively provide this information for applications. The growth in Equipment applications and awards in FY 2010 and FY 2011 again can be attributed to the ARRA. On top of being able to offer an additional Major Research Instrumentation competition in FY 2010, the NSF also waived the typical cost share requirement of 30%.

In addition, Marquette received Equipment awards from the Health Resources and Services Administration (HRSA) in FY 2011. These one-time equipment awards were made available to enhance existing HRSA-funded programs. While there was still significant competition, the pool of applicants was smaller and Marquette received nearly \$600,000 for equipment to benefit the College of Nursing and the Department of Physical Therapy.

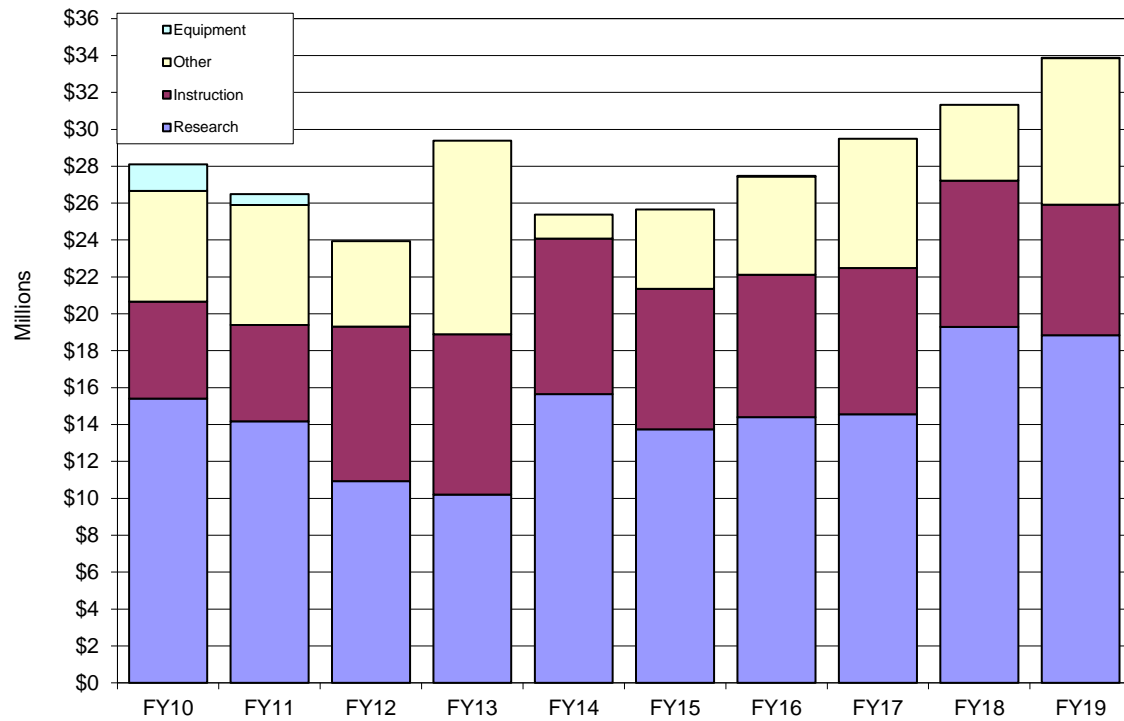
Since 2013, the NSF Equipment category has not seen any activity because the agency moved to classifying their awards as “research.” In addition, the majority of equipment requested is used for research purposes and is often included in a larger research grant.

The Other category includes approximately \$2.4M for the provision of dental services. Prior year totals (FY 2010 – FY 2012) included funds from the State via WE Energies for the Discovery Learning Complex and FY 2013 included the School of Dentistry expansion project. Funds requested by and received for the Institute for the Transformation of Learning are included in this category as well.

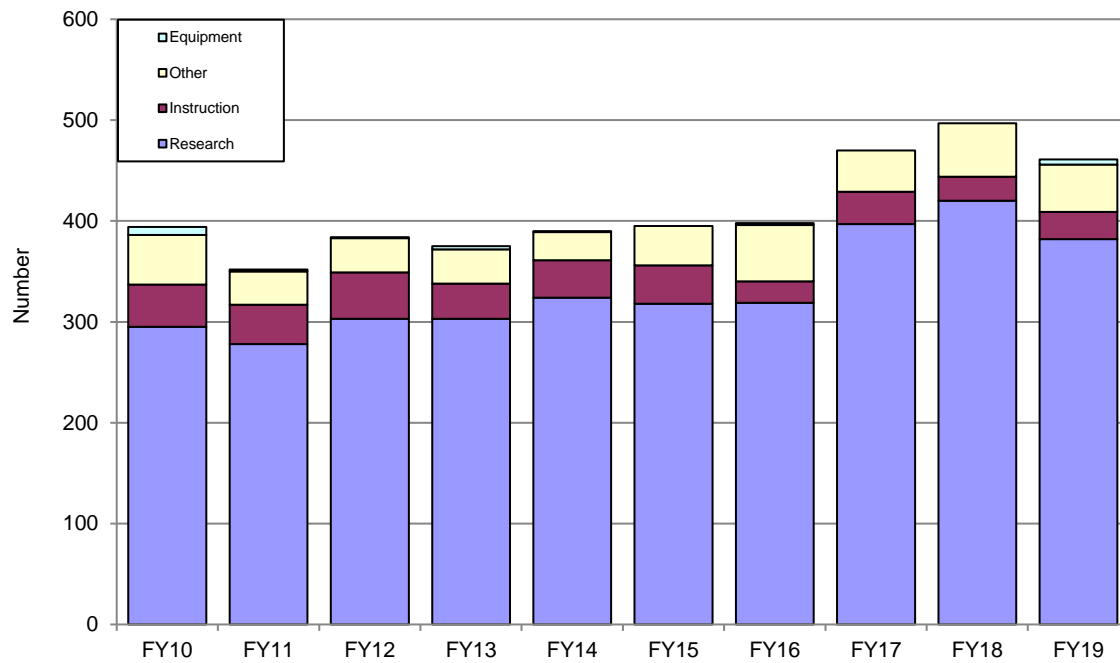
**Figure 13, Awards by Activity Type, FY 2010-2019**



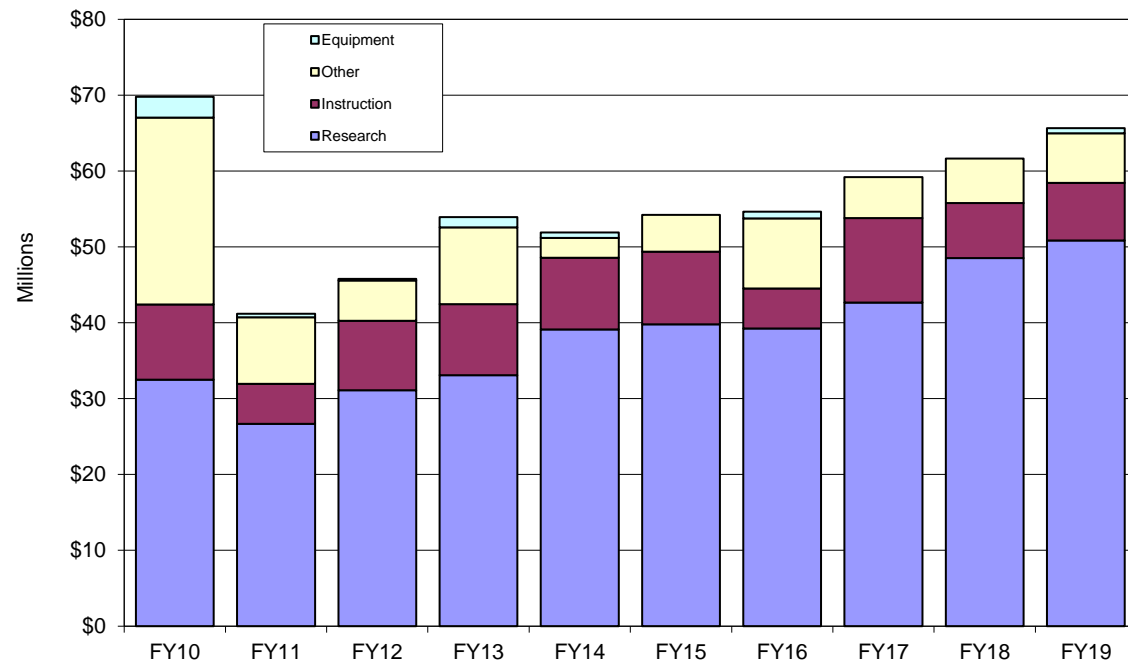
**Figure 14, Award Dollars by Activity Type, FY 2010-2019**



**Figure 15, Applications by Activity Type, FY 2010-2019**



**Figure 16, Application Dollars by Activity Type, FY 2010-2019**

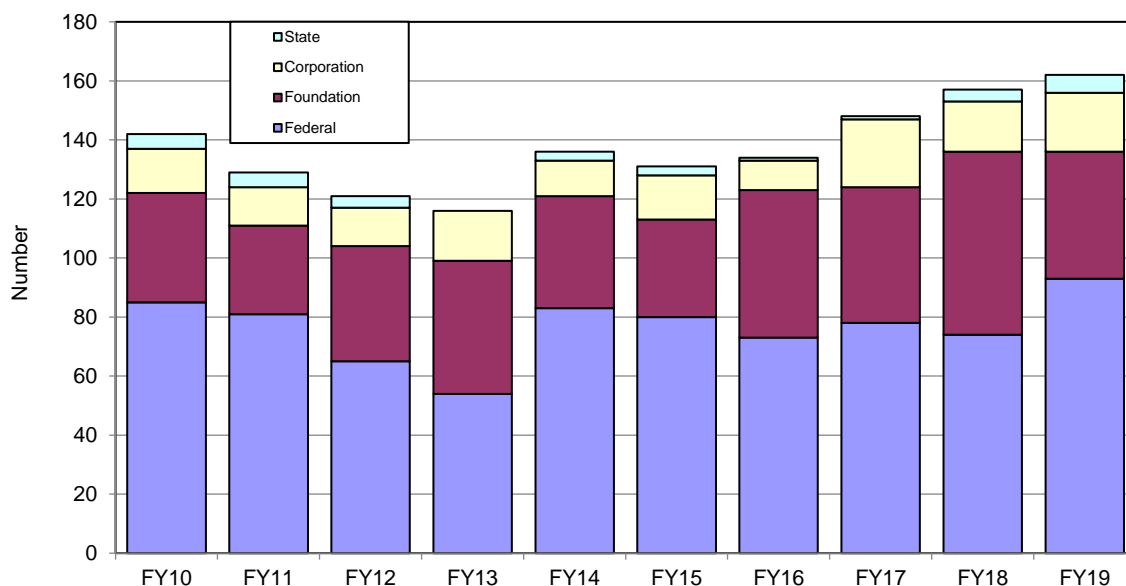


## 6. Research

Requests for research dollars continue to grow. In FY 2011, research applications totaled \$26.6M. In FY 2019, research applications exceeded \$51M. This constitutes a significant increase over the past years. It is very promising to see an upward swing in research applications, as it means the potential for an upward swing in research awards.

Figure 17 illustrates the number of research awards by sponsor over the past ten years. Figure 18 compares research award dollar totals over the past ten years and the relative contribution of each sponsor type. Again, much of the increase in federal research dollar totals in FY 2010 and FY 2011 can be attributed to ARRA.

**Figure 17, Research Awards by Sponsor Type, FY 2010-2019**



**Figure 18, Research Award Dollars by Sponsor Type, FY 2010-2019**

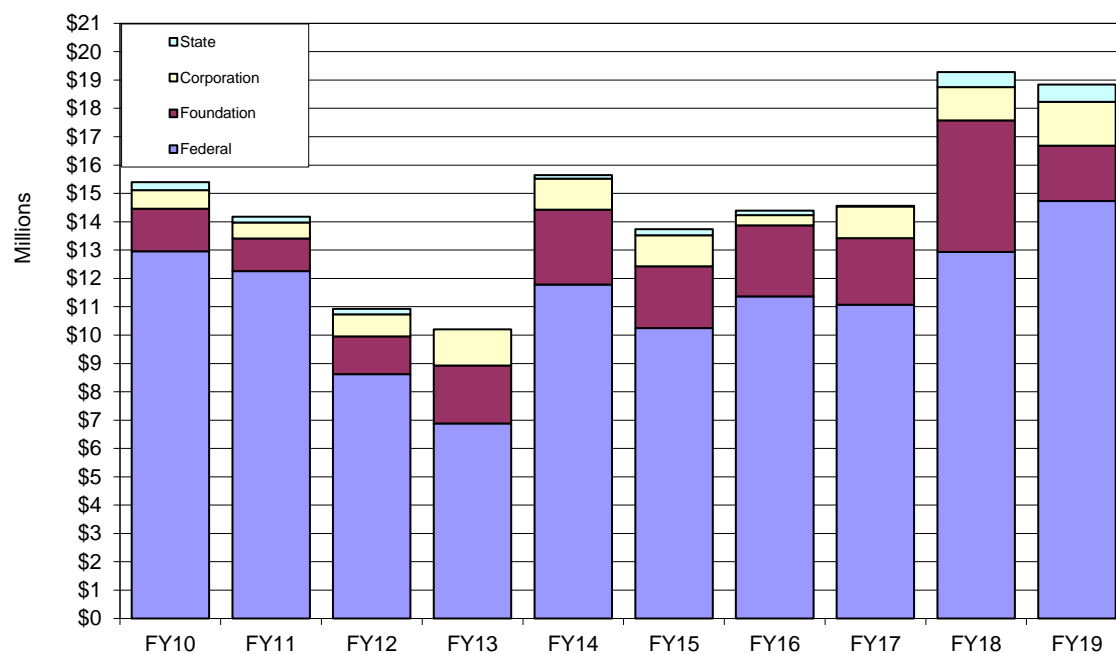
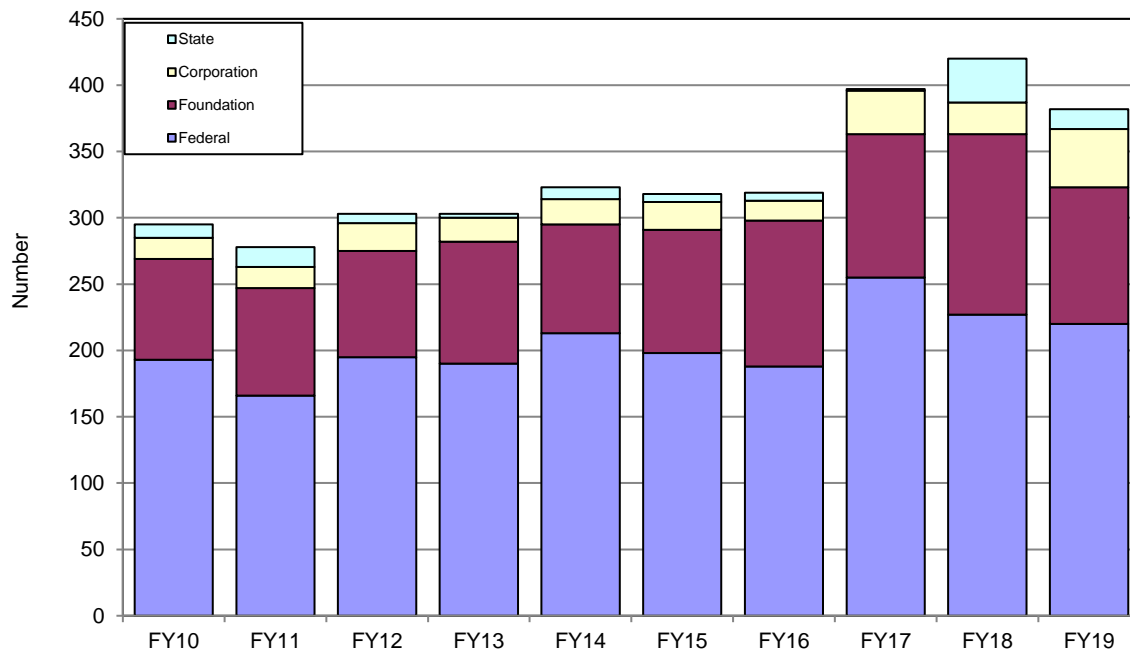


Figure 19 shows research applications over the past 10 years and their corresponding sponsors. Figure 20 compares research application dollars over the same period.

