

Vision 20/20: An interdisciplinary research program for the Division of Nutritional Sciences

Issue:

The University of Illinois' Division of Nutritional Sciences (DNS) began in 1968 and has evolved to be a highly recognized interdisciplinary program providing graduate education in nutrition and serving as a catalyst for interdisciplinary and transdisciplinary nutrition research. Nutritional scientists need to not only master nutrition and the complexities of metabolism, but also the "languages" of other disciplines like genetics, behavior, immunology, bioengineering, cognitive neuroscience, and bioinformatics, to name a few. Nutrition research needs to cross disciplinary boundaries because to solve the most challenging problems requires an interdisciplinary approach. Similarly, innovative technologies will most likely emerge from interdisciplinary teams. Thus, the need for interdisciplinary nutrition-related research has never been greater.

Despite the demand for interdisciplinary nutrition research, most funding from the College's Office of Research is allocated along traditional departmental routes and tends to reward the individual principle investigator model. While it is possible that a portion of these funds will fortuitously support interdisciplinary research, the current model does not encourage interdisciplinary activities. Intramural research funding from the College dedicated to interdisciplinary activities is critical to cultivating multi-investigator teams that can successfully compete for extramural funding and address the most challenging problems and opportunities. To this end, a proposal for a new interdisciplinary research program to be administered by the DNS was developed. The proposal was used to solicit funds from the University of Illinois College of Agriculture, Consumer and Environmental Sciences (ACES) Office of Research.

What has been done:

The University of Illinois College of ACES Office of Research invested \$200,000 in the Division of Nutritional Sciences (DNS). These funds were used to establish a new interdisciplinary research program for DNS faculty entitled Vision 20/20. The program was to catalyze unique interdisciplinary nutrition-related research. Through Vision 20/20 the DNS sought proposals from interdisciplinary teams for projects with potential to provide new transformative innovations in nutrition or solutions to nutrition-related diseases. Proposals received were evaluated by a panel of DNS faculty and in year 1 six projects were funded totaling \$120,000. A second request for proposals was announced the following year and in year 2 four more projects were funded totaling \$80,000. Thus, 100% of the funds invested by the Office of Research were committed to support innovative research programs within the DNS. The proposals selected for funding support work in three general areas of nutrition: translational/clinical research, basic research, and development of diagnostic tools. The project teams include a diverse group of more than 30 researchers representing 10 departments from 6 colleges, with collaborators from 3 other universities. The College of ACES Office of Research recently committed an additional \$220,000 to Vision 20/20 over the next 2 years. Thus, this new program has garnered \$420,000 in a 4 year period to support interdisciplinary nutrition-related research.

Impacts/New Partnerships:

The obvious and immediate impact of Vision 20/20 is that \$420,000 is going to support interdisciplinary nutrition research. The research supported by Vision 20/20 will yield important results. However, by providing incentive for interdisciplinary research teams, the program's greatest impact will be on how nutrition research is approached by individuals heretofore. Will the multi-investigator, interdisciplinary approach, be the preferred model? In year 1 and 2, 30% of the proposals selected for funding were from assistant professors, presumably in the formative years. Further, a portion of the funds allocated through Vision 20/20 go to support pre- and postdoctoral trainees—those who represent the next wave of nutrition researchers and educators.

Outcome of Project (societal impact/ measure of increased quality of life)

A goal of Vision 20/20 was to catalyze interdisciplinary nutrition-related research. Five groups funded through Vision 20/20 in year 1 submitted extramural research proposals. Two proposals totaling more than \$300,000 have been funded thus far and others are pending. Projects funded by Vision 20/20 in year 2 are in an “incubation period” but already several groups have indicated they plan to submit proposals as a result of Vision 20/20 funding. Thus, there’s evidence that Vision 20/20 has already succeeded in fostering interdisciplinary nutrition-related research. The true impact, however, will not be fully appreciated for several years to come.

How has your project been aided by your FSLI experience?

The FSLI experience instilled in me confidence to develop and articulate a vision for this new program. It further underscored the importance of having a well-organized implementation plan and clear communication with faculty. By adhering to these principles, there was high confidence among faculty that the program was administered in a fair manner.

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