

The TarHelium



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September 2011



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Editor

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Secretary & Address Information



NC-ACS EXECUTIVE COMMITTEE

K. Tomer, *Chair*
K. Levine, *Chair-Elect*
M. Pasquinelli, *Secretary*
J. T. Bursey, *Treasurer*

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Notes from the Chair: Ken Tomer



It's hard to believe that summer is almost over. But with undergraduates heading back to the universities and public schools and traditional calendars starting up again, summer must be winding down. BUT, as summer winds down, the Fall NC-ACS activities will start up. The main item on our Fall agenda is the Local Section meeting which will be held on September 30th this year at NCSU (plenty of nearby parking). This meeting traditionally has very good attendance and includes food, beverages, approximately 100 posters, a distinguished lecturer, and poster awards. Did I mention food and beverages? For more details, have a look at the flyer on page 3 in this issue of the *TarHelium*.

As part of our continuing sponsorship of joint meetings this year with our Discussion Groups, we are sponsoring the September 14th Meeting of the

[Triangle Area Mass Spectrometry \(TAMS\) Discussion Group](#). The speaker is Dr. Andy Hoofnagle from the University of Washington who will be speaking on clinical protein analysis. TAMS meetings are held at 6–8 p.m. at the Ruvane auditorium, GSK Campus (Moore Dr. off of TW Alexander in RTP). Food and soft drinks are provided.

Fall is also time for the Section's annual elections. There is a call for nominations in this issue and the elections will be held electronically in November. On a less pleasant note, due to changes in demographics, we have been reduced to five Councilors and five Alternate Councilors this year, a loss of one Councilor and one Alternate Councilor position. Please encourage any chemists you know who are not members, or have let their membership lapse, to join or rejoin. The ACS has a number of activities to help both employed and unemployed chemists.

Since the last issue of the *TarHelium*, the Section sponsored a well-attended dinner meeting in May at [Mez Contemporary Mexican Restaurant](#). Dr. Lawrence Lazarus, NIEHS, gave a very enthusiastic presentation, "Color and Visual Perception

in Art: Chemical and Physical Analyses, Neuroscience Insights and the Psychology of Art."

Planning is well underway for the 2012 SouthEastern Regional Meeting of the American Chemical Society ([SERMACS 2012](#)) which will be held at the [Raleigh Convention Center](#) in November 2012. Meanwhile, [SERMACS 2011](#) will be held in Richmond, VA.

Kudos to our four new ACS Fellows: Prof. Al Crumbliss, Duke University; Prof. Mike Ramsey, UNC; Prof. Al Tonelli, NCSU; and Prof. Orlin Velev, NCSU. This is high acknowledgment of their scientific achievements, professional contributions, and ACS service.

Congratulations also to Dr. Myra Halpin, NCSSM, who serves on the National Committee which will host the 2012 International Chemistry Olympiad to be held in Maryland. She has organized the local Chemistry Olympiad for a number of years, and I want to thank her from the Section for her exceptional ongoing efforts.

Hope to see you at the Fall Section Meeting!

Ken



Editor's Note:

Please see page 11 for notes on the new newsletter format. As always: your feedback is welcomed!

Volunteers Needed for National Chemistry Week Activities

—Contributed by James Harrington



The NC-ACS is currently planning the National Chemistry Week activities for this coming year. We are recruiting volunteers who would be interested in presenting displays or stage presentations at museums that speak to the theme of this year, “**Chemistry—Our Health, Our Future.**” There are two activities planned during the week. The first activity will take place on Saturday, October 15 from 12 noon–5 p.m. at the [North Carolina Museum of Natural Sciences](#) in Raleigh. The format of displays will include table displays and 30-minute demonstration shows on a stage. We would like volunteers for both.

The second activity will take place at the [North Carolina Museum of Life and Science](#) in Durham, NC, on Saturday, October 22 from 10 a.m.–3 p.m. The format of displays will include a series of 30-minute interactive laboratory sessions, 30-45 minute classroom group activities, and table demonstrations. We would like volunteers for all.

