

SWOSU's Tim Hubin Wins Prestigious Henry Dreyfus Teacher Scholar Award

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Southwestern Oklahoma State University Bernhardt Associate Professor of Chemistry Tim Hubin, whose work centers on developing metal-containing drug molecules to fight cancer and HIV, has received a Henry Dreyfus Teacher-Scholar Award from the Camille and Henry Dreyfus Foundation, Inc., in New York City.

The prestigious honor is a \$60,000 award, and only six faculty around the nation are chosen each year for the highly competitive award.

The Henry Dreyfus teacher-scholar program supports the research and teaching careers of talented young chemistry faculty at United States colleges and universities that offer bachelor or master's degrees in the chemical sciences.

"I am humbled to be recognized with this nationally competitive award," Hubin said. "I see it as an endorsement of the Chemistry Department here at SWOSU in Weatherford.

It encourages me to keep working harder than ever to prepare SWOSU students as skilled, creative chemists."

Hubin said he will use the Henry Dreyfus Teacher-Scholar Award to support aspects of his cancer and HIV research, which is done in collaboration with researchers in Great Britain and Belgium. The grant will ensure his ability to do research full-time in the summer for the next several years.

He will also use part of the award to support his newly-established collaborative work with SWOSU Associate Professor of Medicinal Chemistry Faruk Khan on anti-malarial, anti-fungal and anti-leishmanial compounds.

"Faruk and I have independently developed similar macrocyclic molecules," Hubin said.

"We decided to pool our resources and test each other's compounds in all relevant disease models, with several potent lead compounds identified."

And, Hubin will continue to develop a new oxidation catalysis project with a collaborator in China. He said early screening reactions have already identified a number of active catalysts.

Hubin said being a teacher-scholar means that research and teaching frequently complement each other in the lab and in the classroom, citing his Advanced Inorganic Chemistry course as an example. In the lecture, Hubin uses his anti-cancer research to highlight inorganic medicinal compounds when teaching a bio-inorganic chemistry unit. He also presents his work on oxidation catalysts during the catalysis unit. The accompanying laboratory course provides a mini-research experience for students, as they synthesize and characterize novel macrocyclic metal complexes.

"We've already published one peer-reviewed paper on the students' results with the entire class as co-authors and there is data for multiple other papers that I haven't had time to fully write up yet," Hubin said. "The student response to bringing research into the classroom has been very enthusiastic, and many of these lab students have gone on to PhD programs after graduating from SWOSU."

Hubin joined the SWOSU faculty in 2005. He said student researchers are essential to his research, and SWOSU students have constantly impressed him with their ability to connect with science on numerous levels.

“We are extremely privileged at SWOSU to have such a strong culture of student-faculty research in the sciences,” Hubin said. “I have mentored 29 undergraduate student researchers since arriving at SWOSU. They’ve all played important roles in advancing projects, and I hope they all value their experiences as much as I value their contributions.”

Hubin thanked SWOSU Provost Blake Sonobe for nominating him for the award and his wife, Becki, for her years of support for his research efforts.

Selection for the Henry Dreyfus Teacher-Scholar Award is based on accomplishment in scholarly research with undergraduates, as well as a demonstrated excellence in teaching. Other winners this year include chemistry faculty from Furman University, Lafayette College, Savannah State, University of San Diego, University of South Alabama, and University of Wisconsin-Eau Claire.