

CANISIUS CHEMISTRY and BIOCHEMISTRY Newsletter

March 2010

Message from the Chair

Greetings to all Griffin Chemists and **Biochemists!**

It has been two years since our last newsletter. Recent editorial changes resulted in this longer than usual hiatus. After many years at the helm, Professor Emeritus Jim Van Verth passed the editorial baton to the next generation of chemistry faculty. Thanks to Professor Pete Schaber for graciously agreeing to serve as the newsletter editor and many thanks to Jim for all his creative work on past newsletters.

Even though the economy went through drastic changes in the last two years, the Department continues to function normally. Our majors continue to be actively engaged in a wide diversity of research projects with faculty in the Department, and 11 students presented the results of their research at the National Meeting of the ACS in Salt Lake City in March '09. The Department produced a high number of new graduates, 24 in 2008 (18 in biochemistry, 6 in chemistry) and 19 in 2009 (9 in biochemistry, 10 in chemistry). We expect 20 new graduates in 2010, 8 in biochemistry and 12 in chemistry. There are more details about our graduates later in this newsletter.

Without doubt the most important news in this newsletter is the retirement of Professor Frank Dinan, who after having taught organic chemistry to Canisius students since 1965, must be well known to all readers of the newsletter who were born after the Second World War. Fall 2009 was Frank's

last semester as a full time professor at Canisius. He will be missed by all of us here, but we will not let him go without a party. The party began in New York City in November, when the Yankees won the 2009 World Series, and will continue in Buffalo in May. There is more information about Frank's retirement later in the newsletter.

The last two years have been exciting years for our faculty. Frank Dinan and Mary O'Sullivan swept the first two College of Arts and Sciences Full-time Faculty Teaching Awards. Frank the first in 2008 and Mary the second in 2009, while I was awarded the first College of Arts and Sciences Faculty Service Award in 2008.

As always, thanks to all who have financially supported the Department. Please consider further supporting our student research and academic scholarships, as well as the chemistry equipment in the new Science Hall. The Department would not exist as a community without the wonderful interactions we have with our alumni, so please continue to support the Canisius Chemistry and Biochemistry Newsletter by keeping us up to date with events in your lives and by submitting information that you think would be of interest to our community.

Keep in touch!

Mariusz Kozik, Professor and Department Chair

New Faculty

We are delighted to welcome a new member to the chemistry/biochemistry faculty:

Kristina Marohn



"Krit" as she likes to be called, serves as our General Chemistry Laboratory Coordinator. She holds a Master of Science degree from SUNY at Fredonia and was an Associate Engineer at AVOX Systems. Krit started teaching our freshman-level general chemistry laboratory classes in Fall 2009.

Crowdle Award

Gerald Zon, Ph.D., class of 1967, was the recipient of the 9th James H. Crowdle Memorial Award for Distinction in Chemistry. Dr. Zon was honored for his contributions to the field of medicinal chemistry. As part of the award celebration he delivered a lecture that described his career path from academia to government to industry. Following the lecture more than 60 guests, including faculty, staff, students, and alumni, attended a banquet in his honor. The Crowdle Award was established in 1970 by the Student Affiliate Chapter of the ACS at Canisius to honor Dr. James Crowdle and recognize outstanding achievements of alumni in the field of chemistry.



Ryan Campagna '10, President of SCACS, presents the Crowdle Award citation to Dr. Gerald Zon '67.

Student Chapter of the American Chemical Society

The Canisius Student Chapter of the ACS was the recipient of two awards for the 2007 – 2008 academic year. The chapter received a commendable award based on its general activities and a Green Chemistry Award, for the chapter's efforts to promote green chemistry. In March of 2009, several members of SCACS attended the award ceremony at the 237th ACS National Meeting & Exposition in Salt Lake City.



Ryan Campagna '10, Andy Kauffmann '11, Chantal Bartels '09 and Mark Makar '10 at the award ceremony.

Student Affiliate Chapter of the American Chemical Society; Facebook

The Student Affiliate Chapter of the American Chemical Society has created a Facebook page to keep all Canisius College Chemistry and Biochemistry alumni better connected and informed of departmental events. If you are on Facebook, please consider adding Scacs Canisius as a friend.

Canisius College Science Summer Camp

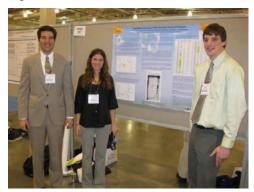
This summer marked the 9th year of the annual Canisius College Summer Science Camp. Nearly 200 middle school students spent a week on campus participating in hands-on activities that involved building radios and simple motors, investigating simple machines and the five senses, as well as constructing and launching pop bottle rockets. With funding from a newly awarded grant from the John R. Oishei Foundation, planning for the 10th year is currently underway. More information about the camp can be found at http://www3.canisius.edu/~szczepas/Camp/s sc.html.



Science Campers pose in front of Lyons Hall with their pop bottle rockets.