We are especially interested in having enthusiastic, excited presenters who can speak to the chemistry of health, medicine, nutrition, and hygiene, and make it accessible to learners of all ages. If you are interested in presenting displays at either activity (or both), have suggestions for additional activities, or would like additional information, please contact James Harrington via [email](#) or by phone at 919-513-3668. Thank you, and we look forward to seeing you!

NC-ACS Not Participating in State Fair 2011

—Contributed by Bill Switzer

I regret that the NC-ACS will not be participating in the State Fair this year. The organizers changed the nature of the exhibit and want exhibitors who emphasize only their agricultural connection. I appreciate your help last year. The Section will be participating in events at the North Carolina Museum of Natural Sciences in Raleigh on October 15 and the North Carolina Museum of Life and Science in Durham on October 22.

NC-ACS Local Section Executive Committee Meetings

The NC-ACS Local Section Executive Committee meets on the first Wednesday of every month. Meeting dates are: October 5, November 2, December 7, January 4, February 1, March 7, April 4, May 2, and June 6. Meetings are held at the Hamner Institute in the Research Triangle Park at 4:30 p.m. All members are welcome and encouraged to attend! Get to know your Executive Committee! Get involved! Volunteer!

Address:

The Hamner Institutes for Health Sciences
6 Davis Drive
PO Box 12138
Research Triangle Park, NC 27709-2137

Directions:

Coming from I-40 West: Exit 280 Davis Drive, right onto Davis Drive. The Hamner Institute is the second campus on the left. There is a left turn lane here.

Coming from I-40 East: Exit 280 Davis Drive, right onto Davis Drive. Continue through one stoplight. The Hamner Institute is the second campus on the left. There is a left turn lane here.

THE TARHELIUM

The TarHelium is a publication of the North Carolina Section of the American Chemical Society (NC-ACS) and is published on a quarterly basis. The newsletter can be viewed at <http://ncacs.sites.acs.org/tarheliumnewsletter.htm>. The views expressed herein are not necessarily those of the Section. Public lectures and seminars, as well as announcements of interest to the ACS membership, will be listed as deemed appropriate by the editor and as space permits. Short commentaries or contributed articles will also be considered. Also, we are happy to publicize, free of charge, any job openings for chemists. We also accept paid advertisements for more extensive recruiting announcements.

Advertisers: Current ad prices for an entire year (4 issues) are: half page, \$200.00; quarter page, \$100.00; business-card size, \$50.00. Single issue prices are: half-page, \$100.00; quarter page, \$50.00; business-card size, \$25.00. Please send your *camera-ready* ad (preferably in .tif or .jpg format) to [Maria Francisco](#). Make checks payable to NC-ACS and mail to Dr. J. T. Bursey, 101 Longwood Pl., Chapel Hill NC 27514.



NC Section Electronic Communications

The NC-ACS offers two services which may be of interest to members: 1) a list server and 2) a web page: <http://ncacs.sites.acs.org/>.

The list server is used for ACS meeting announcements and for job announcements. Unlike some lists, the number of postings is quite limited—usually no more than 3 or 4 a month. This list is moderated, which means that all messages must be approved by the list owner before they are posted. If you have a valid opening within the NC Section, please mail an appropriate announcement to [Bill Switzer](#). Very occasionally, openings outside of the NC Section are posted. If you wish to subscribe, please address mail to: mj2@lists.ncsu.edu. The subject field is ignored, but in the message field, type: **subscribe NCACS**. Your return address becomes your subscription address. These instructions, as well as those for removing your name, are linked to the web page.

If you have not looked at the web page recently, please do so. The Executive Committee is committed to making this page a useful resource. It is constantly being updated to include new information. Please feel free to suggest additional links and PLEASE offer to take responsibility for maintaining one or more of the local links.



