In two years, the University of Michigan will celebrate 15 years since leadership swung open the doors to the Life Sciences Institute, a nucleus of biomedical research on campus. One of its most prestigious faculty members has been along for almost the entire ride.

Janet L. Smith, Ph.D., joined the U-M faculty in 2005 as the Margaret J. Hunter Collegiate Professor in the Life Sciences. Since then, she has become director of the Center for Structural Biology and held the Martha J. Ludwig Professorship in Protein Structure and Function. She is a world leader in the field of protein structure determination and structural enzymology.

Colleagues who nominated Smith for the Distinguished Faculty Lectureship Award in Biomedical Research say she has made a series of remarkable contributions to the field and is regarded as a world-renowned expert in the structure and function of polyketide synthase domains. She also has been an important contributor to the community in a variety of ways, and she has trained and mentored numerous highly successful students.

“The quality of biomedical research here means that I have outstanding colleagues and collaborators and an opportunity to train excellent students,” says Smith, who delivered her lecture, “Biosynthetic Enzymes: Nature’s Amazing Catalysts,” on Sept. 28. “The collegial environment at U-M is also a major advantage. Great scholarship across the University is a personal benefit, as I’ve enjoyed getting to know U-M colleagues outside the sciences.”

Smith, who also holds an appointment as professor of biological chemistry in the Medical School, is considered one of the most influential protein crystallographers of her generation and has applied crystallography to provide structural insights into the function of several protein families. One colleague said Smith is as good of a representative for the science of the Medical School as the U-M will ever have. He added that a major perk to moving his lab to the Life Sciences Institute was it allowed him to work alongside Smith.

Her impact is felt away from campus, as well, as she is scientific director of a National Institutes of Health-supported beamline facility for structural biology at the Advanced Photon Source of the Argonne National Lab. There, she has put together a cutting-edge platform for characterization of macromolecular complexes by X-ray crystallography. She long has been an advocate of making state-of-the-art technology available to all across the research community.

“She is a truly rare individual and scientist, with not only remarkable accomplishments in individual biological fields, but also contributions with deep impact in shaping the present and future of biomedical research.”

— Georgios Skiniotis, Ph.D., Jack E. Dixon Professor of Life Sciences, associate professor, Life Sciences Institute and associate professor, Department of Biological Chemistry