**Figure 19, Research Applications by Sponsor Type, FY 2010-2019**



**Figure 20, Research Application Dollars by Sponsor Type, FY 2010-19**

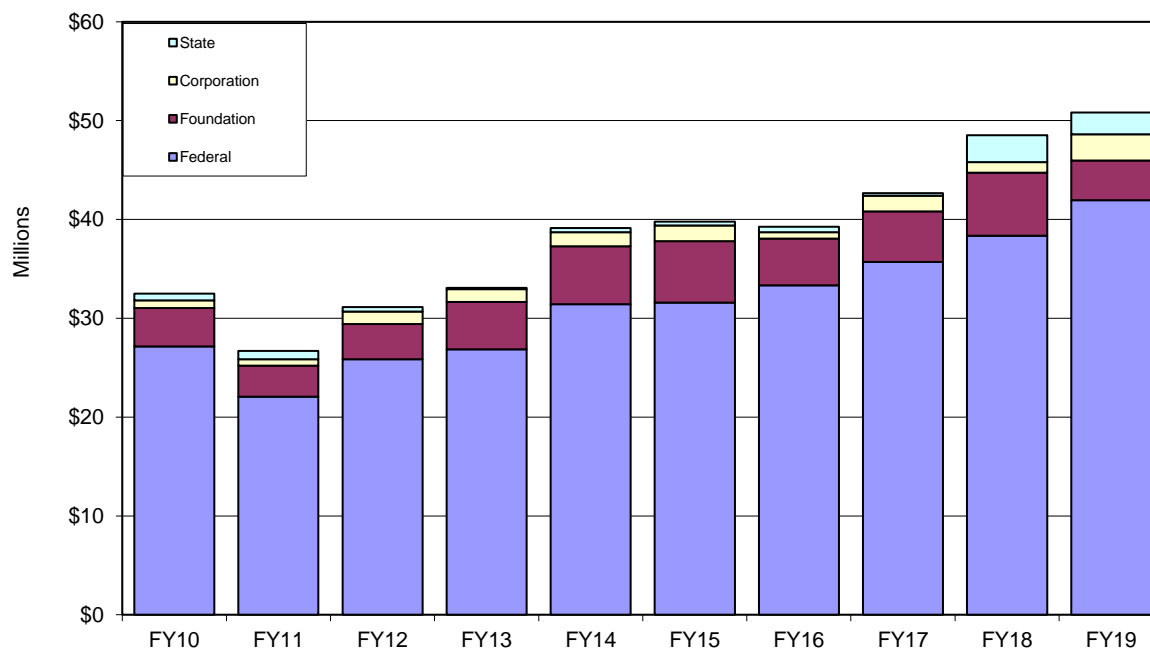


Table 14 states the number of people and actions that contribute to the annual research totals.

**Table 14, Extramural Research: People, Actions, and Dollars, FY 2010 - 2019**

Fiscal Year	Number of Research Awardees	Number of Research Awards	Research Award Dollars	Number of Research Applicants	Number of Research Applications	Research Application Dollars
2010	81	142	\$15,402,641	141	295	\$32,492,350
2011	77	129	\$14,174,005	131	278	\$26,687,970
2012	76	121	\$10,923,041	146	303	\$31,117,752
2013	67	116	\$10,208,059	139	303	\$33,079,185
2014	81	136	\$15,650,756	138	323	\$37,977,690
2015	79	131	\$13,742,412	141	318	\$39,783,614
2016	79	134	\$14,391,233	145	319	\$39,260,426
2017	93	148	\$14,562,230	175	396	\$42,662,678
2018	102	157	\$19,283,742	188	420	\$48,158,489
2019	99	162	\$18,690,214	175	382	\$51,006,648

## 6.1. Research Sponsors

**Federal research sponsorship.** Table 15 compares federal research award and application data for the past ten years. If one were to take out the two ARRA-impacted years in both applications and awards, there would be rather steady growth over the last ten years. While it is promising to see an increase in research applications and research dollars, if Marquette wants to grow significantly in the research arena, the number of research applicants and corresponding number of applications and application dollars will need to grow. There has been a concerted effort to improve the quality of applications, which is paying off. Now the base of researchers submitting applications needs to increase, along with the scale of the projects.

**Table 15, Federally Funded Research: People, Actions, and Dollars, FY 2010 - 2019**

Fiscal Year	Number of Federal Research Awardees	Number of Federal Research Awards	Federal Research Award Dollars	Number of Federal Research Applicants	Number of Federal Research Applications	Federal Research Application Dollars
2010	57	85	\$12,962,926	106	193	\$27,153,477
2011	72	81	\$12,260,992	117	166	\$22,067,530
2012	47	65	\$8,624,831	106	195	\$25,867,700
2013	41	54	\$6,885,518	101	190	\$26,850,397
2014	49	83	\$11,812,892	106	213	\$31,416,838
2015	56	80	\$10,244,599	105	199	\$31,580,969
2016	68	73	\$11,364,176	98	188	\$33,334,978
2017	58	78	\$11,068,238	112	255	\$35,687,126
2018	52	74	\$12,935,847	80	227	\$38,011,978
2019	62	93	\$14,586,986	119	220	\$42,002,653



**Foundation research sponsorship.** This year, foundations accounted for \$1,950,388, or 10%, of research support. This is higher considerably lower than FY 2018, in good part due to a large multi-year award to the College of Nursing in which all years were awarded up front. The FY 2019 award amount is slightly lower, though more comparable, to the award totals in FY 2017 and FY 2016.

Significant sponsors in FY 2019 include the American Genetic Association, American Heart Association, American Society for Clinical Pathology, Association for Assessment and Research in Counseling, Association for Counselor Education and Supervision, Autism Society of Southeastern Wisconsin, Brain & Behavior Research Foundation, Charles Koch Foundation, Children's Research Institute WI, Electric Power Research Institute, GHR Foundation, Greater Milwaukee Foundation, Kern Family Foundation, Inc., Marshfield Clinic Research Institute, Medical College of Wisconsin, Milwaukee Succeeds, Morris Animal Foundation, Near West Side Partnership, Next Door Foundation, Oregon Institute of Technology, Patient-Centered Outcomes Research Institute, Shriners Hospital for Children, Sigma Theta Tau Delta Gamma At-Large Chapter-Milwaukee, Simons Foundation, Society for Developmental Biology, Society for the Study of Amphibians and Reptiles, The Herpetologists' League, William and Flora Hewlett Foundation, Wisconsin Women's Health Foundation

**Corporate research sponsorship.** This year, corporations accounted for \$1,550,206 or 8% of research support. This is similar to the FY 2018 and 2017 funding levels. A significant decrease was recorded in FY 2016 due to a major sponsor ending its long-time research project. Research sponsors in FY 2019 include Badger Meter, Inc., Cimco Marine AB, Facebook, Ford Motor Company, Hologic, Inc., Northwestern Mutual Life, Smart Biophotonics, LLC, Sunstar Americas, Transformational Technologies, Inc., Ubitrix, and Woodway USA.

## 6.2. Research Awards and Applications by Academic Unit

Table 16 states the number of people in each unit who received or requested extramural research awards from all sponsor types, the number of their awards or requests, and the total dollars awarded or requested in FY 2019.

**Table 16, Research by Academic Unit: People, Actions and Dollars, FY 2019**

Research Awardees and Awards					Research Applicants and Applications			
Unit	Tenure(d) Track Faculty	Awardees	Awards	Award Totals	Unit	Applicants	Applications	Application Totals
ARTS	231	40	63	\$7,114,334	ARTS	70	134	\$19,349,304
ARTS	0	3	3	\$339,162	ARTS	2	4	\$1,133,801
BSCI	18	7	13	\$1,802,756	BSCI	13	32	\$7,522,401
CHEM	13	8	9	\$2,943,924	CHEM	11	24	\$5,177,857
ENGL	24	0	0	\$0	ENGL	4	4	\$195,000
LLAC	19	0	0	\$0	LLAC	2	2	\$69,843
MSCS	27	10	19	\$1,313,917	MSCS	11	33	\$3,331,044
PHIL	22	0	0	\$0	PHIL	3	3	\$328,638
PHYS	7	3	3	\$145,000	PHYS	4	5	\$299,814
POSC	17	1	2	\$65,000	POSC	3	4	\$233,559
PSYC	19	8	14	\$504,575	PSYC	13	19	\$644,074
SOCS	18	0	0	\$0	SOCS	1	1	\$349,051
THEO	27	0	0	\$0	THEO	1	1	\$5,222
BUAD	51	1	2	\$160,702	BUAD	2	3	\$615,488
ECON	12	1	2	\$160,702	ECON	2	3	\$615,488
COMM	24	1	1	\$4,000	COMM	3	3	\$206,598
CMST	0	0	0	\$0	CMST	1	1	\$198,182
JOUR	0	1	1	\$4,000	JOUR	1	1	\$4,000
STCM	0	0	0	\$0	STCM	1	1	\$4,416
DENT	21	2	5	\$715,514	DENT	3	9	\$1,028,921
CLSE	0	1	1	\$157,449	CLSE	1	2	\$356,499
DENT	0	1	4	\$558,065	DENT	1	6	\$643,489
DSCH	0	0	0	\$0	DSCH	1	1	\$28,933
EDUC	19	2	3	\$28,505	EDUC	3	4	\$37,273
CECP	8	2	3	\$28,505	CECP	1	1	\$24,392
EDPL	11	0	0	\$0	EDPL	2	3	\$12,881
ENGR	46	33	59	\$6,693,759	ENGR	48	148	\$19,091,007
BIEN	9	9	21	\$3,273,473	BIEN	16	49	\$6,130,275
CEEN	9	7	11	\$783,175	CEEN	8	33	\$3,040,235
EECE	14	11	16	\$1,292,711	EECE	14	41	\$6,992,177
ENGR	0	1	1	\$500,000	ENGR	1	2	\$502,400
MEEN	14	5	10	\$844,400	MEEN	9	23	\$2,425,920
HSCI	47	17	23	\$3,468,462	HSCI	32	62	\$9,721,861
BISC	15	7	9	\$1,969,728	BISC	14	27	\$5,970,790
CLLS	3	2	3	\$102,500	CLLS	3	8	\$318,307
PHAS	14	0	0	\$0	PHAS	1	2	\$33,792
PHTH	10	6	9	\$945,278	PHTH	12	23	\$2,946,514
SPPA	5	2	2	\$450,956	SPPA	2	2	\$452,458
LAW	29	1	1	\$30,001	LAW	1	2	\$45,000
NURS	18	4	5	\$475,479	NURS	11	15	\$579,873
PROV	0	0	0	\$0	PROV	1	1	\$300,687
ORI	0	0	0	\$0	ORI	1	1	\$300,687
<b>TOTAL</b>	<b>486</b>	<b>101</b>	<b>162</b>	<b>\$18,690,756</b>	<b>TOTAL</b>	<b>175</b>	<b>382</b>	<b>\$51,006,648</b>

## 7. Individual Applications and Awards

Individual applications and awards are those opportunities that are submitted by Marquette personnel and are received by the individuals directly, rather than through the university. Because no funds are coming directly to the university, these applications and awards cannot be counted in the standard university totals. However, these opportunities are significant endeavors and should be recognized. Fellowships (e.g., Fulbright) are good examples of the type of award received by an individual. Individual applications and awards are broken out in a separate section of the ORSP monthly reports.

Although all faculty are strongly encouraged to report individual application and award activity to ORSP, they are not required to do so. Thus, it is highly likely that the numbers below are underreported. The number of individual awards is likely to increase as overall university activity increases and faculty become aware of the opportunity to register individual applications and awards.

Table 17 lists the number of people, actions, and dollars that make up Marquette's individual application and award activity.

**Table 17, Individual Activity: People, Actions, and Dollars, FY 2015-2019**

Fiscal Year	Number of Awardees	Number of Awards	Total Award Dollars	Number of Applicants	Number of Applications	Total Application Dollars
2015	8	9	\$126,533	17	21	\$238,440
2016	6	8	\$96,201	16	23	\$334,460
2017	6	6	\$203,041	16	21	\$612,902
2018	7	7	\$91,822	15	15	\$236,564
2019	3	4	\$23,690	11	12	\$155,664

## 8. First-time Marquette Awardees and Applicants

First-time awardees and first-time applicants include those who are receiving their first award or submitting their first application while employed at Marquette. First-timers may be new hires or long-standing employees who are newly active in grants and contracts at Marquette. First-timers are a crucial part of Marquette's extramural activity as the university seeks to increase the number of grant-active faculty and staff.

Table 18 states the number of first-time Marquette awardees and applicants, the number of awards and applications (all project types) for which they are responsible, and the dollars associated with these actions. This section includes all actions. Table 19 states the same data points as the prior table, and focuses on research awards and applications.

This year's first-time awardees and applicants and their projects are listed in appendices G and H.

**Table 18, First-Time Awardees & Applicants, FY 2015-2019**

Fiscal Year	Number of New Awardees	Number of Awards	Total Award Dollars	Number of New Applicants	Number of Applications	Total Application Dollars
2015	19	22	\$1,802,563	23	34	\$1,877,673
2016	25	30	\$2,552,180	35	55	\$3,579,115
2017	24	28	\$2,489,389	43	75	\$9,499,127
2018	34	43	\$3,473,087	59	96	\$4,193,278
2019	26	35	\$1,876,008	44	68	\$4,091,231

**Table 19, First-Time Research Awardees & Applicants, FY 2015-2019**

Fiscal Year	Number of New Research Awardees	Number of Research Awards	Total Research Award Dollars	Number of New Research Applicants	Number of Research Applications	Total Research Application Dollars
2015	16	18	\$1,739,299	18	28	\$1,713,187
2016	18	22	\$2,191,721	26	45	\$3,229,157
2017	21	24	\$2,452,989	39	68	\$9,133,797
2018	27	34	\$3,242,005	46	79	\$3,790,703
2019	18	25	\$1,529,807	33	53	\$3,514,646

## 9. ORSP Outreach

### 9.1. Pre-award Outreach

During FY 2019, the pre-award team:

- Visited 58 faculty members in their offices. These visits are typically timed to correspond with career milestones: the visits from the pre-award team included 24 new faculty, 14 second-year faculty and 20 who needed to submit a proposal to meet Committee on Research.
- Met with nine associate deans, ten chairs, and one dean to better understand and meet the needs of their faculty.
- Continued to offer a National Science Foundation (NSF) CAREER workshop series, in order to increase the number and competitiveness of these proposals.

