



2016-2017 Office of Nursing Research Annual Report

University of Kentucky, College of Nursing

Office of Nursing Research

Annual Report FY 17

Thomas Kelly, Associate Dean for Research; Kristin Ashford, Assistant Dean for Research

October 13, 2017

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) 2013-2017.

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 Patient Centered Outcomes Research Institute, the Kentucky Department for Public Health, American Nurses Foundation) 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 17, sixteen of the College of Nursing's faculty serve as PI (or Multi-PI) on funded, extramural research.

Information on Indirect (Facilities & Administrative) Costs

Facilities & Administrative (F&A costs) are real expenses incurred by the university in support of sponsored projects, but which by federal regulation cannot be charged directly to a specific grant, contract, or other sponsored agreement. F&A costs stem from the institutional need to maintain a shared infrastructure that supports the research and scholarly activities of all investigators. F&A costs are divided into facilities costs (e.g. building depreciation, operation and maintenance, utilities) and administrative costs (e.g. sponsored projects administration, purchasing, accounting, legal services). These funds are important to the College of Nursing because a portion of the funds is returned to the College to support future grant development.

The federal F&A cost rate is negotiated periodically with the university's audit agency, the Department of Health and Human Services. The F&A rate varies by type of project (e.g., research, instruction, career development) and location of the work (on-campus vs. off-campus). For research projects that are conducted on the UK campus, which is the most common type of extramurally sponsored project received by the CON, the F&A rate is 53%. F&A support for research projects conducted off campus is 26%. Federal awards involving instruction have a lower F&A rate (46%), and career development awards (e.g., 'K' awards) have an even lower indirect rate (8%). Private foundations, associations and state agencies may or may not separately reimburse F&A costs, and the rates are generally set by the funding agency. PCORI, an independent, nonprofit, nongovernmental organization, has an F&A cost rate limit of 40%. Some foundation awards (e.g., Robert Wood Johnson Foundation's Future of Nursing Scholars; Jonas Scholars) do not provide any F&A reimbursement.

F&A payments are driven by grant expenditures, rather than awards. If UK received a grant for \$100,000, but only spent \$70,000 of that award on research, UK, in turn, would receive an F&A payment based on the \$70,000 that was 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. In other words, in FY 17, the College of Nursing is receiving F&A distributions from grant expenditures that occurred in FY 15.

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 who are supported by the unit that are able 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 colleges at UK. 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 members (particularly the number of RTS faculty) within an academic unit is thus a critical resource 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 members are expected to contribute scholarship, often in association with their special assignments, and are expected to compete for extramural awards to support their special assignments, but are not expected to compete successfully for extramural research funding.

Grant Productivity

Tables A thru D below show a breakdown of extramural research funding trends by RTS within the College of Nursing. Table A provides the number of RTS and STS faculty in the College of Nursing since FY13. Over the past 5 years, the total number of RTS and STS faculty in the College of Nursing has increased by 17% (30 to 35). However, the number of RTS faculty has decreased by 11% (18 to 16), while the number of STS faculty has increased by 58% (12 to 19). This shift in faculty distribution has occurred in order to address the broad academic needs of the College of Nursing. The overall research and scholarship portfolio of the College, however, should be evaluated based on the distribution of RTS and STS faculty.

Table A. Total Number of RTS and STS CON Faculty

	FY 13	FY 14	FY 15	FY 16	FY17
Regular Title Series (RTS) Faculty*	18	18	17	16	16
Special Title Series (STS) Faculty	12	12	16	18	19

*The Dean of the College of Nursing is not included in the RTS totals.

Table B and Figure 1 provide data on total number of grant submissions and on the number of grants submitted per faculty member over the past five years. The data indicate that while the total number of grant applications has decreased slightly over the past 4 years, the number of grants per RTS faculty member remains stable.

