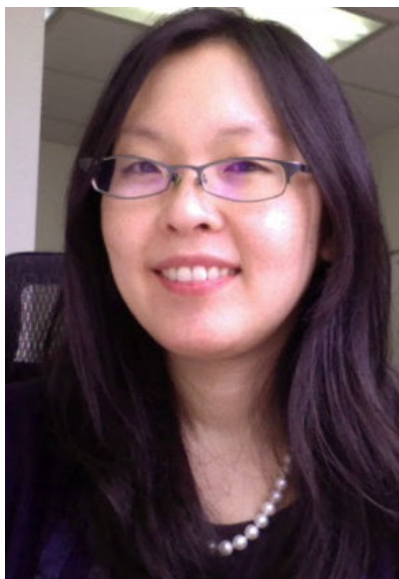


## **2015 Agnes Fay Morgan Research Award**

**Dr Jin Kim Montclare**

**Department of Chemical and Biomolecular Engineering,  
at New York University Polytechnic School of Engineering;  
Department of Biochemistry at SUNY Downstate Medical Center;  
Department of Chemistry at New York University.**



Dr Jin Montclare is an Associate Professor in the Chemical and Biomolecular Engineering Department of New York University Polytechnic School of Engineering, with a joint appointment and affiliate status in the Biochemistry and Chemistry Departments at SUNY Downstate Medical Center and New York University.

Dr Monclare was born in the Bronx, New York. As a first generation Korean-American, she was an undergraduate at Fordham University majoring in chemistry and minoring in philosophy. As an undergraduate, she was a Clare Boothe Luce and Goldwater Scholar, enabling her to pursue her degree in chemistry while carrying out research on mapping human chromosome 21 as part of the Human Genome Project in the Department of Molecular Genetics at the Albert Einstein College of Medicine. She graduated in 1997 *summa cum laude in cursu honorum*, and was awarded the Institute of American Chemists Award for overall excellence in chemistry. In 2003, she completed her Ph.D. in bioorganic chemistry at Yale University with Professor Alanna Schepartz, as a National Science Foundation and Pfizer Predoctoral Fellow. She then worked on

protein chemistry as a NIH Postdoctoral Fellow in the laboratory of Professor David Tirrell at Cal Tech. In 2005, she joined the faculty at NYU.

Dr Jin's research is at the interface of chemistry, materials science and biology. She employs cutting edge methods of protein engineering and chemical biology to design and develop new biomaterials (self-assembling proteins), therapeutic agents and biocatalysts (functional proteins/enzymes for particular substrates) relevant to medicine, biotechnology and green chemistry. She had identified proteins capable of polymer degradation, detoxification of neurotoxins and activation of genes. Colleagues in her field regarded her as one of the most exciting young minds to have entered the field of biomaterials.

During the past 9 years, she has directly mentored 4 postdoctoral fellows, 10 Ph.D., 16 M.S. and 34 undergraduate students who have completed their degrees. In addition, she has supervised 11 high school student internships in her lab, and her outreach programs, Chem-Biotechnology Laboratory and Summer Bioengineering Program, has enrolled over 600 high school, middle school and grade school students performing advanced experiments in their school facilities and at NYU Polytechnic School of Engineering.

Dr Montclare has authored 49 publications, 1 issued patent and 5 patent applications. During her independent career at NYU, Dr. Montclare has received numerous awards including but not limited to the Othmer Junior Fellowship, Weschler Award for Excellence, AFOSR Young Investigator Award, Dreyfus Special Grant Award, ACS PROGRESS/Dreyfus Lectureship, Jacobs Excellence in Education Award and Executive Leadership in Academic Technology and Engineering Fellow and the Distinguished Award for Excellence. She has had an impressive track of funding for her excellent research, garnering over \$6.3 million dollars in federal and non-federal grants from NSF, NIH, ARO, AFOSR, DoD, Dreyfus Foundation and the likes.

According to Dr David Pine, one of her nominators and Chair of her Department, Dr Montclare has a passion for education as well and is fearless in employing technology in her classes as well as in the outreach programs she directs. "She had made a significant impact in student research recognition and training the next generation. Of her 49 publications, 40 were co-authored by women and minority students, 19 were co-authored with undergraduates/high school students. Students from her lab have garnered 102 awards and research fellowships from NSF, NIST, ACS, ARO Brookhaven National Lab and other like agencies. Of the 102, 56 have been awarded to the women and underrepresented students that she had directly mentored."

Iota Sigma Pi is happy to recognize Dr Jin Montclare's research achievements and her contributions to her profession with the 2015 Agnes Fay Morgan Research Award.