### 9.2. Presentations, Workshops and Other Activities

ORSP routinely hosts formal presentations, workshops, and brown bag sessions on topics relating to sponsored research in order to provide information and encouragement. Selected examples of these events include a Fulbright Information Session, and workshops on how to find funding for potential projects. A complete list of FY 2019 events can be found in Table 20.

To increase the competitiveness of applications, ORSP continued the National Science Foundation (NSF) CAREER cohort. Seventeen (17) faculty participated in some component of the CAREER cohort programming. In addition to preparing faculty for this particular competition, the cohort promoted best practices for writing and assembling any grant application, as well as developed a support network of colleagues. Since the CAREER cohort's inception in 2012, five faculty cohort participants have received CAREER awards.

ORSP continues to collaborate with other campus units. As an example, Mission and Ministry continued to partner with ORSP to co-sponsor a series of events entitled "One Thing Led to Another," at which faculty members share their research autobiographies. Further, ORSP has enjoyed collaborating with the Ott Memorial Writing Center to help faculty learn how to develop research posters. These sessions have been well received and serve a valuable purpose.

ORSP, in partnership with the Center for Community Engagement, Service Learning, and other Marquette units, played a key role in planning and implementing Marquette's third annual Community Engagement Symposium. This event had 446 registrants, 281 of whom were community members. Attendees heard a national keynote speaker, then participated in breakout sessions and a poster session. The hope is to encourage partnerships that will then seek funding for innovative projects that advance the needs of both the university and the community.

ORSP, the Office of the Vice President for Research and Innovation, and the Graduate Student Organization jointly hosted the 14<sup>th</sup> annual Forward Thinking Poster Session and Colloquy, which was held in conjunction with the Office of International Education's International Poster Session. This event celebrates, showcases and encourages faculty/student research in all disciplines. Fifty-two (52) faculty/student teams presented posters and seven teams presented colloquies; a total of 32 faculty and 68 students participated. Eighteen (18) departments from seven Colleges/Schools were represented. Offering both posters and colloquies offers presenters the opportunity to choose the most appropriate format for highlighting their work.

**Table 20, ORSP Presentations and Workshops, FY 2019**

EVENT	MONTH	OUTCOME
An Introduction to NIH Submissions	September	Faculty learned about the requirements for preparing proposals for submission to the National Institutes of Health.
Campus Research Forum on Instrumentation and Equipment	October	This forum series was designed to determine equipment needs across campus, identify multi-disciplinary user groups, and proactively develop a plan that will meet the campus community's research needs.
Finding Funding for Health, Science and Engineering Projects	October February	Prospective applicants gained acquaintance with tools and resources to identify potential sponsors.
Working with Kuali, Marquette's Grants Management System	September October	These sessions were designed to help faculty and staff navigate Kuali, providing a space for them to ask targeted questions regarding their issues.
Finding Funding for Humanities and Social Sciences Projects	September February	Prospective applicants gained acquaintance with tools and resources to identify potential sponsors.
Creating Research Posters	October	Faculty learned how to condense a project into poster format, best practices for poster creation and examples of what makes a successful poster. In collaboration with the Norman H. Ott Memorial Writing Center.
Forward Thinking Poster Session and Colloquy	November	The Marquette community learned about and gave feedback on the future research projects of participating faculty/student teams. Co-hosted by the Office of International Education and Office of Research and Innovation.
One Thing Led to Another	October November March April	In this continuing series, faculty share their research autobiographies and talk about how their life and career path led them to where they are today. Co-sponsored by Manresa for Faculty.
Impactful Research: The Importance of 'Why'	October April	A workshop designed to help researchers talk about why their work is impactful/significant in grant proposals.
Approaching a Mission Driven Agency Webinar with Hanover Research	January	A webinar about applying to Mission Driven Agencies such as the Department of Defense, Department of Energy, NASA, etc.
Finding Funding for Graduate Students	February	Prospective applicants gained acquaintance with tools and resources to identify potential sponsors. Co-Sponsored with the Graduate School.

EVENT	MONTH	OUTCOME
Introduction to Grant Writing for Graduate Students	February	Graduate students received an overview of the grant-writing process including proposal development and budget estimation. Co-sponsored with Preparing Future Faculty and Professionals
Key Changes for NIH Grantseekers Webinar with Hanover Research	February	Updates to NIH grants per their new grant proposal guide, published in January 2019.
Developing Specific Aims for the NIH Webinar with Hanover Research	March	Designed to familiarize researchers with tools for crafting strong Specific Aims proposal sections for NIH applications.
NSF CAREER Proposal Cohort	March (2) April (2)	This is a series of seminars to assist in those interested in developing and submitting an NSF CAREER Proposal. Early CAREER Program applicants learned how to prepare competitive proposals for submission to the NSF.
International Funding Opportunities Workshop	April	Faculty learned about the Fulbright program and other international research opportunities from past awardees and campus representatives of the respective programs.

## 10. Student Support

Grants provide meaningful student support in various ways. Students receive the benefit of participating in cutting-edge research projects firsthand and learning proper procedures and best practices. In addition, faculty who write stipends, tuition, and salary support in their grants are able to financially support students, which benefits both the students and the faculty, who then have additional help with their research project. In FY 2019, 185 graduate students received support from grants.

Total FY 2019 grant expenditures for students include over \$4M altogether, including \$2.1M for graduate student stipends, \$1.2M for graduate tuition, and \$660,681 for undergraduate salaries.

Over the past five years, nearly \$17M in support for students has been generated directly through sponsored programs, as shown in Table 21. These figures include only sponsor funds and do not include numerous university commitments made as cost-share or in-kind contributions.

**Table 21, Student Support, FY 2015-2019**

Fiscal Year	Stipends	Graduate Tuition	Undergraduate Salaries	Total
2015	\$1,771,881	\$711,568	\$516,440	\$2,999,887
2016	\$1,725,224	\$474,395	\$643,799	\$2,843,418
2017	\$1,958,802	\$820,392	\$694,647	\$3,473,841
2018	\$2,028,928	\$808,560	\$744,851	\$3,602,399
2019	\$2,129,194	\$1,258,226	\$660,681	\$4,048,101



## 11. Technology Transfer

The Office of Research and Sponsored Programs has worked with the Office of Research and Innovation and the Intellectual Property Review Board to administer the university's Technology Transfer program. With the transitioning of technology transfer functions into the newly created Office of Corporate Engagement and Partnerships (OCEP), Fiscal Year 2019 is the final year for which ORSP will provide comprehensive technology transfer activity data. ORSP will still receive and review invention disclosures to the extent of ensuring that any inventions developed with grant funds comply with the corresponding grant agreements. ORSP will continue to report inventions that are developed with federal funds in iEdison, for example.

### 11.1. Invention Disclosures, Patent Applications, and Patents

In FY 2019, the university received 14 invention disclosures. The disclosure is the first step in determining an appropriate strategy to protect an invention and make it available for use.

**Table 22, Invention Disclosures, FY 2015-2019**

	2015	2016	2017	2018	2019
Number of Disclosures	12	16	22	13	14

After the disclosure is filed, the university evaluates it and decides whether to pursue intellectual property protection – and if so – what type of protection. Table 23 reflects the types of activity undertaken. A provisional application must be converted to a different type of application within a year or it becomes abandoned. Patent applications typically are pending for at least two years, generally longer.

**Table 23, Patent Activity, FY 2015-2019**

Fiscal Year	Provisional Applications	Utility Applications	International Applications	National Stage Applications	Continuation Applications	Divisional Applications	Patents Issued
2015	4	1	3	0	0	3	7
2016	9	1	3	20	0	0	5
2017	8	1	7	3	0	0	3
2018	2	6	9	9	1	0	4
2019	5	9	3	22	0	0	3

At the close of FY 2019, nine previously filed utility patent applications (filed in FY 2015, 2016 and 2018), seven PCT patent applications (filed in FY 2018), and 24 national stage applications (filed in FY 2016, 2017 and FY 2018) were pending. As noted above, three patents were issued in FY 2019; two US, and one Japanese. Marquette currently maintains a total of 18 US patents.

### 11.2. Licensing Activity and Revenue

One new license agreement was signed in FY 19 with a major corporation.

In fall 2018, GasDay spun out of Marquette University and formed a new entity: Marquette Energy Analytics. GasDay had been Marquette's largest source of licensing revenue. Thus, licensing revenue dropped dramatically in FY 2019.

Licensing revenue in FY 2019 totaled \$470,583 (see Table 24). Licensing revenue reported in Table 24 represents accounts receivable following the execution of license agreements. Reflected in the total is legal expense reimbursement of \$37,833.

Table 25 shows Marquette's licensing revenue without legal reimbursement. Marquette's GasDay project accounts for most of the university's licensing revenue listed in this table.

**Table 24, Total Licensing Revenue, FY 2015-2019**

<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
\$925,802	\$889,435	\$991,286	\$1,042,511	\$470,583

**Table 25, Licensing Revenue without Legal Reimbursement, FY 2015-2019**

<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
\$803,420	\$833,678	\$956,179	\$990,478	\$432,750



## Appendix A: Summary of Awards for FY19

**132 different individuals received awards**

**Number of people receiving each type of award**

*(A person may receive more than one type of award)*

Research	100
Instruction	13
Equipment	1
Other	27

### Number of Awards Received, by Type of Sponsor and Type of Activity

	Federal	State	Foundation	Corporation	Total
Research	93	6	43	20	162
Instruction	14	4	1	1	20
Equipment	0	0	0	1	1
Other	9	7	20	2	38
Total	116	17	64	24	221

### Award Dollars Received, by Type of Sponsor and Type of Activity

	Federal	State	Foundation	Corporation	Total
Research	\$14,586,986	\$603,176	\$1,950,388	\$1,550,206	\$18,690,756
Instruction	\$4,079,738	\$2,463,011	\$500,000	\$39,200	\$7,081,949
Equipment	\$0	\$0	\$0	\$9,985	\$9,985
Other	\$3,205,035	\$714,102	\$3,978,815	\$45,000	\$7,942,952
Total	\$21,871,759	\$3,780,289	\$6,429,203	\$1,644,391	\$33,725,642

### Awarded Facilities & Administrative Costs, by Type of Sponsor and Type of Activity

	Federal	State	Foundation	Corporation	Total
Research	\$3,413,716	\$162,707	\$125,470	\$256,781	\$3,958,674
Instruction	\$314,489	\$6,607	\$0	\$0	\$321,096
Equipment	\$0	\$0	\$0	\$0	\$0
Other	\$89,882	\$24,231	\$145,487	\$0	\$259,600
Total	\$3,818,087	\$193,545	\$270,957	\$256,781	\$4,539,370

## Appendix B: Summary of Applications for FY19

### 216 different individuals submitted applications

#### Number of people submitting each type of application

*(A person may submit more than one type of application)*

Research	175
Instruction	17
Equipment	5
Other	34

#### Number of Applications Submitted, by Type of Sponsor and Type of Activity

	Federal	State	Foundation	Corporation	Total
Research	220	15	103	44	382
Instruction	18	4	1	4	27
Equipment	4	0	0	1	5
Other	14	6	24	3	47
Total	256	25	128	52	461

#### Application Dollars, by Type of Sponsor and Type of Activity

	Federal	State	Foundation	Corporation	Total
Research	\$42,002,653	\$2,233,096	\$4,008,399	\$2,762,500	\$51,006,648
Instruction	\$4,541,818	\$2,467,981	\$500,000	\$75,200	\$7,584,999
Equipment	\$658,858	\$0	\$0	\$9,985	\$668,843
Other	\$3,134,570	\$252,992	\$3,123,407	\$55,000	\$6,565,969
Total	\$50,292,899	\$4,954,069	\$7,631,806	\$2,777,685	\$65,826,459

#### Requested Facilities & Administrative Costs, by Type of Sponsor and Type of Activity

	Federal	State	Foundation	Corporation	Total
Research	\$10,824,444	\$487,468	\$213,233	\$416,301	\$11,941,446
Instruction	\$342,597	\$6,607	\$0	\$0	\$349,204
Equipment	\$0	\$0	\$0	\$0	\$0
Other	\$205,900	\$8,077	\$42,171	\$0	\$256,148
Total	\$11,372,941	\$502,152	\$255,404	\$416,301	\$12,546,798