NC American Chemical Society 125th Local Section Conference

NC ACS Distinguished Lecturer: Dr. Nicholas Oberlies, Associate Professor, Medicinal Chemistry and Pharmacognosy, UNC Greensboro

Student Poster Session: High School, Undergraduate, & Graduate/Post Docs

Awards: Cash prizes for Student Posters, Marcus E. Hobbs Service Award, NC ACS 2011 Undergraduate Scholarship Awards, and more...

FRIDAY, SEPTEMBER 30, 2011

NCSU College of Textiles
Centennial Campus

1000 Main Campus Drive, Raleigh, NC 27606



Poster submission & to register:

<http://tinyurl.com/ncacs125Conference>

FREE Registration! FREE Food!

Call for NC-ACS Local Section Nominations

The Executive Committee of the North Carolina American Chemical Society (NC-ACS) is issuing a final call for officer nominations for the 2012 calendar year. All elected officers of the Section serve on the Executive Committee that normally meets on a monthly basis during the academic year.

Unfortunately, due to a change in section demographics, we are reduced to five Councilors and five Alternate Councilors, causing us to lose one Councilor and one Alternate Councilor. We have one Councilor and one Alternate Councilor rotating off the Executive Committee this year, and at this point, several alternatives are being discussed. As our Chair, Ken Tomer, mentioned in his lead article, the way to remedy this is to encourage your friends and colleagues to join, or if their memberships have lapsed, rejoin the ACS.

With that said, there are two positions open:

Chair-Elect (2-year term)

During the first year, the Chair-Elect organizes the Local Section Conference, assists the Chair with management of the Section, and represents the Chair in his/her absence. The Chair-Elect

then serves as Chair in the second year of the term.

Secretary (2-year term)

The Secretary keeps the Executive Committee organized by maintaining all current files and records of the Local Section.

Any active member may nominate themselves or any other active member for any of the positions noted. Please note: if you nominate another person, ensure that s/he is willing to be nominated and, if elected, serve in the position noted. We need your participation in the leadership of the section. Full job descriptions for each of these positions can be found on our website at: http://ncacs.sites.acs.org/ExecutiveCommittee/job_manual.html.

Please send names of nominees to [Marc ter Horst](#) by Monday, October 3, 2011. Biographical sketches of the candidates, as well as the Local Section ballot, will be published in the November issue of the *TarHelium*.



ACS
Chemistry for Life

The Virginia Section Hosts...

Rich in History

Rich in Science

Rich in Chemistry

SERMACS 2011

Richmond, Virginia

October 26-29, 2011

Charting Chemical Connections

www.sermacs2011.org

www.virginia.sites.acs.org

International Year of CHEMISTRY 2011

- Clicking the picture will take you to the SERMACS 2011 website.
- Please note that online abstracts can be submitted through September 20 at <http://abstracts.acs.org>
- Early registration for this conference continues through September 20. Online registration and list of fees can be found on the registration tab at <http://sermacs2011.org/registration/>
- Hotel reservations may be made by October 3, 2011, at discounted rates. The [Omni Richmond Hotel](#) is located in the historic Shockoe Bottom overlooking the scenic James River in the heart of Richmond's financial and historic districts.

NC-ACS to Host SERMACS in Raleigh November 2012

SERMACS 2012
The Southeastern Regional Meeting
of the American Chemical Society

Catalyzing Sustainable Innovation

14-17 November 2012
Raleigh Convention Center
Raleigh, North Carolina

Website: www.SERMACS2012.org available in 2011

SERMACS 2012
The Southeastern Regional Meeting
of the American Chemical Society

Catalyzing Sustainable Innovation

Symposia Highlights ♦ Energy and Sustainability ♦ Chemistry and Medicine ♦ Nanochemistry ♦ Chemical Biology ♦ Polymers ♦ Chemical Education ♦ Food and Agriculture ♦ Environment and Safety	VENDOR EXPOSITION	Other Events ♦ Awards Ceremony ♦ Workshops ♦ High School Program ♦ Project SEED ♦ Entrepreneurial Chemistry ♦ WCC & YCC
	SCI-MIX	
	GRADUATE FAIR	
	UNDERGRADUATE PROGRAM	
	SOCIAL NETWORKING	

14-17 November 2012, Raleigh Convention Center, Raleigh, North Carolina

NC-ACS will be hosting the Southeastern Regional Meeting of the ACS (SERMACS) November 14–17, 2012. The Planning Committee meets on the second Wednesday of each month in person at GlaxoSmithKline in RTP and online via WebEx (for those who want to attend remotely).

