

2014 WCC Rising Stars—Continued

Continued from Page 8

Liz, who grew up in Canada, earned a BS degree in chemistry, with honors, from Acadia University in Nova Scotia in 1997. She elected to further her education in the US, completing a PhD in chemistry at Boston College in 2002, followed by three years as a post-doctoral fellow at Harvard University. In 2005, she joined the Department of Chemistry at the University of California, Irvine (UCI) as an Assistant Professor, rising to the rank of Associate Professor in 2012.

At UCI, *Liz* leads a dynamic research group engaged in mechanism-based design of new reactions using organometallic catalysts and applying these transformations to complex target-oriented syntheses. In a collaborative effort with UCI Medical School researchers, new com-

pounds produced in her group having structural similarity to agents with known biological activity are tested for effectiveness against certain cancer cell lines. What *Liz* says she most enjoys about her current role is “working with talented graduate students and getting to ask questions about reaction mechanisms.”

According to *Liz*, she has benefited from a number of “fantastic mentors” throughout her professional development. She specifically named Prof. Scott Miller (her PhD advisor), Eric Jacobsen (her postdoctoral advisor) as well as Prof. Mike Kerr and Prof. Youla Tsantrizos (her undergraduate research advisors). She credits them with teaching her numerous lessons about conducting research “from the virtues of running a proper control experiment to how to choose and dissect problems.”

2014 Cope Scholar

Prof. Abigail Doyle

By Alice Lurain

Prof. Abigail G. Doyle received the 2014 Arthur C. Cope Early Career Scholars Award sponsored by the Arthur C. Cope Fund for her “discovery of mechanistically novel and synthetically useful methods for selective, catalytic C–C and C–F bond formation.” This award is designed to recognize and encourage the excellent work in organic chemistry by researchers who have fewer than 10 years of experience since their terminal degrees.

Prof. Doyle earned her undergraduate and master degrees in Chemistry and Chemical Biology from Harvard University in 2002. She began her doctoral studies at Stanford University developing gold catalysts for the hydration of unactivated alkenes in the laboratory of Prof. Justin Du Bois, and then returned to Harvard in 2003 to join Prof. Eric Jacobsen’s group.

Her research there included the discovery of a transition metal-catalyzed enantioselective alkylation of tributyltin enolates with alkyl halides and the development of a thiourea catalyst for enantioselective nucleophilic additions to prochiral oxocarbenium ions. A native of Princeton, NJ, she has been an Assistant Professor in the Department of Chemistry at Princeton University since July 2008.

As part of the Cope Scholars Symposium at the Fall 2014 National Meeting in San Francisco, *Prof. Doyle* presented a talk entitled “New reagents and strategies for catalytic nucleophilic fluorination.” She highlighted the importance of fluorinated organic molecules in medical, agrochemical and materials applications due to the unique chemistry of these compounds, while noting the relative paucity of practical synthetic methods for carbon-fluorine bond formation.