**Appendix C: Three-year Award History by Unit** \*Totals do not include awards made directly to the individual

	FY17			FY18			FY19		
	Awardees	Awards	Dollars	Awardees	Awards	Dollars	Awardees	Awards	Dollars
<b>ARTS</b>	<b>30</b>	<b>50</b>	<b>\$5,416,288</b>	<b>39</b>	<b>60</b>	<b>\$8,463,880</b>	<b>39</b>	<b>66</b>	<b>\$7,521,614</b>
ARTS	2	4	\$446,640	2	4	\$614,560	3	5	\$739,162
BSCI	8	12	\$2,310,658	11	18	\$4,518,559	7	13	\$1,802,756
CHEM	5	7	\$634,711	9	14	\$2,467,289	8	9	\$2,943,924
ENGL	0	0	\$0	0	0	\$0	0	0	\$0
LLAC	1	1	\$15,000	1	1	\$4,000	0	0	\$0
HIST	0	0	\$0	0	0	\$0	0	0	\$0
MSCS	7	17	\$1,797,824	8	12	\$574,129	10	20	\$1,321,197
PHIL	0	0	\$0	0	0	\$0	0	0	\$0
PHYS	2	2	\$5,663	1	1	\$20,000	3	3	\$145,000
POSC	1	1	\$46,549	1	1	\$7,000	1	2	\$65,000
PSYC	3	5	\$154,243	4	7	\$206,343	8	14	\$504,575
SOCS	1	1	\$5,000	0	0	\$0	0	0	\$0
THEO	0	0	\$0	2	2	\$52,000	0	0	\$0
<b>BUAD</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>1</b>	<b>2</b>	<b>\$160,702</b>
ECON	0	0	\$0	0	0	\$0	1	2	\$160,702
<b>COMM</b>	<b>2</b>	<b>2</b>	<b>\$18,000</b>	<b>5</b>	<b>6</b>	<b>\$225,093</b>	<b>4</b>	<b>6</b>	<b>\$247,300</b>
CMST	0	0	\$0	2	2	\$67,193	0	0	\$0
COMM	0	0	\$0	0	0	\$0	1	1	\$3,300
DMPA	1	1	\$3,000	2	2	\$7,900	0	0	\$0
JOUR	1	1	\$15,000	1	2	\$150,000	3	5	\$244,000
<b>DENT</b>	<b>7</b>	<b>13</b>	<b>\$3,946,655</b>	<b>6</b>	<b>9</b>	<b>\$3,477,37</b>	<b>5</b>	<b>10</b>	<b>\$3,785,221</b>
CLSE	1	4	\$239,815	1	3	\$309,980	1	2	\$164,585
DENT	2	5	\$3,624,124	2	3	\$3,014,113	2	6	\$3,531,830
DISS	0	0	\$0	1	1	\$96,205	1	1	\$35,000
DSCH	3	3	\$74,006	1	1	\$53,806	1	1	\$53,806
GENE	1	1	\$8,710	1	1	\$3,275	0	0	\$0
<b>EDUC</b>	<b>4</b>	<b>9</b>	<b>\$1,282,72333</b>	<b>3</b>	<b>5</b>	<b>\$610,362</b>	<b>4</b>	<b>8</b>	<b>\$1,533,895</b>
CECP	1	2	\$87,603	1	1	\$20,862	3	5	\$176,895
EDPL	2	2	\$4,975	1	2	\$4,500	0	0	\$0
ITOL	1	5	\$1,190,145	1	2	\$585,000	1	3	\$1,357,000
<b>ENGR</b>	<b>31</b>	<b>61</b>	<b>\$7,536,285</b>	<b>30</b>	<b>49</b>	<b>\$5,525,129</b>	<b>35</b>	<b>63</b>	<b>\$7,439,359</b>
BIEN	9	25	\$3,905,990	12	19	\$1,885,338	9	22	\$3,295,073
CEEN	6	10	\$471,919	6	10	\$676,602	7	11	\$783,175
EECE	9	14	\$754,856	5	9	\$937,188	12	17	\$1,491,711
ENGR	1	3	\$1,745,000	2	4	\$1,004,800	1	2	\$1,000,000
MEEN	6	9	\$658,520	5	7	\$1,021,201	6	11	\$869,400
<b>GOCA</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>1</b>	<b>1</b>	<b>\$2,500</b>
PUAF	0	0	\$0	0	0	\$0	1	1	\$2,500
<b>GRAD</b>	<b>1</b>	<b>2</b>	<b>\$201,812</b>	<b>1</b>	<b>2</b>	<b>\$252,844</b>	<b>2</b>	<b>4</b>	<b>\$394,598</b>
GRAD	0	0	\$0	0	0	\$0	1	1	\$20,483
TRIN	1	2	\$201,812	1	2	\$252,844	1	3	\$374,115
<b>HSCI</b>	<b>21</b>	<b>32</b>	<b>\$4,130,201</b>	<b>23</b>	<b>45</b>	<b>\$5,865,945</b>	<b>19</b>	<b>26</b>	<b>\$3,542,647</b>
BISC	9	17	\$3,110,476	11	18	\$3,296,131	7	9	\$1,969,728
CLLS	1	3	\$16,850	2	4	\$86,000	2	4	\$112,485
PHAS	1	1	\$50,000	2	2	\$44,200	1	1	\$39,200
PHTH	8	8	\$892,021	6	19	\$2,408,968	6	9	\$945,278
SPPA	2	3	\$60,854	2	2	\$30,646	3	3	\$475,956
<b>LAW</b>	<b>3</b>	<b>7</b>	<b>\$194,003</b>	<b>3</b>	<b>4</b>	<b>\$333,113</b>	<b>4</b>	<b>5</b>	<b>\$136,271</b>
<b>NURS</b>	<b>11</b>	<b>13</b>	<b>\$3,076,476</b>	<b>14</b>	<b>17</b>	<b>\$3,158,361</b>	<b>7</b>	<b>8</b>	<b>\$2,468,248</b>
<b>OMM</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>1</b>	<b>2</b>	<b>\$1,250,000</b>
<b>PROV</b>	<b>3</b>	<b>4</b>	<b>\$577,496</b>	<b>4</b>	<b>6</b>	<b>\$643,777</b>	<b>3</b>	<b>3</b>	<b>\$526,004</b>
OIE	1	1	\$271,187	1	3	\$359,350	1	1	\$299,077
ORI	2	3	\$306,309	3	3	\$284,427	2	2	\$226,927
<b>STAF</b>	<b>3</b>	<b>6</b>	<b>\$792,858</b>	<b>3</b>	<b>3</b>	<b>\$389,239</b>	<b>3</b>	<b>4</b>	<b>\$1,299,138</b>
OSDE	1	1	\$134,033	0	0	\$0	1	1	\$70,421
SHS	1	1	\$1,500	2	2	\$20,250	1	1	\$10,000
STAF	1	4	\$657,325	1	1	\$368,989	1	2	\$1,218,717
<b>UGRA</b>	<b>8</b>	<b>11</b>	<b>\$2,320,575</b>	<b>7</b>	<b>12</b>	<b>\$2,376,199</b>	<b>4</b>	<b>13</b>	<b>\$3,418,145</b>
CTL	1	1	\$400	0	0	\$0	0	0	\$0
EOP	4	6	\$2,134,393	4	7	\$2,178,217	3	11	\$3,405,565
HMA	2	3	\$163,202	3	5	\$197,982	1	2	\$12,580
OSes	1	1	\$163,202	0	0	\$0	0	0	\$0
<b>TOTAL</b>	<b>124</b>	<b>210</b>	<b>\$29,493,372</b>	<b>138</b>	<b>218</b>	<b>\$31,321,322</b>	<b>132</b>	<b>221</b>	<b>\$33,725,642</b>

**Appendix D: Three-year Application History by Unit** \*Totals do not include awards made directly to the individual

	FY17			FY18			FY19		
	Applicants	Applications	Dollars	Applicants	Applications	Dollars	Applicants	Applications	Dollars
<b>ARTS</b>	<b>80</b>	<b>170</b>	<b>\$17,052,591</b>	<b>88</b>	<b>178</b>	<b>\$22,784,318</b>	<b>72</b>	<b>140</b>	<b>\$19,702,247</b>
ARTS	2	3	\$206,160	3	8	\$802,378	2	5	\$1,183,801
BSCI	13	37	\$5,281,625	16	41	\$7,923,729	13	33	\$7,620,849
CHEM	16	30	\$4,084,527	13	30	\$5,541,561	11	25	\$5,290,879
ENGL	3	5	\$106,157	2	2	\$105,338	4	4	\$195,000
LLAC	2	4	\$75,505	5	7	\$262,665	0	0	\$0
HIST	7	9	\$327,284	3	8	\$269,665	2	2	\$59,000
MSCS	14	47	\$5,483,959	15	34	\$4,906,629	12	35	\$3,401,940
PHIL	2	2	\$167,997	3	3	\$238,175	4	4	\$349,215
PHYS	5	7	\$400,654	4	9	\$635,649	4	5	\$299,814
POSC	4	4	\$163,789	3	4	\$269,484	3	4	\$233,559
PSYC	7	14	\$468,375	17	27	\$1,534,369	13	19	\$644,074
SOCS	3	5	\$182,235	2	2	\$202,676	1	1	\$349,051
THEO	2	3	\$104,324	2	3	\$92,000	1	1	\$5,222
<b>BUAD</b>	<b>1</b>	<b>1</b>	<b>\$18,650</b>	<b>2</b>	<b>3</b>	<b>\$33,070</b>	<b>4</b>	<b>5</b>	<b>\$635,488</b>
ACCO	0	0	\$0	1	1	\$18,200	1	1	\$10,000
ECON	1	1	\$18,650	0	0	\$0	2	3	\$615,488
MARK	0	0	\$0	1	2	\$14,870	1	1	\$10,000
<b>COMM</b>	<b>3</b>	<b>4</b>	<b>\$193,400</b>	<b>6</b>	<b>6</b>	<b>\$103,593</b>	<b>8</b>	<b>10</b>	<b>\$470,408</b>
CMST	0	0	\$0	2	2	\$67,193	3	3	\$288,192
COMM	1	1	\$50,400	0	0	\$0	1	1	\$8,800
DMPA	1	1	\$3,000	2	2	\$7,900	0	0	\$0
JOUR	1	2	\$140,000	1	1	\$25,000	3	5	\$169,000
STCM	0	0	\$0	1	1	\$3,500	1	1	\$4,416
<b>DENT</b>	<b>8</b>	<b>25</b>	<b>\$6,943,009</b>	<b>6</b>	<b>8</b>	<b>\$3,095,430</b>	<b>5</b>	<b>14</b>	<b>\$4,060,129</b>
CLSE	1	5	\$516,302	1	1	\$7,136	1	3	\$366,499
DENT	2	14	\$6,193,980	2	4	\$3,021,213	2	9	\$3,629,697
DISS	1	1	\$96,205	0	0	\$0	1	1	\$35,000
DSCH	3	4	\$127,812	2	2	\$63,806	1	1	\$28,933
GENE	1	1	\$8,710	1	1	\$3,275	0	0	\$0
<b>EDUC</b>	<b>7</b>	<b>12</b>	<b>\$1,644,121</b>	<b>6</b>	<b>11</b>	<b>\$775,378</b>	<b>6</b>	<b>10</b>	<b>\$1,211,310</b>
CECP	2	2	\$154,528	2	4	\$119,326	2	3	\$172,782
EDPL	2	3	\$10,975	2	4	\$10,501	3	4	\$86,528
EDUC	2	3	\$298,473	1	1	\$60,551	0	0	\$0
ITOL	1	4	\$1,180,145	1	2	\$585,000	1	3	\$952,000
<b>ENGR</b>	<b>43</b>	<b>128</b>	<b>\$15,831,874</b>	<b>50</b>	<b>155</b>	<b>\$14,946,947</b>	<b>50</b>	<b>155</b>	<b>\$20,480,730</b>
BIEN	11	59	\$7,046,137	20	58	\$6,191,987	17	50	\$6,149,610
CEEN	10	25	\$2,528,103	10	42	\$3,295,105	8	34	\$3,239,235
EECE	12	26	\$3,751,251	9	28	\$2,366,491	14	43	\$7,483,665
ENGR	1	3	\$1,297,223	2	4	\$1,004,800	1	3	\$1,002,400
MEEN	9	15	\$1,209,160	9	23	\$2,088,564	10	25	\$2,605,820
<b>GOCA</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>1</b>	<b>1</b>	<b>\$2,500</b>
PUAF	0	0	\$0	0	0	\$0	1	1	\$2,500
<b>GRAD</b>	<b>1</b>	<b>2</b>	<b>\$201,812</b>	<b>4</b>	<b>5</b>	<b>\$291,544</b>	<b>4</b>	<b>6</b>	<b>\$570,754</b>
GRAD	0	0	\$0	3	3	\$38,700	2	2	\$51,119
TRIN	1	2	\$201,812	1	2	\$252,844	2	4	\$519,635
<b>HSCI</b>	<b>30</b>	<b>73</b>	<b>\$7,982,921</b>	<b>29</b>	<b>74</b>	<b>\$11,829,875</b>	<b>34</b>	<b>65</b>	<b>\$9,796,046</b>
BISC	12	28	\$5,668,015	13	26	\$6,615,305	14	27	\$5,970,790
CLLS	2	10	\$562,717	2	11	\$524,409	3	9	\$328,292
PHAS	3	3	\$140,941	0	0	\$0	2	3	\$72,992
PHTH	10	25	\$1,362,553	10	32	\$4,107,912	12	23	\$2,946,514
SPPA	3	6	\$248,695	4	5	\$582,249	3	3	\$477,458
<b>LAW</b>	<b>3</b>	<b>7</b>	<b>\$566,940</b>	<b>3</b>	<b>5</b>	<b>\$150,576</b>	<b>4</b>	<b>6</b>	<b>\$141,270</b>
<b>NURS</b>	<b>17</b>	<b>22</b>	<b>\$4,037,534</b>	<b>18</b>	<b>28</b>	<b>\$5,002,928</b>	<b>14</b>	<b>18</b>	<b>\$2,444,841</b>
<b>OMM</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>1</b>	<b>2</b>	<b>\$197,594</b>	<b>0</b>	<b>0</b>	<b>\$0</b>
<b>PRES</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>1</b>	<b>1</b>	<b>\$4,452</b>
ATHL	0	0	\$0	0	0	\$0	1	1	\$4,452
<b>PROV</b>	<b>3</b>	<b>4</b>	<b>\$598,881</b>	<b>5</b>	<b>8</b>	<b>\$957,022</b>	<b>3</b>	<b>5</b>	<b>\$1,045,187</b>
OIE	1	1	\$298,822	1	3	\$399,106	1	1	\$299,983
ORI	1	3	\$300,059	3	4	\$545,916	3	4	\$745,204
PROV	0	0	\$0	1	1	\$12,000	0	0	\$0
<b>STAF</b>	<b>2</b>	<b>7</b>	<b>\$705,075</b>	<b>3</b>	<b>3</b>	<b>\$441,910</b>	<b>4</b>	<b>5</b>	<b>\$1,486,147</b>
OSDE	0	0	\$0	1	1	\$70,421	1	1	\$96,457
SHS	1	2	\$21,500	1	1	\$2,500	1	1	\$10,000
STAF	1	5	\$683,575	1	1	\$368,989	1	2	\$1,218,717
STDE	0	0	\$0	0	0	\$0	1	1	\$160,973
<b>UGRA</b>	<b>8</b>	<b>16</b>	<b>\$3,420,643</b>	<b>7</b>	<b>11</b>	<b>\$1,055,074</b>	<b>5</b>	<b>18</b>	<b>\$3,746,685</b>
CTL	1	1	\$400	1	1	\$5,000	4	15	\$3,708,685
EOP	4	8	\$3,001,881	4	6	\$999,076	0	0	\$0
HMA	2	6	\$255,160	2	4	\$50,998	1	3	\$38,000
OSES	1	1	\$163,202	0	0	\$0	0	0	\$0
<b>TOTAL</b>	<b>206</b>	<b>470</b>	<b>\$59,197,451</b>	<b>228</b>	<b>497</b>	<b>\$61,665,259</b>	<b>216</b>	<b>461</b>	<b>\$65,824,194</b>

## **Appendix E: Marquette University Extramural Application and Award and Intellectual Property Activity History, by College and Department**

### **Marquette University**

	Awardees	Awards	Total	Applicants	Applications	Total
2019	131	221	\$33,725,642	216	461	\$65,826,459
2018	138	218	\$31,321,321	229	497	\$61,665,259
2017	124	210	\$29,493,372	206	471	\$59,294,059
2016	114	195	\$27,476,129	182	398	\$54,632,175
2015	107	184	\$25,653,365	173	395	\$54,214,489
2014	106	182	\$25,378,818	171	390	\$51,607,788
2013	104	179	\$29,388,986	180	375	\$53,942,165
2012	106	188	\$23,932,872	177	384	\$45,782,596
2011	111	188	\$26,491,630	159	352	\$41,194,147
2010	116	200	\$28,101,796	186	394	\$69,776,286

## College of Arts & Sciences Application and Award History, by College and Department

### College of Arts & Sciences

	Awardees	Awards	Total	Applicants	Applications	Total
2019	39	66	\$7,521,614	72	140	\$19,702,247
2018	40	60	\$8,463,880	87	178	\$22,784,317
2017	30	50	\$5,416,288	80	170	\$17,052,591
2016	31	51	\$7,501,013	66	140	\$14,408,576
2015	29	51	\$4,130,842	63	142	\$13,857,062
2014	33	52	\$5,339,622	61	132	\$12,219,358
2013	27	42	\$4,042,965	65	124	\$12,496,073
2012	28	37	\$3,485,350	67	125	\$12,897,035
2011	29	43	\$3,961,545	53	105	\$9,507,951
2010	33	50	\$7,312,605	57	116	\$16,951,112

### Department of Biological Sciences

	Awardees	Awards	Total	Applicants	Applications	Total
2019	7	13	\$1,802,756	13	33	\$7,620,849
2018	11	18	\$4,518,559	16	41	\$7,923,729
2017	8	12	\$2,310,658	13	37	\$5,281,625
2016	6	8	\$2,864,330	13	30	\$4,988,994
2015	4	6	\$588,087	12	27	\$4,616,912
2014	9	11	\$1,962,812	12	32	\$3,840,112
2013	6	7	\$2,059,903	12	25	\$3,410,276
2012	3	3	\$259,355	14	22	\$3,124,165
2011	4	4	\$478,963	12	18	\$2,071,749
2010	12	17	\$2,966,510	13	23	\$4,158,375

FY 2019 Faculty: Abbott, Antony, Arble, Blumenthal, Eddinger, Gamble, Hristova, LaManna, Maki, Manogaran, Mynlieff, Origanti, Petrella, Schlappi, Schnitzer, St. Maurice, Stuart, Yang = 18; 72% application rate

FY 2010 – American Recovery and Reinvestment Act (ARRA) funding significantly impacted totals for this year across the university.