News from the Childs-Disney Lab

The Childs-Disney Lab had another great year studying RNA secondary structure. Chantal Bartels (Biochemistry, '09), Ryan Campagna (Biochemistry, '10), and Andrew Kauffmann (Chemistry & Biochemistry, '11) presented their work at the 237th National Meeting of the American Chemical Society in Salt Lake City. They also published the lab's first peer reviewed article in Nucleic Acids Research. The article is available for free download at: http://nar.oxfordjournals.org/cgi/screenpdf/g kp587v1. They are continuing their work on a subclass of RNAs that regulate gene expression and continuing to study how oligonucleotides bind to unstructured regions in these RNAs.



Ryan Campagna (Biochemistry, '10), Chantal Bartels (Biochemistry '09), and Andrew Kauffmann (Chemistry & Biochemistry, '11) presenting their research at the 237th National Meeting of the American Chemical Society in Salt Lake City. Canisius Chemistry and Biochemistry Students' Presentations at the 237th American Chemical Society Meeting in Salt Lake City, UT, March, 2009

Mark Saric, Thomas Edd (Dr. M. O'Sullivan) "Synthesis of spermidine and spermine derivatives as potential inhibitors of *Trypanosoma cruzi* trypanothione reductase".

Mark Makar, Kyle Malstrom (Drs. M. Kozik, S. Szczepankiewicz) "Direct NMR evidence for bromide ion coordination to transition metal substituted polyoxometalates in nonpolar solvents".

Christopher Mekelburg (Dr. S.

Szczepankiewicz) "Another look at the fizz keeper: a case study laboratory exercise for high school students".

Ryan Campagna, Chantal Bartels, Andrew Kauffmann (Dr. J. Childs-Disney) "Using RNase H to improve RNA secondary structure prediction".

Mark Farrugia, John Frost (Dr. T.

Gregg) "Steric and electronic effects of substituents on the rate of allene cyclopropanation".

Michael St. Phillips (Drs. F. Dinan, P.

Schaber) "Juicing the juice: a laboratory based case study for analytical and general chemistry courses".

Class of 2008

Sadie Antunes, BS (Chem) is seeking available opportunities in chemistry.

Roanna Ayers, BS (Biochem) is enrolled in Nursing School at Regis University in Colorado.

Amy DeLuca, BS (Chem) is working in sales and marketing in a pharmaceutical company.

Katie Ferguson, BS (Biochem) is attending pharmacy school at the University of Maryland, Baltimore.

Cerrene Giordano, BS (Chem) is continuing her studies in medical school at the University at Buffalo.

Kristina Grove, BS (Biochem) is continuing her studies in the pharmacy program at the University at Buffalo.

Mallory Hardick, BS (Biochem) is seeking available opportunities in the biochemistry area.

Sarah Hirschbeck, BS (Biochem) is attending medical school at the University at Buffalo.

Ian Horner, BS (Chem) is currently applying to the PhD program in chemistry at the University at Buffalo.

Stephanie Kalisz, BS (Biochem) is continuing her studies in pharmacy at the University at Buffalo.

Kapoor Sunjay, BS (Biochem) no information available.

Carolyn Landers, BS (Biochem) is attending pharmacy school at Midwestern University.

Dan Lysiak, BS (Biochem) is a drug representative working for Eli Lilly.

Julie Miaczynski, BS (Chem) is continuing her studies at the Loyola University of Chicago Medical School.

Andrew Minkel, BS (Biochem) has been enrolled in the MBA program at Canisius College.

Adam Pendleton, BS (Biochem) enrolled in the MBA program at Canisius College; he is currently beginning his studies in medical school at Creighton University.

Shane Poplawski, BS (Biochem) has a graduate fellowship in the PhD program in pharmacology at the University of Pennsylvania.

Jonathan Schwarz, BS (Biochem) is serving as an officer in th U.S. Army. He is currently on duty in Afganistan. We all wish him well and safe return.

Janelle Tryjankowski, BS (Biochem) spent time studying in Mexico and applying for a Fulbright Scholarship to study in Germany. She plans on applying to medical school after completion of her studies abroad.

Christian Volk, BS (Biochem) is applying to pharmacy doctorial programs.

Andrew Welka, BS (Biochem) is continuing his studies in medical school at the New York College of Medicine.

Ann Wojtaszczyk, BS (Biochem) is attending medical school at the University at Buffalo.

Huimei Zheng, BS (Biochem) has a graduate fellowship in the PhD program in Biomedical Sciences, at Upstate Medical School.

Christopher Szefler, BS (Chem) is employed in the local chemical industry.

Class of 2009

Jane Arcadi, BS (Chem) is attending medical school at the University at Buffalo.

Chantal Bartels, BS (Biochem) has begun her studies in medicine at the University at Buffalo.

Derrick Carlson, BS (Chem) is a graduate student in Environmental Engineering (M.Sc. program) at Carnegie Mellon University.

Alan Champagne, BS (Biochem) has attended graduate school in education at the University at Buffalo and is currently seeking employment in the industrial sector.

