Marquette University: Marquette biomedical sciences professor receives $1.6 million U-RISE grant from National Institutes of Health

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MILWAUKEE — Dr. SuJean Choi, professor of biomedical sciences in Marquette University's College of Health Sciences, has received a $1.6 million grant from the National Institutes of Health U-RISE program to implement curriculum and programming to support students as they gain undergraduate research expertise while cultivating a science identity and sense of inclusion in the science community.

The goal of the project, which is funded through NIH's Undergraduate Research Training Initiative for Student Enhancement (U-RISE) program, will be to create an environment that increases familiarity and comfort in research environments for students from underrepresented backgrounds in research. Researchers will focus on recruiting undergraduate students from underrepresented student populations, first-generation college students and women.

"We are very excited about the opportunity to implement this U-RISE grant at Marquette," Choi said. "The mission of expanding opportunities and promoting diversity and inclusion within research is in line with the university's Catholic, Jesuit mission and guiding values. This grant will allow us to foster an environment that welcomes diversity in background, scholarship and research. We hope to increase a sense of belonging and persistence for these students and facilitate the advancement of their research careers into graduate school."

Participants will enroll in two years of rigorous and original research experience beginning with a didactic-based research undergraduate course called "Path to

Research," a continuous U-RISE seminar series, and placement into active research labs. In addition to exploring the methodological and analytical skills required of scientists, this program will also extensively address the responsible conduct of research, written and oral science communication skills, and promote cultural validation, the development of a science-identity, and a sense of belonging to the Marquette and greater science community. U-RISE students will engage in course work, a summer research bootcamp, attend U-RISE and research seminars, write a pre-doctoral grant proposal, and develop an individual development plan with their research mentors.

Choi will lead an interdisciplinary team of co-principal investigators, Dr. Kimberly D'Anna-Hernandez, associate professor of psychology in the Klingler College of Arts and Sciences; Dr. Laurieann Klockow, clinical professor of biomedical sciences; and Dr. Matthew Hearing, assistant professor of biomedical sciences.

"Marquette faculty researchers are highly collaborative and have a reputation for interdisciplinary efforts," said Dr. William Cullinan, dean of the College of Health Sciences. "We are excited for Dr. Choi's team to utilize this U-RISE award to expand the undergraduate research activities across colleges at Marquette by providing formal curricular and programmatic structure, and to introduce and support students towards pursuit of research careers."

Students enrolled in the program will also be supported with tuition, a monthly stipend, summer research help, and individualized advising and professional development.

"The U-RISE program will serve as a prominent exemplar of *cura personalis*—'care for the whole person'," Choi added. "U-RISE scholars will receive personal and individualized academic advising, research training, and numerous opportunities to hone the scientific and professional skills to become a successful career scientist."

The goal of the U-RISE program is to develop a diverse pool of undergraduates who complete their baccalaureate degree, and transition into and complete biomedical, research-focused higher degree programs (e.g., Ph.D. or M.D./Ph.D.). Training grants offset the cost of stipends, tuition and fees, and training related expenses, including health insurance, for the appointed trainees in accordance with the approved NIH support levels. Training grants are usually awarded for five years and are renewable.