### Individual Applications and Awards: Department of Biological Sciences

N/A

### Department of Chemistry

	Awardees	Awards	Total	Applicants	Applications	Total
2019	8	9	\$2,943,924	11	25	\$5,290,879
2018	9	14	\$2,467,289	13	30	\$5,541,561
2017	5	7	\$634,711	16	30	\$4,084,527
2016	6	8	\$1,580,164	14	32	\$4,780,732
2015	5	9	\$802,596	10	28	\$3,754,228
2014	5	8	\$1,190,200	14	26	\$4,311,664
2013	5	9	\$917,495	12	27	\$2,983,768
2012	7	10	\$2,018,283	13	33	\$4,343,966
2011	9	16	\$2,209,342	12	35	\$3,694,251
2010	10	17	\$2,732,960	15	39	\$8,073,375

FY 2019 Faculty: Babikov, Clark, Dockendorff, Donaldson, Fiedler, Gardinier, Huang, Kincaid, Reid, Reiter, Timerghazin, Tran, Yi = 13; 85% application rate

NOTE: FY 2010 included a \$1,346,559 construction application.

### Individual Applications and Awards: Department of Chemistry

N/A



### Department of English

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	4	4	\$195,000
2018	0	0	\$0	2	2	\$105,338
2017	0	0	\$0	3	5	\$106,157
2016	0	0	\$0	4	4	\$170,582
2015	0	0	\$0	3	7	\$468,788
2014	0	0	\$0	1	2	\$90,000
2013	1	1	\$ 24,948	4	5	\$254,054
2012	0	0	\$0	2	2	\$75,600
2011	0	0	\$0	1	1	\$65,797
2010	1	1	\$189,413	3	4	\$339,373

FY 2019 Faculty: Angeli, Bieganowski, Blair, Boly, Burrows, Campbell, Canavan, Curran, Edoro, Farr, Fishman, Flack, Ganz, Hartman Keiser, Hathaway, Hribal, Melamed, Nowacek, Pladek, Rivero, Sorby, Strakhov, Wadsworth, Zurcher =24; 17% application rate

### Individual Applications and Awards: Department of English

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	2	2	\$12,000
2018	0	0	\$0	2	2	\$105,338
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	2	3	\$46,612
2015	1	1	\$6,000	2	2	\$9,432
2014	2	2	\$5,500	3	3	\$7,500
2013	1	1	\$25,450	4	5	\$88,164
2012	0	0	\$0	1	1	\$6,000

### Department of History

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	2	2	\$59,000
2018	0	0	\$0	3	8	\$269,665
2017	0	0	\$0	7	9	\$327,284
2016	0	0	\$0	2	3	\$109,691
2015	1	1	\$4,000	2	4	\$114,050
2014	0	0	\$0	2	2	\$110,338
2013	0	0	\$0	0	0	\$0
2012	2	2	\$93,440	3	4	\$224,484
2011	0	0	\$0	0	0	\$0
2010	0	0	\$0	0	0	\$0

FY 2019 Faculty: Avella, Ball, Donoghue, Efford, Finn, Foster, Hay, Knox, Korieh, Marten, Matthew, McMahon, Meissner, Mullins, Naylor, Rindfleisch, Smith, Staudenmaier, Wert, Zeps = 20; 10% application rate (not including individual applications)

### Individual Applications and Awards: Department of History

	Awardees	Awards	Total	Applicants	Applications	Total
2019	2	3	\$9,210	3	4	\$26,236
2018	2	2	\$8,000	3	3	\$29,667
2017	3	3	\$104,000	7	10	\$241,450
2016	1	2	\$5,000	4	10	\$120,276
2015	0	0	\$0	3	6	\$52,838
2014	2	2	\$7,200	5	5	\$98,560
2013	2	3	\$8,200	3	6	\$38,200
2012	1	1	\$60,000	1	1	\$60,000

### Department of Languages, Literatures and Cultures

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	2	2	\$69,843
2018	1	1	\$4,000	5	7	\$262,665
2017	1	1	\$15,000	2	4	\$75,505
2016	0	0	\$0	2	2	\$100,800
2015	0	0	\$0	1	1	\$50,400
2014	1	1	\$45,000	4	4	\$217,979
2013	0	0	\$0	2	3	\$135,294
2012	0	0	\$0	1	1	\$50,400
2011	0	0	\$0	0	0	\$0
2010	0	0	\$0	0	0	\$0

FY 2019 Faculty: Afinoguenova, Barnes, Beall, Bellver, Castañeda, Coleman, Cortes- Velez, Dale, Daly, Diakite, Gendron, Hernandez, Kraemer, Medeiros, Othman, Pasero, Paulk, Pustejovsky, Vanderheyden = 19; 11% application rate (not including individual applications)

### Individual Applications and Awards: Department of Languages, Literatures and Cultures

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	1	1	\$54,467
2018	0	0	\$0	2	2	\$13,400
2017	0	0	\$0	2	2	\$77,066
2016	2	2	\$4,013	1	1	\$2,500
2015	1	1	\$4,000	3	3	\$15,598
2014	0	0	\$0	0	0	\$0
2013	0	0	\$00	0	0	\$0
2012	0	0	\$0	1	1	\$6,000

**Department of Mathematics, Statistics and Computer Science**

	Awardees	Awards	Total	Applicants	Applications	Total
2019	10	20	\$1,321,197	12	35	\$3,401,940
2018	8	12	\$574,129	15	34	\$4,906,629
2017	7	17	\$1,797,824	14	47	\$5,483,959
2016	6	13	\$1,641,466	8	27	\$1,905,457
2015	9	18	\$1,370,975	10	34	\$1,888,206
2014	6	18	\$1,608,693	10	31	\$1,491,045
2013	6	13	\$701,029	10	31	\$2,328,854
2012	7	11	\$657,248	12	31	\$2,371,036
2011	7	13	\$914,098	10	29	\$1,661,539
2010	3	7	\$751,715	13	26	\$2,209,402

FY 2019 Faculty: Ahamed, Bansal, Bozdag, Brylow, Clough, Engbers, Factor, Guha, Hamedani, Hamilton, Jung, Krenz, Maadooliat, Madiraju, Magiera, Merrill, Pantone, Pastijn, Perouli, Puri, Rowe, Ruitenburg, Sanders, Schwartz, Sheng, Slattery, Spiller = 27; 44% application rate

**Individual Applications and Awards: Department of Mathematics, Statistics and Computer Science**

N/A

### Department of Philosophy

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	4	4	\$349,215
2018	0	0	\$0	3	3	\$238,175
2017	0	0	\$0	2	2	\$167,997
2016	0	0	\$0	4	5	\$164,478
2015	1	1	\$10,500	5	6	\$433,411
2014	1	1	\$202,506	1	3	\$149,751
2013	0	0	\$0	6	7	\$757,137
2012	0	0	\$0	3	3	\$206,200
2011	0	0	\$0	1	1	\$120,243
2010	2	2	\$410,000	2	4	\$389,213

FY 2019 Faculty: Adams, Bloch-Mullins, Carter, Choi, Gibson, Goldin, Harris, Ibanez-Noe, Jones, Luft, Peressini, Rickus, Rivera Berruz, Silva, Taylor, Tobin, Tucker, Twetten, Valentine, Vandeveld, Wolfendale, Wreen =22; 18% application rate

### Individual Applications and Awards: Department of Philosophy

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	1	1	\$18,688	1	1	\$18,688
2015	0	0	\$0	1	1	\$6,000
2014	0	0	\$0	2	2	\$71,000
2013	0	0	\$0	1	1	\$35,000
2012	0	0	\$0	0	0	\$0

### Department of Physics

	Awardees	Awards	Total	Applicants	Applications	Total
2019	3	3	\$145,000	4	5	\$299,814
2018	1	1	\$20,000	4	9	\$635,649
2017	2	2	\$5,663	5	7	\$400,654
2016	3	7	\$493,064	3	7	\$304,820
2015	2	2	\$110,000	3	5	\$451,366
2014	2	2	\$92,685	2	2	\$77,000
2013	1	1	\$9,000	3	3	\$175,230
2012	2	2	\$119,014	2	2	\$119,014
2011	3	3	\$183,750	3	4	\$225,751
2010	2	2	\$144,794	2	4	\$407,540

FY 2019 Faculty: Andeen, Bennett, Kunz, Politano, Sanders, Stockdale, Tharp = 7; 57% application rate

### Individual Applications and Awards: Department of Physics

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	1	1	\$25,740
2012	1	1	\$4,240	1	2	\$10,240

### Department of Political Science

	Awardees	Awards	Total	Applicants	Applications	Total
2019	1	2	\$65,000	3	4	\$233,559
2018	1	1	\$7,000	3	4	\$269,484
2017	1	1	\$46,549	4	4	\$163,789
2016	1	1	\$2,000	1	1	\$2,000
2015	0	0	\$0	3	3	\$40,207
2014	1	1	\$3,430	4	11	\$435,240
2013	2	2	\$57,100	3	3	\$17,361
2012	1	1	\$30,000	1	1	\$30,000
2011	0	0	\$0	0	0	\$0
2010	1	1	\$36,968	1	1	\$36,968

FY 2019 Faculty: Azari, Barrington, Berlin, Brigden, Brooks, Dobbs, Friman, Hanley, McAdams, McCormick, Nolette, Palmer-Rubin, Rich, Rocco, Swank, Unda Gutiérrez, Wichowsky =17; 18% application rate

### Individual Applications and Awards: Department of Political Science

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	2	2	\$29,805
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	1	2	\$90,450
2016	0	0	\$0	0	0	\$0
2015	2	3	\$68,839	1	2	\$66,500
2014	0	0	\$0	2	2	\$5,235
2013	0	0	\$0	0	0	\$0
2012	1	1	\$28,592	1	1	\$28,592

### Department of Psychology

	Awardees	Awards	Total	Applicants	Applications	Total
2019	8	14	\$504,575	13	19	\$644,074
2018	4	7	\$206,343	17	27	\$1,534,368
2017	3	5	\$154,243	7	14	\$468,375
2016	5	9	\$495,802	8	18	\$1,193,553
2015	5	9	\$572,912	8	14	\$938,669
2014	3	3	\$83,428	6	12	\$1,200,984
2013	1	2	\$11,500	6	8	\$1,998,029
2012	2	3	\$95,886	7	13	\$1,665,872
2011	3	4	\$92,757	9	11	\$1,098,898
2010	1	2	\$61,029	5	9	\$975,068

FY 2019 Faculty: de St. Aubin, Gerdes, Gordon, Grych, Guastello, Heck, Hoelzle, Howard, Kaugars, Kodak, Magnus, Nielson, Oswald, Porcelli, Saunders, Tiger, Torres, Van Hecke, Wierzbicki = 19; 68% application rate

### Individual Applications and Awards: Department of Psychology

N/A



### Department of Social and Cultural Sciences

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	1	1	\$349,051
2018	0	0	\$0	2	2	\$202,676
2017	1	1	\$5,000	3	5	\$182,235
2016	1	1	\$188,907	3	4	\$228,137
2015	0	0	\$0	3	3	\$202,922
2014	2	2	\$12,587	3	3	\$79,780
2013	1	1	\$100,042	2	3	\$174,588
2012	1	1	\$59,717	3	5	\$235,062
2011	1	1	\$57,635	1	1	\$96,574
2010	0	0	\$0	1	2	\$75,049

FY 2019 Faculty: Cainkar, Cheng, Coles, Crampton, Farkas, Gruenewald (Stroshine), Harris, Hlavka, Jones, Lynch, McCarthy, Moon, Mulla, Peterson, Semukhina, Snowden, Sullivan, Wheelock = 18;  
11% application rate

### Individual Applications and Awards: Department of Social and Cultural Sciences

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	2	2	\$19,818	3	3	\$25,818
2017	0	0	\$0	2	3	\$64,702
2016	0	0	\$0	1	1	\$6,000
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	2	2	\$93,000

### Department of Theology

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	1	1	\$5,222
2018	2	2	\$52,000	2	3	\$92,000
2017	0	0	\$0	2	3	\$104,324
2016	1	1	\$25,283	1	1	\$100,000
2015	1	1	\$10,000	4	5	\$138,870
2014	2	2	\$42,281	1	1	\$5,000
2013	1	1	\$20,000	3	3	\$107,681
2012	2	3	\$64,518	3	4	\$114,918
2011	2	2	\$25,000	2	3	\$227,566
2010	1	1	\$19,216	2	3	\$68,500

FY 2019 Faculty: Burns, Cover, Dabney, Dempsey, Doran, Duns, Garcia Huidobro, Hills, Johnson, Kelly, Kim, Lehner, Martins, Mattox, Mueller, Nussberger, Ogbonnaya, Omar, Orlov, Pace, Pidel, Plested, Saint-Laurent, Schaefer, Thiede, Ward, Wood = 27; 4% application rate

### Individual Applications and Awards: Department of Theology

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	1	1	\$3,100
2018	1	1	\$35,724	1	1	\$84,475
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	2	2	\$66,793
2015	1	1	\$15,000	2	2	\$19,000
2014	0	0	\$0	0	0	\$0
2013	1	1	\$18,500	2	2	\$53,500
2012	1	1	\$40,900	1	1	\$40,900

## College of Business Administration Application and Award History, by College and Department

### College of Business Administration

	Awardees	Awards	Total	Applicants	Applications	Total
2019	1	2	\$160,702	4	5	\$635,488
2018	0	0	\$0	2	3	\$33,070
2017	0	0	\$0	1	1	\$18,650
2016	0	0	\$0	1	1	\$74,125
2015	0	0	\$0	0	0	\$0
2014	2	2	\$80,980	2	2	\$80,980
2013	5	5	\$175,330	5	6	\$237,530
2012	1	1	\$50,000	1	3	\$317,903
2011	2	2	\$39,500	4	4	\$242,340
2010	1	2	\$15,462	3	3	\$62,110