Volunteers are needed for the following positions:

- Fundraising
- Public relations
- Social Events
- Academic Exhibits

If you are interested in joining the organizing committee, please contact [Charlie Goss](#). Thank you!

The current Planning Committee members are listed in the table below:

Position	Name	Position	Name
General Chair	Charles A. Goss	Registration	Keith Dawes
Treasurer	Sol Levine	Webmaster	Dustin Wheeler
Program	Marc ter Horst	Program Book	Lyn Francisco
Symposia	Kenneth B. Tomer (Chair) Richard A. Palmer Alan Tonelli Ved Srivastava Danna Mattocks	Undergraduate Symposium	Dan Shin (Chair) W. Lin Coker, III Kassy Mies Jim Parise, Jr. Dan Barber
Commercial Exhibits	John W. Hines Reshan Fernando	ACS Meeting Planning Office	Michelle Stevenson
Unassigned	Steve Meyerhoffer Shri Kulkarni Melanie Silinski		

North Carolina Project SEED Program



[Project SEED](#), the American Chemical Society's social action program, places talented, disadvantaged high school students in academic, industrial, and

government research laboratories for 8-10 weeks during the summer to experience "hands-on" research. Each student completes a chemical research project under the supervision of a scientist/mentor (called a preceptor) and receives an educational award.

The goal of Project SEED is to help expand the career outlook of economically disadvantaged students. Since 1968, the Project SEED program has made it possible for more than 4,500 talented high school students to conduct research in local chemistry laboratories. The program consists of an 8-10 week summer science research project for the students with the majority of participants working in chemistry and chemistry-related sciences. The

students receive individual instruction under the direct supervision of scientists/preceptors in the laboratory. The preceptors serve as role models and encourage the students to learn about careers in chemistry.

Over the past 16 years, the North Carolina Section Project SEED program has served approximately 100 students with 96 percent attending college (100 percent over the last five years), 83 percent majoring in science or mathematics, 67 percent in chemistry, and 75 percent overall receiving full or partial scholarships. The average SAT score among current participants has been around 1200 (Verbal and Math). The Project SEED program has more underrepresented minorities as national winners than any program in the state and very possibly the country. Over the past five years, our students have placed and won 36 national awards in science competitions, including eight Siemens Westinghouse National Semifinalists and two Sigma Xi National First Place Winners. Our student participants have matriculated to in-state institutions such as North Carolina State University, University of North

Carolina at Chapel Hill, Wake Forest University, North Carolina Central University, Winston-Salem State University, East Carolina University, University of North Carolina at Greensboro, and North Carolina A&T State University. Out-of-state institutions include MIT, Stanford, Dartmouth, Princeton, University of Florida, University of Miami, Hampton University, Howard University, Morehouse College, Virginia Tech, and the University of Maryland, Baltimore County. Among our program alumni, we currently have nine students who were admitted to doctoral programs and a Phi Beta Kappa member. We have a demonstrated model that works in moving talented disadvantaged students into the sciences.



TAMS Fall Meeting and 2011-2012 Kick-Off

–Contributed by Ken Tomer

The [Triangle Area Mass Spectrometry Discussion Group \(TAMS\)](#) will be holding their 2011-2012 Kick-Off and Fall Meeting on Wednesday, September 14 at Ruvane Auditorium, GSK Facility from 6-8 pm. This event is co-sponsored by the NC-ACS.



The event starts off at 6:30 pm when Russell Grant will kick off the 2011-2012 year with his 2011 ASMS reflections and the 2011-2012 program to date.

