

2015-2016 Office of Nursing Research Annual Report

# UNIVERSITY OF KENTUCKY COLLEGE OF NURSING

# Office of Nursing Research Annual Report 2015-2016

Prepared by

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This University of Kentucky (UK) College of Nursing (CON) Office of Research report provides highlights and trends in CON extramural and intramural researching funding during Fiscal Years (FY) 2012-2016.

#### *Types of Grants*

CON principal investigators (PIs) submit various types of grants, generally to one of two types of award programs— extramural research (research dollars are awarded from an organization external to the University of Kentucky, examples include the National Institute of Nursing Research, the National Cancer Institute, the Health Resources & Services Administration, the Kentucky Department for Public Health) and intramural research (research dollars are awarded from a program internal to the University of Kentucky; examples include the Center for Clinical and Translational Science (CCTS) awards, the Office of the Vice President for Research (VPR) awards, and UK Women & Philanthropy). Grant awards provide funding for the cost of conducting the research (i.e., direct costs) as well as the cost to the institution for the facilities and administration of the research (indirect costs). The indirect (facilities and administrative, or F&A) funds associated with a grant vary contingent upon the type of funder as well as the type of funding mechanism. Intramural research awards, for example, do not provide funds for indirect costs.

When applying for extramural funding, PIs cast a wide net, targeting federal and state agencies, private foundations, and professional associations. Awards to UK vary by funding type. National Institute of Health (NIH) grants are awarded for multi-year intervals, but funds are distributed on a year-to-year basis, and funding amounts each year can change from that committed at the time of the initial award. Funds for contracts, however, are guaranteed when the contract is initially awarded. Therefore, the total amount over the life of the contract is counted as occurring at the time the initial contract is awarded. A good example of this would be Patient Centered Outcomes Research Institute (PCORI) funding.

As of FY 16, fifteen of the College of Nursing's faculty serve as PI (or Multi-PI) on funded, extramural research.

#### Information on Indirect (Facilities & Administrative) Costs

Facilities and Administrative (F&A) payments from funding agencies to the University, and eventually to the College of Nursing, are driven by grant expenditures, rather than awards. If UK received a grant for \$100,000, but only spent \$50,000 of that award on research, UK, in turn, would receive an F&A payment based on the \$50,000 spent. Due to the amount of time needed for F&A calculations, it takes two years for the F&A to return to the College of Nursing. In other words, in FY 16, the College of Nursing is receiving F&A distributions from grant expenditures that occurred in FY 14.

Private foundations, associations and state agencies may or may not separately reimburse indirect costs. If they do, rates are generally set by the funding agency. PCORI, an independent, nonprofit, nongovernmental organization, has an indirect cost rate limit of 40%.

Indirect cost rates can also vary according to the type of funding mechanism. For example, federal career development awards (e.g., 'K' awards) have a lower indirect rate (Department of Health and Human Services agencies cover 8%) vs. a research award (depends upon an institution's federally-negotiated rate). Some

foundation awards (e.g., Robert Wood Johnson Foundation's Future of Nursing Scholars; Jonas Scholars) do not provide facilities and administration costs.

Unique Facts about the University of Kentucky, College of Nursing's Research Portfolio

When looking at the total number of research dollars generated by an academic unit per fiscal year, it is important to consider the number of faculty members that are supported by the unit to compete for extramural funding. At the University of Kentucky, the College of Nursing has a smaller number of Regular Title Series (RTS) and Special Title Series (STS) faculty (i.e., tenure-eligible faculty) than many other UK colleges. Within the faculty workforce, RTS faculty members typically receive the greatest amount of institutional support for research and are, in turn, called upon to compete successfully for extramural funding. The number of faculty (particularly the number of RTS faculty) within an academic unit are thus a critical resources in competing for grant awards. STS faculty members typically have special assignments (e.g., administrative, clinical or educational assignments) that restrict time for research activities; these faculty members typically receive less institutional support for research. STS faculty are expected to contribute scholarship, often in association with their special assignments, but not to compete successfully for extramural research funding.

Tables A thru D below show a breakdown of extramural research funding trends by RTS within the College of Nursing. Table A indicates that the number of RTS and STS faculty have remained stable since FY12.

Table A	FY 12	FY 13	FY 14	FY 15	FY 16
Regular Title Series (RTS)	19	18	18	17	16
Faculty*					
Special Title Series (STS)	15	12	12	16	18
Faculty					

Table A. Total Number of RTS and STS CON Faculty

<sup>\*</sup>The Dean of the College of Nursing is not included in the RTS totals.

Table B and Figure 1 demonstrate a an increasing trend in total number of grant submissions and in the number of grants submitted per faculty member over the past five years.