### Department of Accounting

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	1	1	\$10,000
2018	0	0	\$0	1	1	\$18,200
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	0	0	\$0
2011	0	0	\$0	0	0	\$0
2010	0	0	\$0	0	0	\$0

FY 2019 Faculty: Akers, Ling, Luo, Rich, Wall = 5; 20% application rate

### Individual Applications and Awards: Department of Accounting

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	1	1	\$10,000
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	0	0	\$0

### Department of Economics

	Awardees	Awards	Total	Applicants	Applications	Total
2019	1	2	\$160,702	2	3	\$615,488
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	1	1	\$18,650
2016	0	0	\$0	1	1	\$74,125
2015	0	0	\$0	0	0	\$0
2014	1	1	\$50,000	1	1	\$50,000
2013	2	2	\$124,250	2	3	\$184,450
2012	1	1	\$50,000	1	3	\$317,903
*2011	2	2	\$39,500	3	3	\$232,609
2010	1	2	\$15,462	1	1	\$4,000

FY 2019 Faculty: Cole, Daniels, Hanson, Huh, Jolly, McGibany, Melnik, Meyer, Nourzad, Smyth, Wagner, Wang = 12; 16% application rate

### Individual Applications and Awards: Department of Economics

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	1	1	\$18,000
2014	0	0	\$0	1	1	\$6,750
2013	0	0	\$0	0	0	\$0
2012	1	1	\$25,000	1	1	\$25,000

### Department of Finance

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	0	0	\$0
2011	0	0	\$0	0	0	\$0
2010	0	0	\$0	0	0	\$0

FY 2019 Faculty: Arena, Cashman, Nguyen, Peck, Pennington-Cross, Wang = 6; 0% application rate

### Individual Applications and Awards: Department of Finance

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	0	0	\$0

### Department of Management

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	1	1	\$30,980	1	1	\$30,980
2013	2	2	\$47,480	2	2	\$47,480
2012	0	0	\$0	0	0	\$0
2011	0	0	\$0	0	0	\$0
2010	0	0	\$0	0	0	\$0

FY 2019 Faculty: Adams, Adya, Barratt, Bastl, Caulfield, Cotton, Hassell, Hughes-Morgan, Kolev, Maranto, O'Neill, Ow, Rehbein, Rogers, Srivastava, Syam, Wangrow, Webster =20; 0% application rate

### Individual Applications and Awards: Department of Management

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	1	1	\$60,000

### Department of Marketing

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	1	1	\$10,000
2018	0	0	\$0	1	2	\$14,870
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	1	1	\$3,600	1	1	\$5,600
2012	0	0	\$0	0	0	\$0
2011	0	0	\$0	1	1	\$9,731
2010	0	0	\$0	1	1	\$58,110

FY 2019 Faculty: Andrews, Durvasula, Matthes, Miller, Ogilvie, Santos, Spaid, Waites = 8; 13% application rate

### Individual Applications and Awards: Department of Marketing

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	0	0	\$0



## College of Communication Application and Award History

### College of Communication

	Awardees	Awards	Total	Applicants	Applications	Total
2019	4	6	\$247,300	8	10	\$470,408
2018	5	6	\$225,093	6	6	\$103,593
2017	2	2	\$18,000	3	4	\$193,400
2016	2	2	\$39,000	3	3	\$58,630
2015	1	1	\$7,525	2	2	\$9,525
2014	1	1	\$7,525	0	0	\$0
2013	1	1	\$9,150	2	2	\$16,675
2012	0	0	\$0	0	0	\$0
2011	3	3	\$25,500	3	3	\$25,500
2010	2	2	\$17,710	4	4	\$340,871

FY 2019 Faculty: Adams, Berg, Brown, Chattopadhyay, Cheatham, D'Urso, Ekachai, Feldner, Garner, Gilkerson, Grow, Holodak, Hudson-Mairet, Keeler, Kim, Krajec, Pokrywczynski, Thomas, Turner, Ugland, Wagner, Waters, Wolburg, Zhu = 24; 33% application rate

### Individual Applications and Awards: College of Communication

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	2	2	\$18,000
2017	0	0	\$0	0	0	\$0
2016	1	1	\$2,000	3	3	\$47,991
2015	0	0	\$0	1	1	\$8,780
2014	1	1	\$1,000	1	1	\$1,000
2013	2	2	\$36,250	2	2	\$36,250
2012	0	0	\$0	0	0	\$0

## School of Dentistry Application and Award History

### School of Dentistry

	Awardees	Awards	Total	Applicants	Applications	Total
2019	5	10	\$3,785,221	5	14	\$4,060,129
2018	6	9	\$3,477,379	6	8	\$3,041,624
2017	7	13	\$3,946,655	8	25	\$6,534,676
**2016	4	5	\$4,612,631	6	21	\$7,576,332
2015	8	10	\$2,740,443	9	17	\$3,847,201
2014	6	8	\$3,076,166	7	11	\$3,288,715
*2013	5	10	\$11,117,451	8	13	\$10,961,117
2012	5	5	\$2,752,844	8	10	\$3,377,918
2011	5	7	\$4,577,117	5	10	\$3,886,142
2010	7	9	\$3,734,727	12	20	\$5,406,058

\* In FY 2013, an application and an award of \$8,000,000 was recorded for the School of Dentistry Facility Expansion.

\*\* In FY 2016, an application and award of \$2,000,000 was recorded for the School of Dentistry Facility Expansion.

FY 2019 Faculty: Ahuja, An, Angelopoulou, Berzins, Bhagavatula, Dentino, Donate-Bartfield, Gonzalez, Guentsch, Hodgson, Kahled, Kofina, Liu, Lynch, Maroulakos, Nimeri, Okunseri, Prasad, Stafford, Tayebi, Thompson =21; 24% application rate

### Individual Applications and Awards: School of Dentistry

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	1	1	\$22,989	1	1	\$22,989

## College of Education Application and Award History, by College and Department

### College of Education

	Awardees	Awards	Total	Applicants	Applications	Total
2019	4	8	\$1,533,895	6	10	\$1,211,310
2018	3	5	\$610,362	6	11	\$775,378
2017	4	9	\$1,282,723	7	12	\$1,644,121
2016	4	11	\$663,483	5	14	\$1,395,822
2015	4	8	\$833,994	7	13	\$814,095
2014	3	5	\$339,810	5	10	\$948,942
2013	3	10	\$756,484	8	19	\$1,289,507
2012	3	16	\$957,418	8	23	\$1,159,073
2011	5	15	\$1,205,124	7	24	\$1,361,969
2010	5	13	\$714,727	8	16	\$1,614,860

\* The Institute for the Transformation of Learning is included in the College's application and award figures.

### Department of Counselor Education and Counseling Psychology

	Awardees	Awards	Total	Applicants	Applications	Total
2019	3	5	\$176,895	2	3	\$172,782
2018	1	1	\$20,862	2	4	\$119,326
2017	1	2	\$87,603	2	2	\$154,528
2016	1	1	\$12,910	2	2	\$115,118
2015	0	0	\$0	2	3	\$255,609
2014	1	1	\$15,810	1	1	\$15,810
2013	1	3	\$120,450	1	3	\$120,450
2012	1	3	\$18,750	2	4	\$42,517
2011	2	3	\$173,790	2	3	\$173,790
2010	2	5	\$252,950	4	8	\$962,395

FY 2019 Faculty: Burkard, Callender, Cook, Edwards, Knobloch-Fedders, Knox, Melchert, Ong = 8; 25% application rate

### Department of Educational Policy and Leadership

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	3	4	\$86,528
2018	1	2	\$4,500	2	4	\$10,501
2017	2	2	\$4,975	2	3	\$10,975
2016	2	2	\$53,924	2	2	\$198,028
2015	2	2	\$114,994	3	4	\$121,494
2014	0	0	\$0	1	1	\$49,132
2013	1	1	\$9,996	6	10	\$538,019
2012	0	0	\$0	3	6	\$186,888
2011	1	1	\$40,000	3	4	\$116,345
2010	2	3	\$59,167	3	3	\$29,476

FY 2019 Faculty: Birren, Byrd, Chubbuck, Clark, Eckman, Gibson, Jessup-Anger, LaBelle, Lowe, van den Kieboom, Walker-Dalhouse = 11; 27% application rate

## College of Engineering Application and Award History, by College and Department

### College of Engineering

	Awardees	Awards	Eng. Total	Applicants	Applications	Eng. Total
2019	35	63	\$7,439,359	50	155	\$20,482,995
2018	28	45	\$4,520,329	49	155	\$14,946,947
2017	31	61	\$7,536,285	41	128	\$15,831,874
2016	22	48	\$4,598,122	34	92	\$11,700,083
2015	26	52	\$6,997,176	39	109	\$16,514,967
2014	27	47	\$6,828,347	39	110	\$17,677,036
***2013	22	45	\$5,265,976	37	98	\$14,164,590
**2012	29	61	\$6,774,197	40	110	\$13,086,977
**2011	30	67	\$6,857,578	41	120	\$12,997,609
*2010	29	64	\$7,296,936	44	127	\$22,807,658

- \* 2010 applications include a NIST construction application for \$9,167,861. Without this, the total for 2010 applications would be \$13,639,797.
- \*\* Applications and awards from the State of Wisconsin for Engineering Hall were recorded in 2010, 2011, and 2012. The annual amounts for these applications and awards were \$1,666,700 and \$1,666,600, respectively.
- \*\*\* The \$1,000,000 GHR award was recorded as an application and award in 2013 and will continue to be recorded throughout the life of the agreement.

### Biomedical Engineering

	Awardees	Awards	Total	Applicants	Applications	Total
2019	9	22	\$3,295,073	17	50	\$6,151,875
2018	12	19	\$1,885,338	20	58	\$6,191,987
2017	9	25	\$3,905,990	11	59	\$7,046,137
2016	7	19	\$1,384,847	10	33	\$5,222,800
2015	11	22	\$2,548,504	13	49	\$9,482,730
2014	10	20	\$3,479,300	13	42	\$8,503,829
2013	9	22	\$2,484,026	14	54	\$7,004,081
2012	11	29	\$2,876,095	16	55	\$5,971,852
2011	12	30	\$2,835,317	13	55	\$5,273,478
2010	12	26	\$2,421,776	13	53	\$4,404,169

FY 2019 Faculty: Audi, Beardsley, Harris, LaDisa, Olson, Scheidt, Gilat-Schmidt, Schmit, Yu = 9;  
100% application rate

### Individual Applications and Awards: Department of Biomedical Engineering

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	1	1	\$36,000

### Civil, Construction and Environmental Engineering

	Awardees	Awards	Total	Applicants	Applications	Total
2019	7	11	\$783,175	8	34	\$3,239,235
2018	6	10	\$676,602	10	42	\$3,295,105
2017	6	10	\$471,919	10	25	\$2,528,103
2016	4	12	\$1,136,718	7	26	\$1,915,860
2015	3	10	\$486,118	7	20	\$1,825,397
2014	3	5	\$248,047	8	18	\$1,329,951
2013	1	6	\$453,476	4	10	\$1,245,079
2012	4	4	\$347,955	5	9	\$1,354,149
2011	4	7	\$277,033	6	14	\$1,311,818
2010	4	9	\$767,498	8	21	\$1,490,078

FY 2019 Faculty: Bai, Heinrich, Karshenas, Mayer, McDonald, McNamara, Parolari, Wan, Zitomer = 9;  
89% application rate

### Individual Applications and Awards: Department of Civil, Construction and Environmental Engineering

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	1	1	\$14,100	1	1	\$14,100

### **Electrical and Computer Engineering**

	Awardees	Awards	Total	Applicants	Applications	Total
2019	12	17	\$1,491,711	14	43	\$7,483,665
2018	5	9	\$937,188	9	28	\$2,366,491
2017	9	14	\$754,856	10	26	\$3,751,251
2016	6	7	\$398,882	6	11	\$790,106
2015	8	12	\$1,760,695	9	21	\$2,335,932
2014	7	12	\$1,392,590	8	24	\$2,811,703
2013	5	5	\$660,633	7	11	\$1,595,740
2012	7	15	\$1,179,575	8	20	\$1,771,138
2011	5	15	\$1,241,010	9	25	\$2,782,964
2010	5	14	\$975,991	9	26	\$3,401,295

FY 2019 Faculty: Ababei, Brown, Coutu, Demerdash, El-Refaie, Hayat, Josse, Lee, Medeiros, Povinelli, Richie, Schneider, Weise, Yaz, Ye =15 ; 100% application rate

**Individual Applications and Awards: Department of Electrical and Computer Engineering**  
N/A

### **Mechanical Engineering**

	Awardees	Awards	Total	Applicants	Applications	Total
2019	6	11	\$869,400	10	25	\$2,605,820
2018	5	7	\$1,021,201	9	23	\$2,088,564
2017	6	9	\$658,520	9	15	\$1,209,160
2016	4	8	\$677,675	10	20	\$2,771,317
2015	3	4	\$1,149,901	9	15	\$1,818,950
2014	6	8	\$658,339	9	23	\$3,406,482
2013	5	6	\$472,841	9	17	\$3,124,690
2012	5	9	\$585,222	9	21	\$2,124,238
2011	5	8	\$636,318	9	17	\$1,539,918
2010	5	12	\$1,076,971	8	18	\$1,732,497

FY 2019 Faculty: Allen, Borg, Cariapa, Domblesky, Erdeniz, Kim, Marklin, Moore, Nagurka, Roy, Schimmels, Singer, Stango, Voglewede = 14; 71% application rate

### **Individual Applications and Awards: Department of Mechanical Engineering**

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	1	1	\$15,575
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0



## College of Health Sciences Application and Award History, by College and Department

### College of Health Sciences

	Awardees	Awards	Total	Applicants	Applications	Total
2019	18	26	\$3,542,647	34	65	\$9,796,046
2018	23	45	\$5,865,945	29	74	\$11,829,875
2017	20	32	\$4,130,201	29	72	\$7,982,921
2016	22	36	\$4,847,664	27	63	\$12,279,130
2015	18	31	\$5,124,697	22	63	\$13,225,983
2014	13	33	\$4,569,380	24	59	\$8,936,438
2013	15	29	\$3,324,135	21	56	\$7,696,217
2012	12	20	\$3,402,624	20	44	\$5,591,090
2011	12	21	\$4,684,806	17	38	\$6,125,999
*2010	15	26	\$4,508,339	22	46	\$13,614,835

\* 2010 figures include a \$6,484,990 application to NIH for a construction project

### Biomedical Sciences

	Awardees	Awards	Total	Applicants	Applications	Total
2019	7	9	\$1,969,728	14	27	\$5,970,790
2018	11	18	\$3,296,131	13	26	\$6,615,305
2017	9	16	\$3,013,868	12	28	\$5,668,015
2016	9	17	\$3,437,062	11	26	\$8,653,345
2015	9	14	\$2,951,567	10	35	\$9,040,740
2014	5	15	\$2,265,978	12	33	\$6,175,550
2013	6	14	\$1,453,154	10	29	\$4,838,464
2012	6	10	\$1,577,502	9	26	\$3,921,173
2011	5	9	\$1,694,763	6	12	\$1,256,795
2010	4	10	\$1,879,362	10	19	\$3,249,877