Then at 7:00 pm, the guest lecturer, Andy Hoofnagle, M.D., Ph.D., will deliver his talk titled **"Novel Roles for Mass Spectrometry in the Clinical Laboratory."** Hoofnagle is Assistant Professor in the Department of Laboratory Medicine and Director of Clinical Mass Spectrometry at the University of Washington.

Abstract:

For many years clinical laboratories have used mass spectrometry with direct infusion and gas or liquid chromatography for the quantification of small molecule analytes in plasma and urine. This has been driven largely by the recognized issues with

immunoassays that include cross-reactivity, poor standardization, and high labor and consumable costs. Hoping to build on this foundation, clinical laboratories have now begun to focus on new targets: proteins and microorganisms. The presentation will describe the significant limitations of immunoassays when used to quantify proteins in clinical samples and the results of experiments aimed at solving those problems with LC-MS/MS. It will conclude with data demonstrating the utility of MALDI-TOF-MS and database searching in the identification of bacterial isolates from hospitalized patients.

Watch this space for the upcoming [Triangle Chromatography Discussion Group's Fall Workshop!](#) It will be announced in an upcoming issue of the [TarHelium](#) as well as on the [NC-ACS website](#).

For more information, please click [here](#) and fill in the contact form on-line. Thank you!



NC Project SEED Students Achieve International Recognition

International Sustainable World Energy Engineering Environment Project Olympiad (ISWEEEP)



There were 440 highly qualified projects from 70 different countries displayed at the George R. Brown Convention Center in Houston May 4-9, 2011.

Nearly 1,100 young scientists and project supervisors were present for this remarkable event. Finalist students were selected to compete at [I-SWEEEP](#) by winning a top prize at regional, state or national level science fairs. Participants enjoyed the opportunity to meet with their friends from different parts of the world while seeing that they were not the only ones committed to finding solutions to the world's problems.

Cosmos Foundation, the event organizer, presented Grand Awards at the I-SWEEEP 2011 Award Ceremony. The I-SWEEEP Awards were valued at nearly \$350,000 in scholarships, monetary prizes, tuition grants, and scientific internships.

Project SEED Students from North Carolina who won prizes are listed below.

Engineering

Bronze Medal Winner

Melissa Chan, "The Effect of Solvent on the Interactions of Polyacrylonitrile with Single-Walled Carbon Nanotubes for the Development of Ultra High Performance Fibers." Advisor: Melissa Pasquinnelli, NC State. Received cash award of \$400.00.

Honorable Mention

Selina Boyd, "The Effect of Recycled Sodium Hydroxide on the Production of

New Copper Nanowires." Advisor: Benjamin Wiley, Duke. Received cash award of \$200.00.

Environment

Bronze Medal Winner

Cheyenne Stewart, Marc Webb, "Long-wavelength Light as a Catalyst for Singlet Oxygen (1O_2) Production and MS2 Inactivation by Cationic Porphyrins." Advisor: Louise Ball, UNC Chapel Hill. Received cash award of \$400.00, which was shared between Stewart and Webb.

Intel International Science and Engineering Fair (ISEF) 2011

Each year, approximately seven million high school students around the world compete in local science fairs where they receive the opportunity to apply classroom learning in the real world, conduct authentic research, and explore their potential as future scientists and innovators. The thousands who win these fairs move up to regional, state and national contests.



Ultimately, those who triumph at these Intel ISEF-affiliated events earn the opportunity to compete at the world's largest pre-college science competition: the [Intel International Science and Engineering Fair](#), a program of [Society for Science & the Public](#).

This year, more than 1,500 young scientists and mathematicians from 65 countries, regions, and territories gathered in Los Angeles, California, to participate in Intel ISEF 2011.

During their week in Los Angeles, these young innovators presented original research and inspiring inventions as they vied for more than \$4 million in prizes. This included the Gordon E. Moore Award, a \$75,000 prize for the first-place winner, as well as two \$50,000 Intel Foundation Young Scientist Awards for the two runners-up.

Participants also had the opportunity to meet like-minded peers from distant lands, interact with Nobel laureates, and other distinguished professionals in their fields of study, and attend social events, including an opening ceremony hosted by Dreamworks Animation CEO Jeffrey Katzenberg, the annual Intel ISEF pin exchange, and a trip to Universal Studios.