Christian Cordaro, BS (Biochem) is currently seeking admission to medical school.

Tom Dobmeier, BS (Chem) is beginning his studies in dental school at the University at Buffalo.

Mark Farrugia, BS (Chem) is enrolled in the MD/PhD program, at the West Virginia University Medical School.

Brian Fluharty, BS (Biochem) has a graduate fellowship in the PhD program in Biological Chemistry at Boston University.

Chad Froebel, BS (Chem) is attending dental school at the University at Buffalo.

John Frost, BS (Chem) has a graduate fellowship in the PhD program in chemistry at the University of Rochester.

Joseph Kelly, BS (Chem) is attending the Lake Erie College of Osteopathic Medicine.

Tara Kurasiewicz, BS (Biochem) is enrolled in pharmacy school at the University at Buffalo.

Julie Nichols, BS (Biochem) is currently seeking admission to medical school.

Diana Schiedo, BS (Biochem) is seeking opportunities at the graduate level in education.

Charlotte Scythes, BS (Biochem) has enrolled in the MBA program at Canisius College, and is working as a graduate assistant in the Economics/Finance Dept. She is planning to go to Law School.

Melissa Sebastiano, BS (Biochem) will apply to pharmacy school this year.

Hargun Singh, BS (Chem) is beginning her studies in dentistry at the University at Buffalo.

Michael St. Phillips, BS (Chem) has a graduate fellowship in the PhD program in chemistry at the University of Rochester.

Brian Tyler, BS (Chem.) is enrolled in the PhD program in chemistry at Brown University supported by a graduate fellowship.

Recent Peer-reviewed Publications (* students)

Journal: Organic Letters Title: Rhodium-mediated enantioselective cyclopropanation of allenes. Authors: Timothy M. Gregg, Mark K. Farrugia and John R. Frost. Citation: Gregg, T. M.; Farrugia, M. K.; Frost, J. R., *Org. Lett.* 2009, *11*, 4434-4436. Journal: Nucleic Acids Research

Title: Improvement of RNA secondary structure prediction using RNase H cleavage and randomized oligonucleotides.

Authors: Andrew D. Kauffmann*, Ryan J. Campagna*, Chantal B. Bartels* and Jessica L. Childs-Disney.

Citation: Nucleic Acids Research, doi:10.1093/nar/gkp587.

Journal: Journal of Physical Chemistry **Title:** Optical-optical double resonance spectroscopy of the $C^2\Pi - A^2\Pi$ and $D^2\Sigma^+ - A^2\Pi$ transitions of SrF. **Authors:** P. M. Sheridan, J.-G. Wang, M. J.

Citation: J. Phys. Chem A 2009, 113,

13383-13389.

Dr. Frank Dinan's Retirement Party



Date: Saturday, May 8, 2010 Time: 6:00 PM Place: Canisius College, Regis Rooms

Please save the date; it promises to be a great time for all. For more information you can contact Dr. Joe Bieron (the party coordinator) at 716-888-2357 or via e-mail at <u>bieron@canisius.edu</u>. Hope to see you there.

Keep in touch

Your classmates and former teachers would like to know what you are doing these days. Please send us a brief report on your activities, accomplishments, career, lifestyle, etc. and any address changes. You may use the form on the next page, or e-mail to the address given on that page.

Canisius Chemistry/Biochemistry Alumni Information Form

You may use the form below for address changes and to keep us informed of your activities. Please provide us with this information even if you have already sent it to the Canisius Alumni Office, since we are making an effort to maintain an accurate independent database of all chemistry/biochemistry alumni. Return to: Peter M. Schaber, Department of Chemistry and Biochemistry, Canisius College, 2001 Main St., Buffalo, NY 14208-1098, or send e-mail to: schaber@canisius.edu.

Name

(Include a	ny title and/o	or degree voi	ı would like us	to use for mailing)
(include u	ing the und (n degree you	a would like us	to use for manning)

Name while at Canisius, if different_____

Is your address correct? If not, what is your preferred mailing address?

Please provide your E-mail address:

Canisius degree(s) and years(s)

Other degree(s), year(s), and granting institution(s)

Most recent position and company (indicate if retired)

What news do you have for the next issue of the newsletter? Keep us in touch with your activities, accomplishments, career, lifestyle changes, avocations, news of classmates, etc.

Collaboration Faculty: Dr. Roberto Gregorius.



Dr. Roberto Gregorius joined Canisius College in August of 2008. While his home department is Adolescence Education where he teaches science education methods for prospective high school teachers, he also participates in the Department of Chemistry and Biochemistry, teaching CHM 111/112 and, soon, Polymer Chemistry. Dr. Gregorius is particularly interested in developing advanced methods of teaching science and is collaborating with other faculty members at the college, including Phil Sheridan and Steve Szczepankiewicz. They are looking into developing effective learning modules (using Flash) to allow students to guide themselves, teach each other, and focus on conceptual learning in General Chemistry.

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