FY 2019 Faculty: Baker, Blackmore, Choi, Evans, Gasser, Ghasemzadeh, Gilmartin, Hearing, Lobner, Mantsch, Peoples, Rajala, Savtchouk, Siebenlist, Wheeler = 15; 93% application rate

### Individual Applications and Awards: Department of Biomedical Sciences

N/A

### Clinical Lab Sciences

	Awardees	Awards	Total	Applicants	Applications	Total
2019	2	4	\$112,485	3	9	\$328,292
2018	2	4	\$86,000	2	11	\$524,409
2017	1	3	\$16,850	2	10	\$562,717
2016	2	2	\$111,750	2	4	\$298,201
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	1	1	\$2,500	0	0	\$0
2012	0	0	\$0	1	1	\$2,500
2011	0	0	\$0	0	0	\$0
2010	1	1	\$3,000	1	1	\$4,855

FY 2019 Faculty: Harkins, Lodh, Munson = 3; 100% application rate

### Individual Applications and Awards: Department of Clinical Lab Sciences

N/A

### Department of Physician Assistant Studies

	Awardees	Awards	Total	Applicants	Applications	Total
2019	1	1	\$39,200	2	3	\$72,992
2018	2	2	\$44,200	0	0	\$0
2017	1	1	\$50,000	3	3	\$140,941
2016	1	1	\$22,800	2	3	\$493,773
2015	2	2	\$118,625	1	1	\$18,625
2014	0	0	\$0	1	1	\$51,676
2013	1	1	\$18,625	1	1	\$18,625
2012	1	1	\$18,625	1	1	\$18,625
2011	1	1	\$18,625	1	1	\$18,625
2010	1	1	\$34,500	1	1	\$34,500

FY 2019 Faculty (All Clinical faculty): Barrett, Bril, Fischer, Hermesen, Holmes, Joy, Knox, Loftis, Misustin, Nagel, Paxton, Sinitz, Warren, Wiemiller = 14 ; 14% application rate

### Individual Applications and Awards: Department of Physician Assistant Studies

N/A

### Department of Physical Therapy

	Awardees	Awards	Total	Applicants	Applications	Total
2019	5	9	\$945,278	12	24	\$2,946,514
*2018	6	19	\$2,408,968	10	32	\$4,107,912
2017	7	8	\$892,021	9	25	\$1,362,553
2016	8	14	\$1,246,052	9	27	\$2,757,964
2015	6	14	\$2,052,105	8	24	\$4,148,578
2014	8	18	\$2,303,402	10	24	\$2,565,114
2013	6	12	\$1,837,876	9	25	\$2,836,628
2012	4	8	\$1,796,497	8	15	\$1,636,812
*2011	4	9	\$1,659,279	7	20	\$3,004,993
2010	7	11	\$1,228,658	8	21	\$2,477,794

\* In FY2011, two applications were recorded for HCOP. One was the final year of a prior award (\$559,744) and one was a new application (\$680,720). Typically, only one would have been recorded. The same situation occurred again in FY 2018.

FY 2019 Faculty: Exercise Science: Hunter, Kipp, Ng, Papanek; Physical Therapy: Bement, Hyingstrom, Neumann, Pinto, Schindler-Ivens, Simoneau = 10; 83% application rate

### Individual Applications and Awards: Department of Physical Therapy

	Awardees	Awards	Total	Applicants	Applications	Total
2019	1	1	\$14,480	1	1	\$14,480
2018	0	0	\$0	0	0	\$0
2017	2	2	\$93,041	2	2	\$93,041
2016	0	0	\$0	0	0	\$0
2015	0	0	\$0	0	0	\$0

### Department of Speech Pathology and Audiology

	Awardees	Awards	Total	Applicants	Applications	Total
2019	3	3	\$475,956	3	3	\$477,458
2018	2	2	\$30,646	4	5	\$582,249
2017	2	3	\$60,854	3	6	\$248,695
2016	2	2	\$30,000	3	3	\$75,847
2015	1	1	\$2,400	3	3	\$18,040
2014	0	0	\$0	1	1	\$144,098
2013	1	1	\$11,980	1	1	\$2,500
2012	1	1	\$10,000	1	1	\$11,980
2011	1	1	\$1,310,393	2	2	\$1,320,393
2010	1	1	\$1,282,230	1	1	\$1,282,230

FY 2019 Faculty: Berry, Delaney, Iuzzini-Seigel, Long, Moyle = 5; 60% application rate

### Individual Applications and Awards: Department of Speech Pathology and Audiology

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	0	0	\$0	0	0	\$0
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	1	1	\$21,600
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	1	1	\$13,700	1	1	\$13,700

### Intellectual Property Activity: Department of Speech Pathology and Audiology

N/A

## Law School Application and Award History

### Law School

	Awardees	Awards	Total	Applicants	Applications	Total
2019	4	5	\$136,271	4	6	\$141,270
2018	3	4	\$333,113	3	5	\$150,576
2017	3	7	\$194,003	3	7	\$566,940
2016	3	3	\$62,076	3	3	\$62,076
2015	2	3	\$92,930	2	4	\$102,595
2014	3	4	\$91,856	3	4	\$91,856
2013	4	5	\$149,471	4	5	\$149,471
2012	4	8	\$116,965	3	7	\$108,970
2011	4	7	\$716,472	4	7	\$680,425
2010	6	10	\$429,321	6	13	\$526,038

FY 2019 Faculty: Anzivino, Blemberg, Blinka, Boyden, Bradford, Carpenter, Ellis, Fallone, Greipp, Franklin, Grossman, Hammer, Idleman, Julien, Lemann, Lindsey, Madry, Mazzie, McChrystal, McMullen, Mitten, Murray, O'Hear, Oldfather, Papke, Rofes, Schneider, Scoville, Secunda =29;  
17% application rate

### Individual Applications and Awards: Law School

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	1	1	\$23,780	1	1	\$23,780
2017	0	0	\$0	0	0	\$0
2016	0	0	\$0	0	0	\$0
2015	1	1	\$30,500	1	1	\$30,500
2014	0	0	\$0	0	0	\$0
2013	0	0	\$0	0	0	\$0
2012	0	0	\$0	0	0	\$0

## College of Nursing Application and Award History

### College of Nursing

	Awardees	Awards	Total	Applicants	Applications	Total
2019	7	8	\$2,468,248	14	18	\$2,444,841
2018	14	17	\$3,158,361	18	28	\$5,002,928
2017	11	13	\$3,076,476	17	22	\$4,037,534
2016	9	13	\$1,488,644	19	33	\$3,339,837
2015	9	15	\$2,795,851	13	24	\$1,915,059
2014	7	13	\$875,262	19	43	\$2,981,860
2013	9	14	\$875,064	16	33	\$3,229,523
*2012	11	23	\$3,342,033	16	40	\$5,567,260
2011	10	10	\$1,279,916	16	28	\$3,961,832
2010	7	7	\$593,120	15	28	\$3,758,529

\* The bump in FY12 awards occurred because Marquette received two years of funding in the same fiscal year for Barnes, Bratt, VandeVusse (1) and VandeVusse (2).

FY 2019 Faculty: Bekhet, Bratt, Clayton-Jones, Dreifuerst, Frenn, Gretebeck, Guttormson, Haglund, Hanson, Jerofke-Owen, Johnson, Keller, Miles, Ohlendorf, Piacentine, Robinson, Weiss, Woda = 18; 78% application rate

### Individual Applications and Awards: College of Nursing

	Awardees	Awards	Total	Applicants	Applications	Total
2019	0	0	\$0	0	0	\$0
2018	1	1	\$4,500	1	1	\$4,500
2017	0	0	\$0	1	1	\$10,193
2016	0	0	\$0	1	1	\$4,000
2015	0	0	\$0	0	0	\$0
2014	0	0	\$0	1	1	\$24,892
2013	0	0	\$0	0	0	\$0



## NOTES:

**FY 2010** – American Recovery and Reinvestment Act (ARRA) funding significantly impacted totals for this year across the university.

**Individual applications.** Individual applications and awards are those opportunities that are submitted by Marquette personnel, and are received by the individuals directly, rather than through the university. Because no funds are coming directly to the university, these applications and awards cannot be counted in the standard university totals. However, these opportunities are otherwise significant endeavors and should be recognized. Since these applications and awards are not required to be registered, it is highly likely that there is underreporting.

**Percentage Application Rate.** The percentage of applicants may be skewed slightly. In some departments, non-tenure track faculty or administrative staff applied and are counted in the total number of applicants.

**Total funding committed up front.** Starting in FY 2010, multi-year awards for which all years of funding have been legally committed by the sponsor up front were recorded as an award in total upon receipt. In all previous fiscal years, awards were reported based on the proposal's estimated or proposed spending plan. For example, a typical National Institutes of Health AREA award is for three years with total direct costs of \$300,000 over a three-year period. In the past, this award would have been recorded as \$100,000 per year in three fiscal years. Under the new method, \$300,000 has been recorded upon receipt of the three-year award.

## Appendix F: Unit Abbreviations

### **ARTS College of Arts & Sciences**

BSCI	Biological Sciences
CHEM	Chemistry
ENGL	English
HIST	History
LLAC	Languages, Literature and Cultures
MSCS	Mathematics, Statistics and Computer Science
PHIL	Philosophy
PHYS	Physics
POSC	Political Science
PSYC	Psychology
SOCS	Social and Cultural Sciences
THEO	Theology

### **BUAD College of Business Administration**

ACCO	Accounting
ECON	Economics
MARK	Marketing

### **COMM College of Communication**

CMST	Communication Studies
COMM	College of Communication
DMPA	Digital Media and Performing Arts
JOUR	Journalism
STCM	Strategic Communication ( <i>formerly Advertising and Public Relations (ADPR)</i> )

### **DENT School of Dentistry**

CLSE	Clinical Services
DENT	School of Dentistry
DISS	Diagnostic and Surgical Sciences
DSCH	Department of Developmental Sciences & Community Health
GENE	General Dentistry

### **EDUC College of Education**

CECP	Counselor Education and Counseling Psychology
EDPL	Educational Policy and Leadership
EDUC	College of Education
ITOL	Institute for the Transformation of Learning

### **ENGR College of Engineering**

BIEN	Biomedical Engineering
CEEN	Civil, Construction, and Environmental Engineering
EECE	Electrical and Computer Engineering
ENGR	College of Engineering
MEEN	Mechanical Engineering

**GRAD Graduate School**

GRAD Graduate School  
TRIN Trinity Fellows

**GOAF Office of Public Affairs**

PUAF Office of Public Affairs

**HSCI College of Health Sciences**

BISC Biomedical Sciences  
CLLS Clinical Laboratory Science  
PHAS Physician Assistant Studies  
PHTH Physical Therapy  
SPPA Speech Pathology and Audiology

**LAW Law School**

**NURS College of Nursing**

**PRES Office of the President**

ATHL Athletics

**OMM Office of Mission and Ministry**

**PROV Office of the Provost**

OIE Office of International Education  
ORI Office of Research and Innovation  
OSDE Office of Student Development

**STAF Student Affairs**

COUN Counseling Center  
MUPD Marquette University Police Department  
SHS Student Health Service

**UGRA Office of Undergraduate Programs and Teaching**

CTL Center for Teaching and Learning  
EOP Educational Opportunity Program  
HMA Haggerty Museum of Art  
OSES Student Educational Services

## Appendix G: First-time Marquette Awardees and Their Awards, FY 2019

Last	First	Dept	Title	Type	Sponsor	Amount
Alexander	Jennifer	PSYC	2018 CTSI National Research Service Award (NRSA) Training Program (TL1): Jennifer Alexander	RES	National Institutes of Health	\$34,580
Andeen	Karen	PHYS	Chemical Composition and Energy Spectrum of Cosmic Rays Using the IceCube Neutrino Observatory	RES	National Science Foundation	\$125,000
Baalbaki	Maha	PSYC	2018 CTSI National Research Service Award (NRSA) Training Program (TL1): Maha Baalbaki	RES	National Institutes of Health	\$32,546
Bender	Florian	EECE	Design and implementation of test system for accelerated deposit formation and monitoring	RES	Badger Meter, Inc.	\$100,000
Callender	Karisse	CECP	Counselor Personal Wellness and Professional Wellbeing Assessment (C-PW): Development and Evaluation	RES	Association for Assessment and Research in Counseling	\$3,630
Callender	Karisse	CECP	Quality of life of substance abuse counselors: Implications for clinical supervisors	RES	Association for Counselor Education and Supervision	\$375
Cleek	Elizabeth	NURS	2018 CTSI National Research Service Award (NRSA) Training Program (TL1): Elizabeth Cleek	RES	National Institutes of Health	\$40,681
Czech-Mrochinski	Mary	PUAF	Marquette University Campus Election Engagement Project	OTH	Ohio Campus Compact	\$2,500
Dao	Ngon	MEEN	The President's Challenge	OTH	Greater Milwaukee Foundation	\$25,000
EL-Refaie	Ayman	EECE	NASA ULI: Transition to Low-Carbon Propulsion	RES	National Aeronautics & Space Administration	\$62,864
EL-Refaie	Ayman	EECE	NASA ULI: Transition to Low-Carbon Propulsion	RES	National Aeronautics & Space Administration	\$31,117
Fallone	Edward	LAW	CSII Participating Institution Award	OTH	Stout University Foundation	\$16,000
Hamilton	Sarah	MSCS	Direct 3D Reconstruction Methods for Electrical Impedance Tomography for Stroke Imaging	RES	National Institutes of Health	\$152,334
Hanson	Andrew	ECON	Local Economic Multipliers: What we know, what we do not know, and new estimates from modern empirical techniques	RES	Charles Koch Foundation	\$125,702
Hanson	Andrew	ECON	Bunching in the Appliance Market: Strategic Engineering or Energy Rating Test Manipulation?	RES	Charles Koch Foundation	\$35,000

