Training & Capacity Building

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Focus on Fellows: Rajendrakumar Gosavi: World-Renowned Training Brings Fellow to NIEHS

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NIEHS Research Fellow Rajendrakumar Gosavi, Ph.D.
(Photo courtesy of Rajendrakumar Gosavi)

An interest in structural biology and an opportunity to work at an institute known for its career development opportunities brought Rajendrakumar Gosavi, Ph.D., to the NIEHS in Research Triangle Park, North Carolina.

Gosavi, a native of India, received his Ph.D. in chemical and environmental engineering at the University of Toledo, Ohio. “About halfway through my graduate program, a course on protein chemistry introduced me to the beautiful world of protein structures and their power in biomedical science,” said Gosavi. “Inspired, I was determined to find a training opportunity in the field of structural biology.”

Gosavi’s interest in the field of protein solubility and crystallization led him to NIEHS to conduct research under the guidance of Lars C. Pedersen, Ph.D. Gosavi is part of the collaborative crystallography group, which provides support to a variety of intramural research projects including DNA repair, endocrine disruption and health effects of allergens. This April, after five years as a postdoctoral fellow, Gosavi became a research fellow in Pedersen’s lab.

Recently, Gosavi’s structural work with estrogen metabolizing enzymes showed how brominated flame retardants and their metabolites mimic binding of natural estrogen to the enzyme. His study , in

collaboration with NIEHS Director Linda Birnbaum, Ph.D., highlights the endocrine-disrupting potential of these chemicals.

Gosavi has seen how his and others' work at NIEHS will be essential to tackling emerging global environmental health problems. "Before I came to the United States, I would have never thought that allergens and flame retardants were a problem in India," said Gosavi. "Since then, I've learned of the prevalence of everyday chemicals around the world, including problems in India, and their adverse health effects. My work is contributing to our understanding of these chemicals and why we should be concerned about them."

With his previous experience in chemical engineering and newfound knowledge of structural biology, Gosavi hopes to enter into the world of drug discovery after his fellowship at NIEHS. "NIEHS is an amazing place to tackle global environmental health issues because you can collaborate with some of the best minds in the field," said Gosavi.