Table B. Extramural (EM) Grant Applications

	FY 13	FY 14	FY 15	FY 16	FY 17
Total # of EM grant applications submitted by CON PIs	35	52	54	46	44
Average # of grant applications per RTS faculty member	1.9	2.9	3.2	2.9	2.75

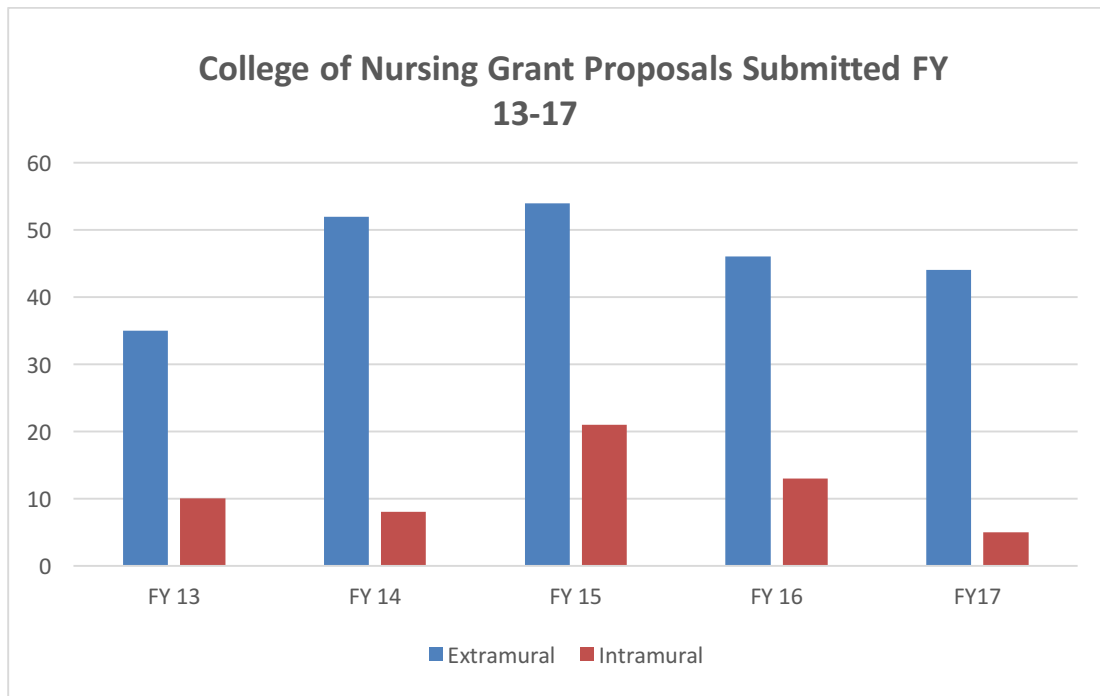


Figure 1. CON Grant Proposals Submitted FY 13-17.

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 was associated with the awarding of a multi-million dollar, four-year PCORI contract – since all of the direct expenses associated with this contract 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. New Extramural Grant Funding; Directs Costs Only

	FY 13	FY 14	FY 15	FY 16	FY 17
Total EM Funding	\$4,789,083	\$1,902,159	\$3,770,156	\$3,465,937	\$4,221,848
Average # of grant \$ per RTS faculty member	\$ 266,060	\$ 105,675	\$ 221,774	\$ 216,621	\$263,866