Last	First	Dept	Title	Type	Sponsor	Amount
Hayat	Majeed	EECE	Probabilistic modeling of cascading failures in complex power grids in support of UNM's CRSIP Type 2 NSF Award	RES	National Science Foundation	\$60,960
Hayat	Majeed	EECE	CDS&E: Optimization of Advanced Cyberinfrastructure through Data-Driven Computational Modeling	RES	National Science Foundation	\$46,489
Hye Ye	Dong	EECE	Adaptive Automatic Target Recognition for CT-Based Object Detection Systems	RES	Department of Homeland Security	\$50,000
Hye Ye	Dong	EECE	Novel Platform for Quantitative Subcellular Resolution Imaging of Human Tissues Using Mass Spectrometry	RES	National Institutes of Health	\$36,732
Jung	Hyunyi	MSCS	Exploring Student Learning through Mathematical Modeling Summer Camp	OTH	Wisconsin Department of Public Instruction	\$7,280
Maadooliat	Mehdi	MSCS	Detecting Shared Chromosomal Regions and Compound Heterozygous Effects for Diseases within PMR	RES	Marshfield Clinic Research Institute	\$42,279
Magnus	Brooke	PSYC	Improving Patient Classification and Outcome Measurement in Traumatic Brain Injury (TBI)	RES	National Institutes of Health	\$14,718
Magnus	Brooke	PSYC	CTSI: Psychometric Analysis of PROMIS-29 In Light Chain Amyloidosis	RES	National Institutes of Health	\$4,000
Origanti	Sophia	BSCI	Role and Regulation of eIF6 in Translation	RES	National Institutes of Health	\$457,334
Origanti	Sophia	BSCI	Elucidating the role of eIF6 as a driver of human breast cancers	RES	Wisconsin Women's Health Foundation	\$20,000
Patterson	Emily	SPPA	Equipment for Marquette University's Department of Speech Pathology and Audiology	OTH	Roland Balg Charitable Trust	\$25,000
Pinto	Brendan	BSCI	Small geckos yield great insight into the genomic underpinnings of speciation	RES	American Genetic Association	\$4,000
Schwarz	Thomas	MSCS	CSR: Small: A Multi-Layered Deniable Steganographic File System	RES	National Science Foundation	\$5,000
Smith	Ron	JOUR	Milwaukee Neighborhood News Service 2019-2020	OTH	Northwestern Mutual Life Foundation	\$15,000
Smith	Ron	JOUR	Milwaukee Neighborhood News Service 2019-2020	OTH	Helen Bader Foundation, Inc.	\$75,000
Smith	Ron	JOUR	Milwaukee Neighborhood News Service 2019-2020	OTH	Joseph and Vera Zilber Family Foundation, Inc.	\$100,000
Smith	Sara	SHS	Red Watch Band Marquette University	OTH	Miller Coors, LLC	\$10,000
Thompson-Colburn	Alexandria	PSYC	2018 CTSI National Research Service Award (NRSA) Training Program (TL1): Alexandria Thompson-Colburn	RES	National Institutes of Health	\$40,466

Last	First	Dept	Title	Type	Sponsor	Amount
Wagner	A. Jay	JOUR	Probing the People's Right to Know: An Audit of State Freedom of Information Laws	RES	Greater Milwaukee Foundation	\$4,000
Walker	Kelly	OSDE	2018-19 AmeriCorps Planning Grant Proposal-Marquette University	OTH	Corporation for National and Community Service	\$70,421

\* *Note that this list includes both individual awardees as well as those who received their award through Marquette University*

## Appendix H: First-time Marquette Applicants and Their Applications, FY 2019

Last	First	Dept	Title	Type	Sponsor	Amount
Angeli	Elizabeth	ENGL	Writing Education in Workplace Training Courses	RES	American Council of Learned Societies	\$40,000
Berardi	Giovanni	PHTH	Pain Modulatory Effects of Exercise in the Management of Chronic Pain	RES	National Institutes of Health	\$77,990
Bird	Claire	PSYC	Dissociation and Trauma in the Latinx population: Cultural x Biological Model	RES	National Institutes of Health	\$35,744
Bird	Claire	PSYC	Dissociation and Trauma in the Latinx population: Cultural x Biological Model	RES	National Institutes of Health	\$36,954
Clark	Joseph	CHEM	Site-Selective Deuterium Incorporation into Hydrocarbon Frameworks	RES	Petroleum Research Fund	\$55,000
Colburn	Alexandria	PSYC	Narrative Explorations of Intersectionality in Black Women's Lives: A Strengths-Based and Mixed-Methods Investigation of Stress, Resilience, and Well-Being	RES	National Institutes of Health	\$36,894
Czech-Mrochinski	Mary	PUAF	Marquette University Campus Election Engagement Project	OTH	Ohio Campus Compact	\$2,500
Dao	Ngon	MEEN	The President's Challenge	OTH	Greater Milwaukee Foundation	\$25,000
Erdeniz	Dinc	MEEN	Creep behavior of a selective laser melted nickel-based superalloy	RES	National Science Foundation	\$150,599
Erdeniz	Dinc	MEEN	Mechanical Behavior of Additively Manufactured Auxetic Superelastic Alloys	RES	International Organization on Shape Memory and Superelastic Technologies	\$24,755
Fallone	Edward	LAW	CSII Participating Institution Award	OTH	Stout University Foundation	\$6,000
Gibson	Melissa	EDPL	Towards a Culturally Relevant Civic Education: Learning from Youth Activists of Color	RES	Spencer Foundation	\$11,131
Hanson	Andrew	ECON	Local Economic Multipliers: What we know, what we do not know, and new estimates from modern empirical techniques	RES	Charles Koch Foundation	\$94,789

Last	First	Dept	Title	Type	Sponsor	Amount
Hanson	Andrew	ECON	Bunching in the Appliance Market: Strategic Engineering or Energy Rating Test Manipulation?	RES	Charles Koch Foundation	\$35,000
Hanson	Courtney	CSC	Career Formation Retreat for First Generation Students	INST R	Proctor & Gamble Company	\$10,000
Hanson	Courtney	CSC	First Generation College Student Career Retreat	INST R	State Farm Insurance	\$16,000
Hayat	Majeed	EECE	Probabilistic modeling of cascading failures in complex power grids in support of UNM's CRSIP Type 2 NSF Award	RES	National Science Foundation	\$61,114
Hayat	Majeed	EECE	CDS&E: Optimization of Advanced Cyberinfrastructure through Data-Driven Computational Modeling	RES	National Science Foundation	\$46,623
Hayat	Majeed	EECE	CPS: Medium: Collaborative Research: Data-driven probabilistic strategies for adaptive protection of smart grids against cyber threats	RES	National Science Foundation	\$250,092
Hayat	Majeed	EECE	CDS&E: Optimization of Advanced Cyberinfrastructure through Data-Driven Computational Modeling	RES	National Science Foundation	\$10,860
Hertzberg	Carie	STDE	Marquette University Burke Scholarship Program (2020-2027)	OTH	The Burke Foundation	\$160,973
Hye Ye	Dong	EECE	Physics-Encoded Data Force-Multiplier for Pharmaceutical Formulations Design	RES	U.S. Department of Defense	\$46,015
Hye Ye	Dong	EECE	Adaptive Automatic Target Recognition for CT-Based Object Detection Systems	RES	Department of Homeland Security	\$50,000
Hye Ye	Dong	EECE	Intraoperative detection of breast tumor margins using ultraviolet fluorescence microscopy and deep learning	RES	U.S. Department of Defense	\$107,135
Hye Ye	Dong	EECE	Quantitative Metrics for MRI-Based Monitoring of Hip Arthroplasty	RES	National Institutes of Health	\$82,372



Last	First	Dept	Title	Type	Sponsor	Amount
Hye Ye	Dong	EECE	Novel Platform for Quantitative Subcellular Resolution Imaging of Human Tissues Using Mass Spectrometry	RES	National Institutes of Health	\$36,732
Hye Ye	Dong	EECE	Novel Algorithm to Increase Anaerobic Co-Digestion Renewable Energy	RES	Industry/University Cooperative Research Center for Water Equip and Policy	\$50,000
Jung	Hyunyi	MSCS	CAREER: Enhancing Opportunities for Students and Teachers to Engage with Mathematical Modeling	RES	National Science Foundation	\$152,333
Jung	Hyunyi	MSCS	Collaborative Research: Engineering-Based Mathematical Modelling in Middle School Mathematics Instruction	RES	National Science Foundation	\$59,943
Jung	Hyunyi	MSCS	Exploring Student Learning through Mathematical Modeling Summer Camp	OTH	Wisconsin Department of Public Instruction	\$11,192
Jung	Hyunyi	MSCS	Developing and Exploring Meaningful Modeling Curricula for Future K-8 Teachers	RES	National Science Foundation	\$48,449
Kirkman	Mackenzie	PSYC	Entitlement, Relationships, and Wellbeing: A Multimethod Exploration	RES	Medical College of Wisconsin	\$30,627
Kokkin	Damian	CHEM	Electronic Spectroscopy of Technological, Atmospheric and Astrophysically Relevant Silicates, SixOy	RES	National Science Foundation	\$164,023
Madayag	Aric	BSCI	Astrocyte Gating of Opioid-Induced Neuroplasticity and Behavior	RES	National Institutes of Health	\$135,188
Malkoff	Anne	PSYC	Navegando Dos Mundos: A Bicultural Skills Intervention for Families of Elementary School-Aged Latino Youth	RES	National Institutes of Health	\$39,000
Miles	Jane	NURS	Longitudinal Development of Leadership Efficacy, Leadership Identity, and Motivation to Lead in Prelicensure Nursing Students	RES	Sigma Theta Tau Delta Gamma At-Large Chapter-Milwaukee	\$4,550
Miller	Felicia	MARK	Digital Marketing Communication	OTH	Proctor & Gamble Company	\$10,000

Last	First	Dept	Title	Type	Sponsor	Amount
Mirabito	Lucas	PSYC	A Brief Intervention for LGBTQ risky drinkers: The DISCUSS Intervention	RES	National Institutes of Health	\$30,636
Misustin	Sarah	PHAS	Examining the use of advanced practice providers (APPs) in oncology care and the association between APP care delivery models and patient-reported care experience and cancer quality outcomes	RES	National Institutes of Health	\$16,812
Misustin	Sarah	PHAS	The Relationship of Advanced Practice Providers (APP) in Oncology to the Quality of Cancer Care and Patient-reported Care Experience	RES	National Institutes of Health	\$16,980
Moore	John	MEEN	TA 23: Propagating Microstructural Variability to the Structural System Level in Hypersonic Vehicles using a Hybrid Data-driven and Mechanics-based Framework	RES	DARPA	\$250,000
Moore	John	MEEN	Determining the driving force for fatigue crack nucleation in a superelastic nickel titanium alloy	RES	National Science Foundation	\$144,586
Moore	John	MEEN	Fatigue Prediction for Additive Manufactured (AM) Metallic Components	RES	U.S. Department of Defense	\$14,000
Nestor	Benjamin	HIST	Einsatzgruppe C in the District Galicia: Ideology, Situational Violence, and Mass Murder	RES	Holocaust Educational Foundation of Northwestern University	\$4,000
Nowacek	Rebecca	ENGL	Memory, Metacognition, and the Maintenance of Trust: How Talk About Writing Illuminates the Collaborative Dimensions of Transfer of Learning	RES	American Council of Learned Societies	\$50,000
Palm	Andrew	BIEN	Design of microcontroller for non-invasive blood clot monitoring using over the cuff pressure monitoring and electrical	RES	American Heart Association	\$26,844

Last	First	Dept	Title	Type	Sponsor	Amount
Pantone	Jay	MSCS	Combinatorial Exploration: A New Approach to Enumeration	RES	National Science Foundation	\$118,283
Pantone	Jay	MSCS	Collaborative Research on Computational and Experimental Combinatorics	RES	Simmons Foundation	\$8,400
Pinto	Brendan	BSCI	Small geckos yield great insight into the genomic underpinnings of speciation	RES	American Genetic Association	\$4,000
Ruopp	Thomas	BIEN	A Novel Pedaling Paradigm to Improve Lower Limb Function Post-Stroke	RES	National Institutes of Health	\$39,060
Sara	Lauren	PHTH	Fatigue and Neuromuscular Function in Adults with Achilles Tendinopathy	RES	National Institutes of Health	\$77,990
Savchuk	Yaroslav (Alex)	BISC	Visualizing cholinergic and noradrenergic modulation of Bergmann astrocytes and GABAergic interneurons in Alzheimer and healthy mice	RES	The Esther A. & Joseph Klingenstein Fund, Inc.	\$110,250
Savchuk	Yaroslav (Alex)	BISC	Exploring the role of the cerebellum in addictive behavior and conversion from goal-directed to habitual learning	RES	Brain & Behavior Research Foundation	\$35,000
Savchuk	Yaroslav (Alex)	BISC	Fast Panoptical Imaging of Brain volumes via time-tagged quadrangular stereoscopy	RES	McKnight Foundation	\$100,000
Siddiqui	Noreen	EDPL	The Experiences of Food Insecure College Students	RES	NASPA Foundation	\$1,500
Siddiqui	Noreen	EDPL	The Experiences of Food Insecure College Students	RES	NASPA Foundation	\$250
Smith	Douglas	ACCO	Proctor & Gamble Fund Higher Educational Grant Program	INST R	Proctor & Gamble Company	\$10,000
Smith	Ron	JOUR	Milwaukee Neighborhood News Service 2019-2020	OTH	Joseph and Vera Zilber Family Foundation, Inc.	\$50,000
Smith	Ron	JOUR	Milwaukee Neighborhood News Service 2019-2020	OTH	Northwestern Mutual Life Foundation	\$15,000
Smith	Ron	JOUR	Milwaukee Neighborhood News Service 2019-2020	OTH	Helen Bader Foundation, Inc.	\$50,000
Smith	Sara	SHS	Red Watch Band Marquette University	OTH	Miller Coors, LLC	\$10,000

Last	First	Dept	Title	Type	Sponsor	Amount
Spring	Mitchell	BISC	Determining discrete circuit contributions to anhedonia	RES	National Institutes of Health	\$32,234
Streeter	Kristi	PHTH	Phrenic Afferents and Neuromuscular Plasticity Following Spinal Cord Injury	RES	National Institutes of Health	\$249,000
Swabek	Carolyn	TRIN	Trinity Fellows Program: Cohort 21, Fall 2020 thru Cohort 24, Spring 2025	OTH	The Burke Foundation	\$144,920
Totka	Joan	NURS	Clinical Assistant Professor	RES	Medical College of Wisconsin	\$8,727
Turner	Lynn	CMST	MU Host application for Center for Communication, Community Collaboration, and Change	OTH	National Communication Association	\$55,000
Wagner	A. Jay	JOUR	Probing the People's Right to Know: An Audit of State Freedom of Information Laws	RES	Greater Milwaukee Foundation	\$4,000
Zhu	Yaguang	CMST	RAPID: Examining Intercultural Disaster Communication with Residents with Limited English Proficiency During Hurricane Florence	RES	National Science Foundation	\$198,182

*\*Note that this list includes both individual awardees as well as those who received their award through Marquette University*

## Appendix I: Notes on Awards and Applications Data

### Reporting Conventions

#### Multi-year awards:

**ORSP reports the portion actually awarded to the University in the current fiscal year.**

Because multi-year awards are typically subject to availability of sponsor funds, subsequent years are reported only as they are awarded. For example, a five-year award totaling \$500,000 might be reported as \$100,000 in each of the five project years. Annual award increments typically occur in consecutive university fiscal years, however readers are advised that two annual increments for a project can and sometimes do fall within the same university fiscal year. Conversely, they may also appear to be a full fiscal year apart.

**Total funding committed up front.** Starting in FY 2010, multi-year awards for which all years of funding have been legally committed by the sponsor up front was recorded as an award in total upon receipt. In all previous fiscal years, awards were reported based on the proposal's estimated or proposed spending plan. For example, a typical National Institutes of Health AREA award is for three years with total direct costs of \$300,000 over a three-year period. In the past, this award would have been recorded as \$100,000 per year in three fiscal years. Under the new method, \$300,000 has been recorded upon receipt of the three-year award.

**Awards are listed before applications.** This convention is meant to help readers avoid the common misconception that applications reported in a given fiscal year neatly correspond with that year's awards. A continuation award may appear as an application and as an award on the same date (often the anniversary of the initial award), while a new award may lag behind its corresponding application by six to twelve months, depending on the sponsor.