

THE SCHLIEREN

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Faculty Spotlight: Dr. Scott Williams

Interview by Katherine Valentine '14

Dr. Scott Williams began his RIT career in 1994 teaching imaging chemistry and optics for CIAS, and occasionally teaching classes for the Chemistry Department. In 1998 he took a leave of absence to be a Director of Research for a Pennsylvania company that made ink jet printable iron-on transfers for t-shirts. Then in 2000, Dr Williams taught in South Dakota as a professor of physical chemistry before returning to RIT in 2003. Currently, Dr. Williams is teaching for Print Media until he transfers to the Chemistry Department next year as a full-time faculty member, teaching physical and inorganic chemistry. So ChemClub thought this would be a great opportunity for everyone to learn a little bit more about a professor many of us are likely to have in the future! Here is what he had to say:

[KV] What kind of research in chemistry are you working on right now?

[SW] I am working on finding an analytical procedure to determine counterfeit pharmaceuticals.

[KV] When did you know you wanted to go into chemistry?

[SW] I have always loved chemistry ever since I received my first chemistry set when I was 8.

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In Memoriam: Dr. Ed Cain

Dr. Edward Cain, professor emeritus in the Chemistry Department, passed away Jan. 12. Professor Cain enjoyed a career at RIT that spanned more than 30 years. He joined RIT in 1974 as assistant professor and chairperson of NTID's science support team. In 1980, he transferred to RIT's chemistry department as an associate professor and assistant department head. He was promoted to professor in 1984 and retired in 2005 as professor emeritus.



In 1980, he received the Eisenhart Award for Outstanding Teaching and the Gamma Epsilon Tau Outstanding Teaching Award and honorary membership in 1982. He taught general chemistry to a wide range of students and his devotion to his students is well known. In addition to his teaching duties, he was an expert in curriculum development. He wrote *The Basics of Technical Communicating* for the American Chemical Society, published several journal articles and was a member of many professional organizations. He was also profiled in *Who's Who in Science Education*.

Professor Cain was a grader for Advanced Placement chemistry exams for six years, a proposal reviewer for the National Science Foundation and a manuscript reviewer for scientific publications and book publishers. He enjoyed traveling to Australia, Wales, Hawaii, the Caribbean, and throughout the United States. Locally, he served as a scorekeeper for euchre tournaments and as an election inspector. He was also active with OASIS, an organization devoted to providing activities for seniors.



[KV] Do you have any quirky things that you do in the lab in order to get good results?

[SW] I find that the best results in lab happen while playing the blues.

[KV] Do you have any hobbies?

[SW] I play guitar, mostly the blues. I like being outdoors, like hiking, camping, and canoeing. Also I am an amateur radio operator for WOCMA.

[KV] Any words of advice for budding chemists?

[SW] Keep your options open.

[KV] If you couldn't be a chemist what would you be?

[SW] I would be playing guitar in a broken down bar somewhere in Louisiana.

[KV] What is your favorite book?

[SW] The Wolf at Twilight by Kent Nerburn

Where are they now?

Ray Pauszek '07 is currently a graduate student in Dr. Bob Stanley's group at Temple University studying the excited state landscapes of DNA-repairing enzymes. He is excited to finish his degree and pursue a career in HIV research post-grad.

Andrew Field '08 completed his Master's degree at UCSD, submitted a paper to biochemistry, and moved cross-state to Santa Cruz to start his PhD in their Biomedical Science and Engineering Program.

Chemistry Humor

Q: Did you hear about the scarecrow that won a Nobel Prize?

A: He was out standing in his field!

Student in the Hood:

KIMBRIA BLAKE '14

Interview by Sofiya Hlynchuk '14

Major: Biochemistry

Mentor: Dr. Suzanne O'Handley

Kimbria is a first-year biochemistry major from Bainbridge, Ohio who's very excited to be able to conduct independent research as a freshman. The undergraduate research program was one of the reasons why she decided to attend RIT.