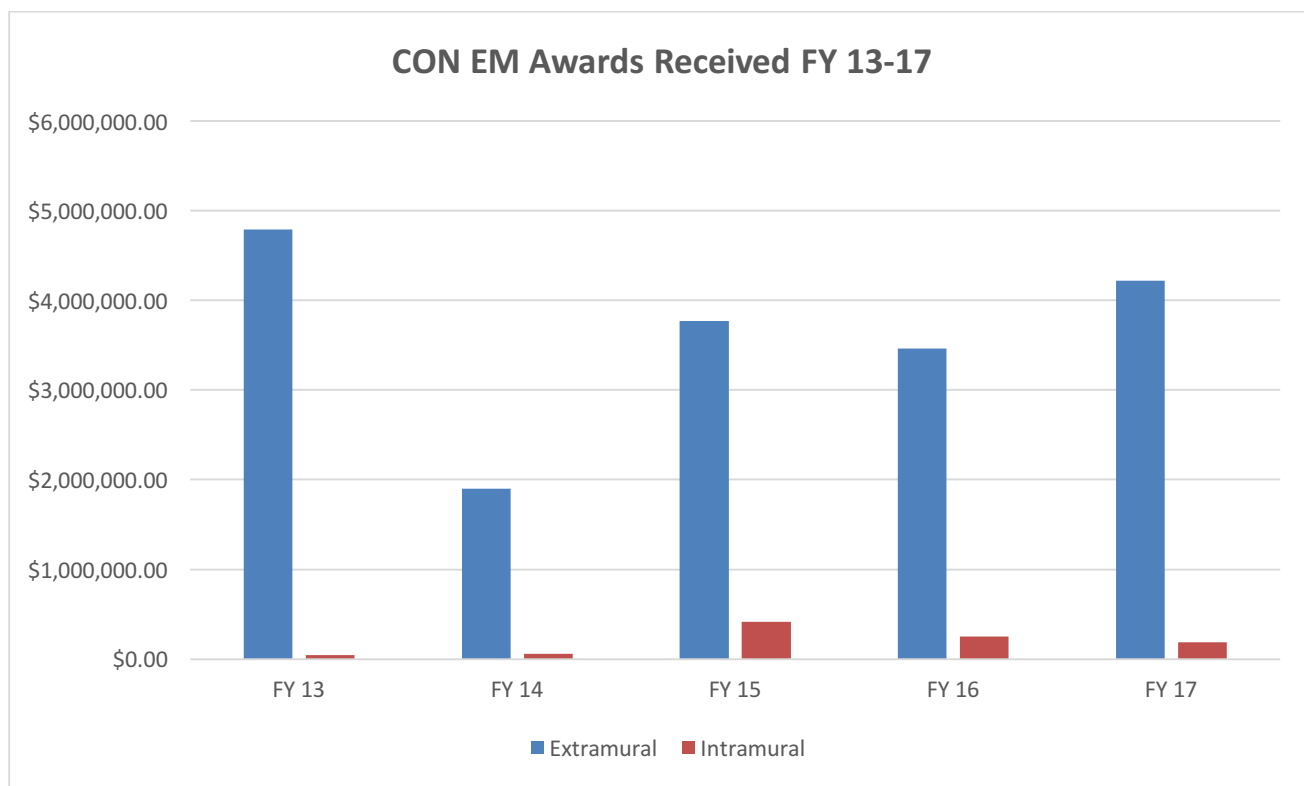


Figure 2. CON Extramural Awards Received FY 13-17

Figure 3 presents the number of grants that were funded for the College since FY 13. 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.