Table B. Extramural (EM) Grant Applications	FY 12	FY 13	FY	FY 15	FY 16
			14		
Total # of EM grant applications submitted by	30	35	52	54	46
CON PIs					
Average # of grant applications per RTS faculty	1.6	1.9	2.9	3.2	2.9
member					

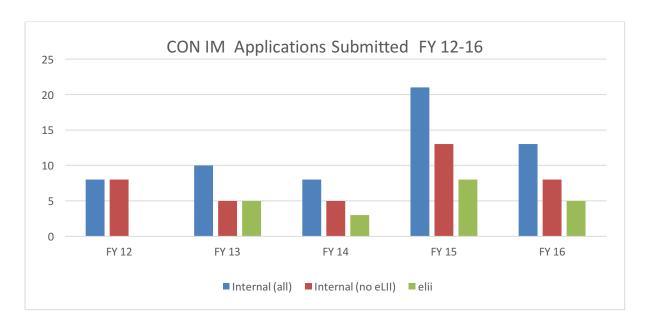


Figure 1. CON Grant Proposals Submitted FY 12-16.

Table C and Figure 2 present extramural grant funding for the College over the past five fiscal years. A substantial increase in funding that occurred in FY 13 is associated with the awarding of a multi-million dollar, four-year PCORI contract – since all of the direct expenses associated with this contact were guaranteed in 2013, the full four-years of funding were allocated in FY13. If these funds were distributed across the four years of the award, it would be clear that grant funding to the CON was accelerating in consort with the number of grant applications, as listed in Table B.

Table C	FY 12	FY 13	FY 14	FY 15	FY 16
Total EM Funding	\$1,653,666	\$4,789,083	\$1,902,159	\$3,770,156	\$3,465,937
Average # of grant \$ per RTS faculty member	\$ 87,035	\$ 266,060	\$ 105,675	\$ 221,774	\$ 216,621

Table C. New Extramural Grant Funding; Directs Costs Only

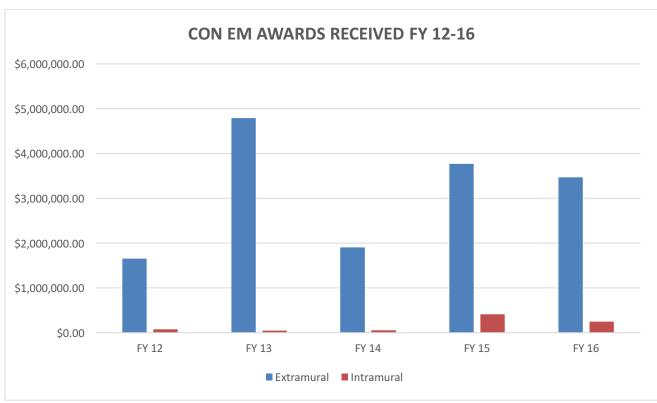


Figure 2. CON Extramural Awards Received FY 12-16

Figure 3 presents the number of grants that were funded for the College since FY 12. With the exception of FY 15, the number of individual proposals that were funded each year has remained constant. Given the increase in award totals over time (see Figure 2), it is clear that the total amount of funding per award has been increasing over time.

Table D details the amount of extramural grant expenditures, per fiscal year, from CON PIs. Of note, grant expenditures are a more direct way of tracking actual research effort, as expenditures are driven by actual research activity. Table D demonstrates a positive acceleration in research effort over the past three years.

Table D	FY 13	FY 14	FY 15	FY 16
EM Grant Expenditures	\$2,038,277	\$2,596,496	\$3,062,596	unavailable
Average EM Grant Expenditure per RTS faculty member	\$ 113,238	\$ 144,250	\$ 180,153	unavailable

Table D. Extramural (EM) Grant Expenditures (Total/Total per RTS) from CON PIs

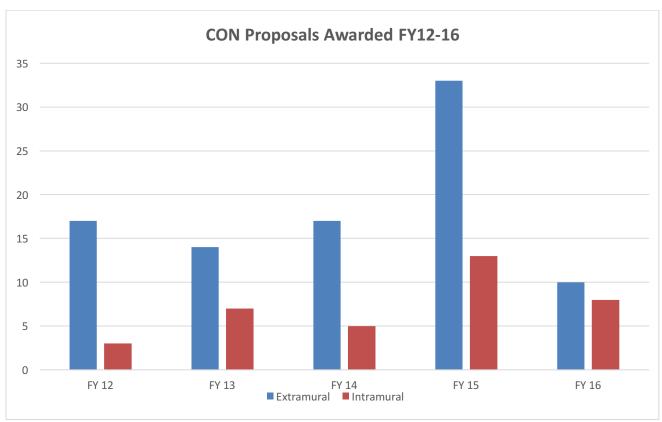


Figure 3. CON Proposals Awarded FY 12-16

#### Intramural Funding

eLearning Innovation Initiative (eLII)

