

## Andres awarded New Investigator Best Paper

By Qing Xu

Sara Andres, Ph.D., visiting fellow in the Genome Stability Structural Biology Group led by Scott Williams, Ph.D., received the 2014 New Investigator Best Paper Award from the Environmental Mutagenesis and Genomics Society (EMGS), in late April.

The editorial board of the society's journal, *Environmental and Molecular Mutagenesis*, earlier chose Andres' paper, "[Recognition and Repair of Chemically Heterogeneous Structures at DNA Ends](#)," as the Editor's Choice article, when it was published in the January 2015 issue.

EMGS was founded in 1969 to provide support to scientists in the field of environmental mutagenesis. The award includes a \$250 cash prize, free registration to the 2015 annual meeting, and a one-year membership in the society.

### Great exposure for a new team

Lead author Andres said the award reflects the work of the whole lab, which investigates DNA damage and repair. "The award is the result of a full team effort," Andres said. "Every author on that paper contributed to the end result, so the award is really a reflection of the amazing people I get to work with every day. Scott's lab is relatively new, so to be able to garner recognition for our work is great exposure for all of us."

According to Andres, EMGS invited Williams to write a review, so the paper addresses one of the lab's main focus areas — discovering how damaged DNA ends are resolved in cells. "Sara has done excellent work here studying the role of the Ctp1 protein in DNA repair, so I asked her to take the lead on the review article," said Williams.

DNA breaks, whether spontaneous or induced by stressors, such as radiation and chemicals, are like a chemical mess that needs to be cleansed before they can be properly repaired, Andres explained. So the paper provides an extensive overview of cellular responders that detect and repair the heterogeneous DNA ends.

"We hope the paper will provide another perspective on DNA damage and become a reference point for professors in a classroom, new graduate students learning about the DNA repair field, or any researcher wishing to know more about resolution of DNA damage," she said.

Andres received her Ph.D. from McMaster University in Canada, where she studied DNA repair and structure-function with Murray Junop, Ph.D. "I have been very fortunate to continue studying DNA repair at NIEHS, where I am surrounded by leading experts in my field," she said.

*Citation:* Andres SN, Schellenberg MJ, Wallace BD, Tumbale P, Williams RS. 2015. Recognition and repair of chemically heterogeneous structures at DNA ends. *Environ Mol Mutagen* 56(1):1-21.

(Qing Xu is a biologist in the NIEHS Metabolism, Genes, and Environment Group.)



*Andres is looking forward to attending the 2015 EMGS conference and sharing her work with a larger audience. (Photo courtesy of Steve McCaw)*



*Williams, who holds a secondary appointment in the Signal Transduction Laboratory, studies the mechanisms through which DNA breaks are recognized and repaired in cells. (Photo courtesy of Steve McCaw)*

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