Kimbria became involved in research this past summer when she participated in the four week RIT Fast Forward Summer Research program. This opportunity was a great way to get her interested in biochemistry and research early in her academic career. This opportunity made continuing the research during her first quarter a much easier transition.



Kimbria is one of three students working with Dr. Suzanne O'Handley. She is characterizing an enzyme, PHO 13, that could potentially be a novel antibiotic target. Some of her tasks involve performing pH and metal testing. The metal tests that she performs often involve using magnesium at different concentrations and observing the enzyme's response. By performing this test she is able to determine the optimal metal concentration for the enzyme PHO13. When asked what her favorite experiment was she eagerly answered "I love performing metal tests and can't wait until I will be able to perform kinetics tests on the enzyme as well".

Besides being involved in the undergraduate research, Kimbria takes an active role outside the classroom as well. She is a member of the Intervarsity Christian Fellowship Organization and the RIT's Hooks and Needles Club. Thanks for catching up with us Kimbria. Good luck with your research!

CHEMISTRY NEWS AND EVENTS

Outstanding Scholar: Congratulations are in order for Sebastian Ramirez '11 for being chosen as a 2011 RIT Outstanding Undergraduate Scholar.

ACS Travel Grants to present at the national ASBMB meeting in April in Washington, DC were recently awarded to Sebastian Ramirez '11 and Alejandra Rizo-Patron '11 and Amanda Fisher '12. Only 20 of these awards are given out in the entire country and they received 3 of them, go RIT!

Pasto Award Winners: Andrew Pinkham '12 and Katryna Pellingra '11 were both recipients of this year's Pasto Award. This award was established in March, 2000 and is awarded to an outstanding student in the Department of Chemistry to complete a research co-op within the department. Andrew will conduct his research with Dr. Thomas Kim and Katryna will conduct her research with Dr. Joseph Hornak.

Microbes for Valentine's Day: ASBMB student affiliates will be selling giant microbes for Valentine's Day with a "valentine's day theme"

Friday Feb. 11th: 9 am to 5 pm in front of the digital den in the SAU

Monday Feb. 14th: 9 am to 5 pm in the SAU lobby
the original sized microbes are \$10 each
the small ones are \$5 each

Available: Mono, Herpes, Egg and Sperm, HIV, and other valentine's day themed microbes

To see what they look like

visit <http://www.giantmicrobes.com/>

Congratulations Amelia McMullen for acceptance to the NASA USRP program. Amelia will participate in this summer program conducting research at Langley Research Center in VA, on "boron nitride nanotube development".

Faculty Activity: Dr Paul Craig recently co-lead the SBEVSL project with Herbert Bernstein, Professor of Computer Science at Dowling College in Long Island; SBEVSL stands for Structural Biology Extensible Visualization Scripting Language. The goal of their project is to develop and enhance software for structural biology and then to use that software to ask and answer interesting questions about the protein structures that have known 3D coordinates.

Dr. Craig also recently published two papers:

Scott Mottarella*, Mario Rosa*, Abdul Bangura*, Herbert Bernstein, Paul A. Craig. ConSCRIPT: A Rasmol to PyMOL Script Converter. *Biochemistry and Molecular Biology Education*, 38: 419-422 (2010). Note: This is one of two papers that have been published from the SBEVSL project to date.

Paul A. Craig, Elizabeth Federici*, Marianne Buehler. Instructing Students in Academic Integrity. *Journal of College Science Teaching*, 40:50-55 (2010)

Laser Sale: HOGS is now selling lasers! The gmail address for anyone that wants one would be: Hogs.Lasers@gmail.com and the prices are 15 for GREEN lasers and 20 for PURPLE lasers!

Archive Photo:



2009 ACS National Meeting Washington, DC. From left to right: Josh Thomson '10, Regina Puts MS'10, Sebastian Ramirez '11, and Sean Culver '11

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