The UK Office of the Provost, Analytics and Technologies, and the Center for the Enhancement of Learning and Teaching launched the eLearning Innovation Initiative in 2013. As noted on the eLII website, "this initiative offers three types of funding opportunities to faculty, departments and units:

- Funding to support the development of innovative, technology-rich pedagogy and learning strategies to address needs in a constantly changing environment via new online degree programs.
- Stipends to faculty to participate in UK led Online Learning and/or Blended Learning Faculty Communities.
- Funding to support redesign of large-lecture courses focusing on development of innovative, technology-rich pedagogy and learning strategies to address needs in the constantly changing learning environment via synchronous and asynchronous hybrid learning opportunities, "flipped" class designs, and IT enabled personalized/adaptive learning."

  [http://www.uky.edu/eLII/aboutus accessed 7.7.16]

Table E provides the number and amount of eLII funding received by CON faculty. The College has been successful in competing for these educational innovation funds, peaking in 2015 with 8 awards totaling over \$87,000.

Table E	FY 12	FY 13	FY 14	FY 15	FY 16
Number of CON eLII awards	n/a	5	3	8	5
Total amount of eLII funding	n/a	\$7,000	\$10,000	\$87,343	\$23,000

Table E. CON eLII awards and funding

Other Intramural (IM) Funding Sources

CON PIs have received funding from several intramural sources such as the UK Office of the Vice President for Research Support Grants Program, the Center for Clinical and Translational Sciences (CCTS), and UK Markey Cancer Center's pilot funding opportunities [e.g., the Cancer Center Support Grant (CCSG) and Kentucky Lung Cancer Research Program awards]. Table F provides the number of IM applications submitted and funded, as well as the amount awarded, for FY12-16.

Table F	FY 12	FY 13	FY 14	FY 15	FY 16
# IM*	8	5	5	13	8
Applications					
Submitted					
# IM*	3	2	2	5**	3
Applications					
Funded					
Total IM*	\$74,605	\$37,923	\$44,968	\$324,934**	\$225,000
Funding					

Table F. CON IM applications submitted, funded, and dollar amount by fiscal year

Of note, CON Faculty received two intramural NIH awards in FY 15 – Building Interdisciplinary Research Careers in Women's Health (BIRCWH K12) and Center for Clinical and Translational Sciences Career Development (KL2). Both are mentored career development programs for early-career faculty, with the BIRCWH supporting investigators interested in women's health, while the KL2 supports investigators interested in clinical/translational research. Both programs are highly competitive and prestigious awards that provide support for salary (75% effort) and research.

#### Sources of research support

Figure 4 presents the funding sources for all active awards in FY 16. Over the last four years, NIH has been the predominant source of extramural funding agency for CON faculty. Some faculty members have pursued funding from other federal agencies (PCORI, Centers for Disease Control and Prevention [CDC], Centers for Medicaid and Medicare Services [CMS]), with positive outcomes.

<sup>\*</sup>Data does not include eLII grants.

<sup>\*\*</sup>Reflects funding from Building Interdisciplinary Research Careers in Women's Health (BIRCHW) and KL2 award.

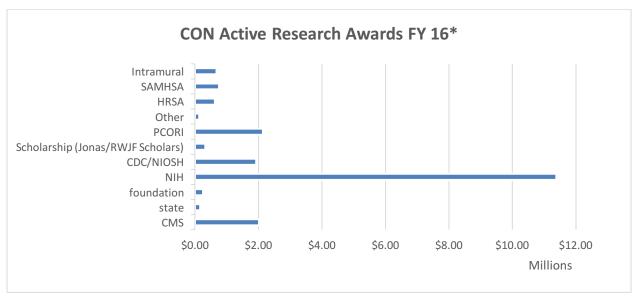


Figure 4. CON Active Research Awards (total funding) in FY 16

This figure does not include eLII funds.

Scholarship

Table G lists the number of presentations given by CON faculty (RTS and STS) since FY 2012 (data for FY 16 not available). During FY14-15, College of Nursing faculty gave a total of 565 research-focused presentations at professional conferences (over 8 presentations per faculty member).

Table G	FY 12	FY 13	FY 14	FY 15
Total	277	305	329	364
Data-Based	253	258	292	273
Data-Based/Faculty*	7.4	8.6	9.7	8.3

**Table G. CON Faculty Presentations (source: Digital Measures)** 

Table H lists the number of publications given by CON faculty (RTS and STS) since FY 2012. During FY14-15, College of Nursing faculty published 342 data based articles in referred journals (over 5 publications per faculty member).