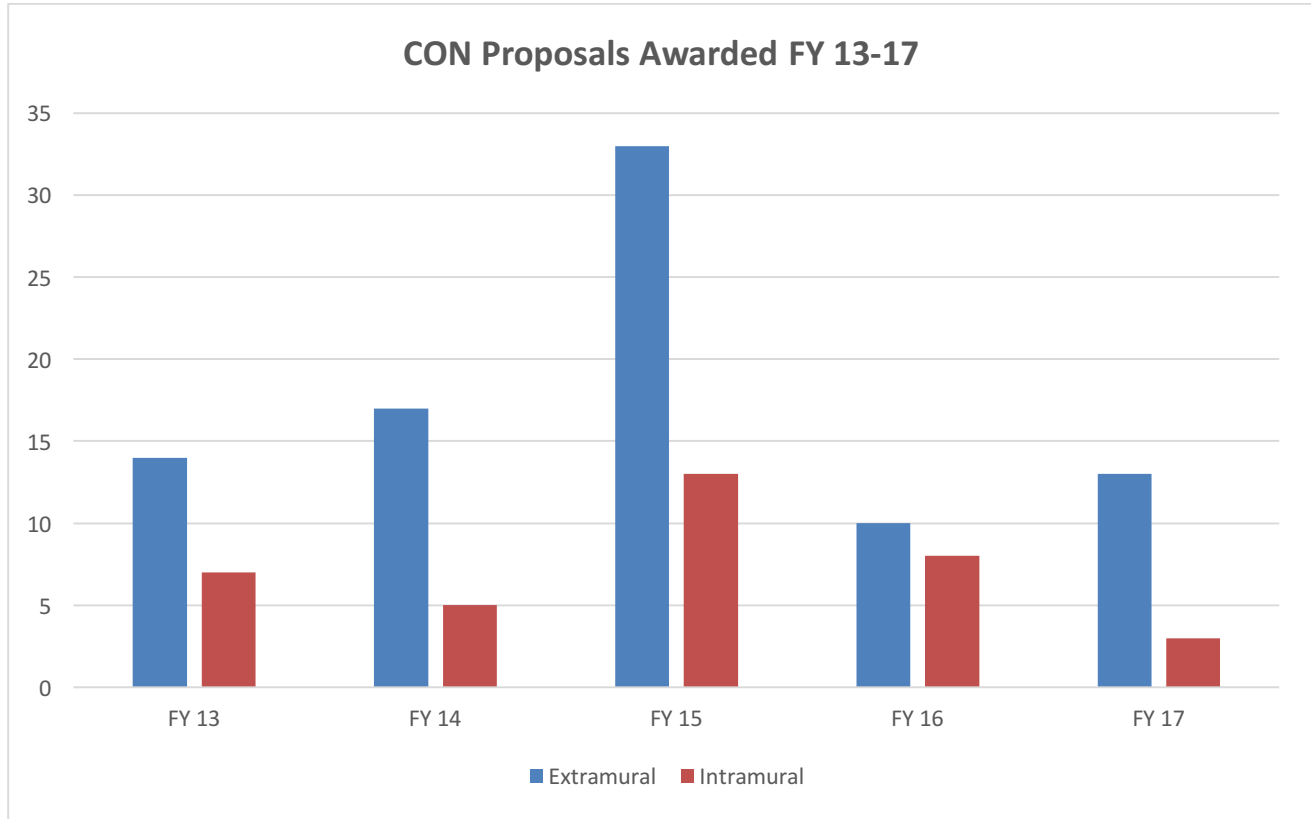


Figure 3. CON Proposals Awarded FY 13-17

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

	FY 13	FY 14	FY 15	FY 16	FY 17
EM Grant Expenditures	\$2,572,089	\$3,470,368	\$4,107,056	\$4,574,497	Not Available
Average EM Grant Expenditure per RTS faculty member	\$ 142,894	\$ 192,798	\$ 241,592	\$285,906	Not Available

Table E 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 NIH FY16. The CON ranked 18th among all academic units (9th among state-sponsored institutions).

Table E: Top 20 NIH-funded Academic Nursing Units

ORGANIZATION	AWARDS	FUNDING
Emory University	22	\$8,381,357
University of Pennsylvania	24	\$7,627,239
University of California, San Francisco	27	\$7,273,200
Duke University	17	\$6,471,139
University of Washington	19	\$6,405,970
Johns Hopkins University	20	\$5,899,204
University of Pittsburgh at Pittsburgh	16	\$5,477,083
University of Illinois at Chicago	13	\$5,179,075
University of California Los Angeles	16	\$5,089,493
University of Michigan	19	\$5,048,327
New York University	8	\$4,935,318
Columbia University Health Sciences	18	\$4,620,132
University of Maryland Baltimore	12	\$4,472,650
Case Western Reserve University	13	\$4,105,909
Yale University	14	\$4,048,591
Arizona State University-Tempe	8	\$3,782,240
Medical University of South Carolina	10	\$3,145,868
University of Kentucky	8	\$2,859,654
University of Utah	10	\$2,793,942
University of Rochester	7	\$2,602,073

Intramural 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 FY13-17.

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

	FY 13	FY 14	FY 15	FY 16	FY 17
# IM Applications Submitted	5	5	13	8	6
# IM Applications Funded	2	2	5*	3	3
Total IM Funding	\$37,923	\$44,968	\$324,934*	\$225,000	\$186,000

*Reflects funding from Building Interdisciplinary Research Careers in Women’s Health (BIRCHW) and KL2 award.

Of note, CON Faculty received two intramural NIH awards in FY 15 – Building Interdisciplinary Research Careers in Women’s Health (BIRCHW 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.

In FY 17, the College of Nursing allocated a portion of the returned F&A funding to support a pilot-funding program for its faculty members. Applications were received and peer-reviewed in February and July, and funds were awarded in March and August. Since this was a new program, activities supported by this program are not included in the data provided in Table F. In FY 17, five pilot study applications were received and two applications each received \$20,000 of funding.

Sources of research support

Figure 4 presents the funding sources for all active awards in FY 17. 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.

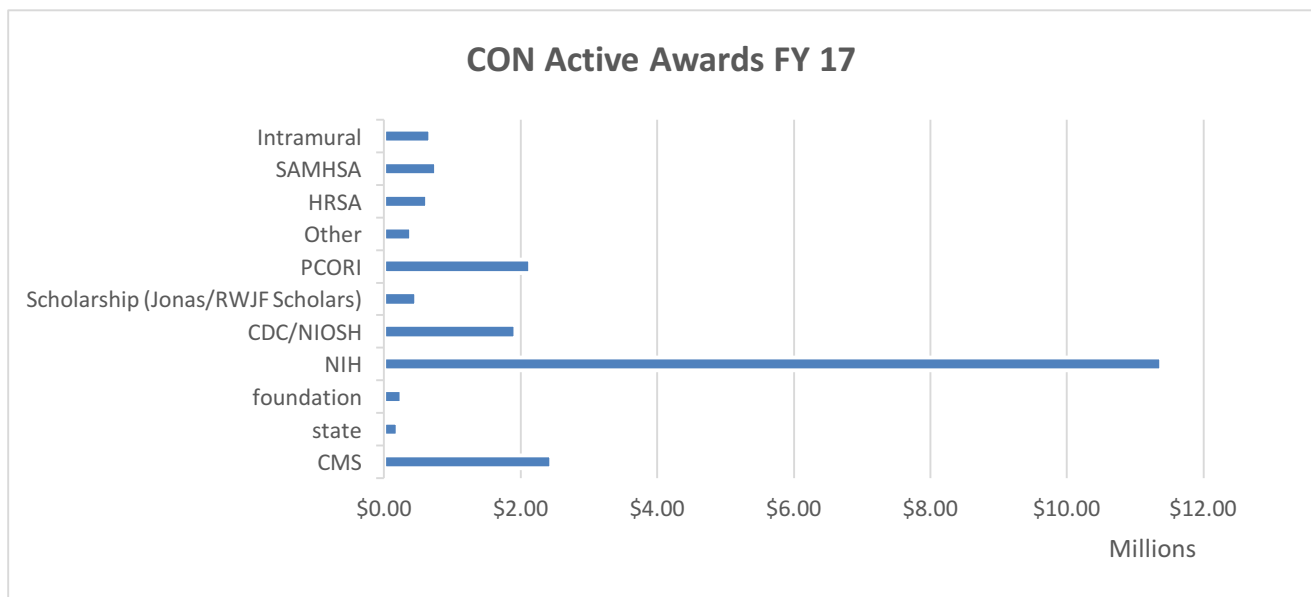


Figure 4. CON Active Research Awards (total funding) in FY 17

Scholarship

Table G lists the number of presentations given by CON faculty (RTS and STS) since FY 2013 (data from FY 17 not available). During FY 16, College of Nursing faculty gave a total of 170 research-focused presentations at professional conferences (4.9 presentations per faculty member). This reflects a reduction in productivity from the previous three years. These data come from the Digital Measures database, which is dependent on faculty reporting of productivity. At this time, it remains unclear whether this reflects a reduction in faculty productivity from previous years or a change in faculty reporting fidelity, and these data will require carefully scrutiny in the next fiscal year.

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

Table G	FY 13	FY 14	FY 15	FY 16
Total	305	329	364	192
Data-Based	258	292	273	170
Data-Based/Faculty*	8.6	9.7	8.3	4.9

*Includes RTS and STS faculty.

Table H lists the number of publications given by CON faculty (RTS and STS) since FY 2013 (data from FY 17 not available). During FY 16, College of Nursing faculty published 157 data based articles in referred journals (over 4.5 publications per faculty member). These data come from the Digital Measures database, which is dependent on faculty reporting of productivity. These totals are comparable to productivity metrics in FY 14 but below rates observed in FY 15. At this time, it remains unclear whether there have been changes in faculty productivity across years or a change in faculty reporting fidelity, and these data will require carefully scrutiny in upcoming fiscal years.

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

Table H	FY 13	FY 14	FY 15	FY 16
Total	265	270	233	171
Data-Based	57	147	195	157
Data-Based/Faculty*	1.9	4.9	5.9	4.5

*Includes RTS and STS faculty.

Conclusion

The University of Kentucky College of Nursing faculty members are actively engaged in patient-oriented and public policy focused research that impacts 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, and data-based publications and presentations, 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
empower

315 College of Nursing Building
University of Kentucky
Lexington, KY 40536-0232

uky.edu/nursing