Table H	FY 12	FY 13	FY 14	FY 15
Total	254	265	270	233
Data-Based	123	57	147	195
Data-Based/Faculty*	3.6	1.9	4.9	5.9

**Table H: CON Faculty Publications (source: Digital Measures)** 

<sup>\*</sup>Includes RTS and STS faculty.

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#### National Status

Table I presents the standing of the University of Kentucky College of Nursing in total NIH funding relative to other academic units of Nursing at the end of 2015. The CON ranked 15<sup>th</sup> among all academic units (9<sup>th</sup> among state-sponsored institutions).

ORGANIZATION	AWARDS	FUNDING
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	16	\$7,884,999
JOHNS HOPKINS UNIVERSITY	10	\$5,561,902
UNIVERSITY OF CALIFORNIA LOS ANGELES	12	\$5,253,554
UNIVERSITY OF WASHINGTON	12	\$4,521,366
EMORY UNIVERSITY	9	\$4,082,469
UNIVERSITY OF PENNSYLVANIA	11	\$4,079,687
UNIVERSITY OF ILLINOIS AT CHICAGO	10	\$3,951,896
DUKE UNIVERSITY	8	\$3,777,212
NEW YORK UNIVERSITY	7	\$3,739,335
UNIVERSITY OF PITTSBURGH AT PITTSBURGH	8	\$3,271,653
UNIVERSITY OF MICHIGAN	7	\$3,026,302
MEDICAL UNIVERSITY OF SOUTH CAROLINA	8	\$3,003,869
ARIZONA STATE UNIVERSITY-TEMPE CAMPUS	4	\$2,342,134
COLUMBIA UNIVERSITY HEALTH SCIENCES	4	\$1,991,987
UNIVERSITY OF KENTUCKY	6	\$1,950,029
MICHIGAN STATE UNIVERSITY	4	\$1,895,571
YALE UNIVERSITY	4	\$1,852,144
UNIVERSITY OF IOWA	4	\$1,847,967
UNIVERSITY OF SOUTH FLORIDA	3	\$1,642,400

**Table I: Top 20 NIH-funded Academic Nursing Units** 

Figure 5 (next page) presents a comparison the University of Kentucky College of Nursing compared to other academic on a number of academic metrics, including publications, national awards and grant funding (Source: UK Academic Analytics). The CON is well above the national median among academic nursing units on all metrics, with publications, citations and number of above the 90<sup>th</sup> percentile.

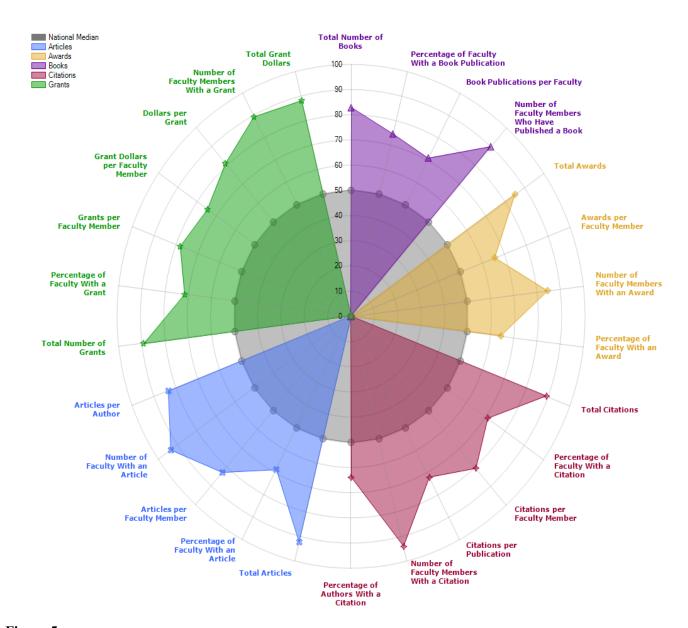


Figure 5.

#### Conclusion

The University of Kentucky College of Nursing faculty members are actively engaged in patient-oriented and public policy focused research impacting the citizens of the Commonwealth (e.g., cardiovascular health, tobacco smoking, drug abuse, maternal and fetal health, occupational health of farmers). By all reasonable metrics, including grant submissions and funding, data-based publications and presentations, comparisons of faculty productivity with other academic units of nursing, the CON is making significant contributions to the science of nursing and producing new knowledge that advances the health of the Commonwealth of Kentucky and beyond.

# envision engage

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