NC Project SEED students who placed in this competition included:

Marc Webb, who received a 4th Place award in the Environmental Science Category, and was one of four recipients to receive the Office of Naval Research Award. This includes Tuition Scholarship Awards of \$4,000 for original research in an important Naval-relevant scientific area that also includes trips to the London International Youth Forum in London, England. Webb also received a certificate signed by the Chief of Naval Research and a U.S. Navy memento. Advisor: Louise Ball, UNC Chapel Hill.

Avery Young received one of two scholarships to the University of the Sciences in Philadelphia, PA., to selected finalists from Biochemistry, Cellular and Molecular Biology, Chemistry, Computer Science, Environmental Science, Medicine & Health, or Microbiology. He received a tuition scholarship of \$10,000 per year for four years. Advisor: Clay Clark, NC State.

Travel Grants Available

Apply for a CIBA/YCC Young Scientist Travel Award for attendance to an ACS national or regional meeting held in 2012. Young scientists under the age of 35 who have postdoctoral appointments or are within the first seven years of their professional career are eligible. Applicants have the opportunity to receive \$500 to attend an ACS meeting and network with other young chemists, professionals, and chemist elite. Online applications for the Spring 2012 CIBA/YCC Travel Award opened Aug. 1. Don't miss out on this great opportunity. For more information, please [visit the Web page](#) or contact ycc.exec@gmail.com.

The application deadline for the American Chemical Society's Women Chemists Committee/Eli Lilly Travel Grant is coming up fast. Don't miss this opportunity to receive up to \$1,000 to present at an ACS meeting between Jan. 1 and June 30. If you travel to the ACS National Meeting, you will be among elite women chemists. There you may network with them and learn firsthand about their experiences. [Visit the Web page](#) for more information and details. Application deadline is Sept. 15.

Four Chemists From NC-ACS Chosen as 2011 ACS Fellows

The American Chemical Society has named the 2011 class of ACS fellows, an honor bestowed upon 213 distinguished scientists who have demonstrated outstanding accomplishments in chemistry and made important contributions to ACS. The 2011 Fellows were recognized at an induction ceremony held August 29 during the ACS National Meeting in Denver.

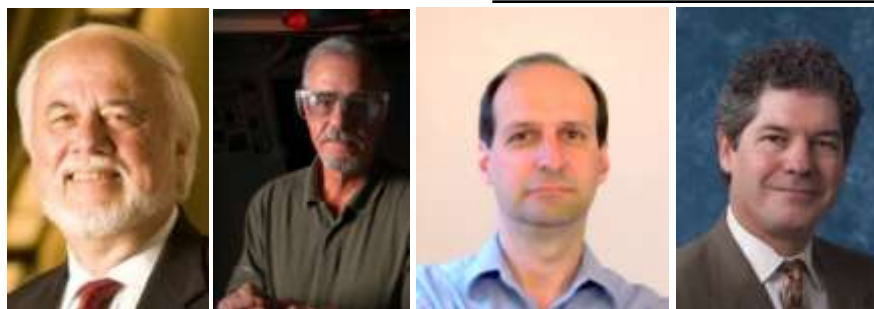
Four Triangle-area chemists were amongst those honored. They include: Al Crumbliss, Duke University; Al Tonelli, NC State; Orlin Velev, NC State, and Mike Ramsey, UNC Chapel Hill.

“ACS is especially proud to honor these chemists during the 2011 International Year of Chemistry,” said ACS President Nancy B. Jackson. “The work they are doing will im-

prove all of our lives as they unleash the power of chemistry to solve global challenges like providing clean water, sufficient food, new energy sources, and cures for disease. But that’s not all. They’re also organizing scientific conferences for their peers, doing outreach with scouts and schools, and being mentors to the next generation of scientists.”

The ACS Fellows Program was

created by the ACS Board of Directors in December 2008 “to recognize members of ACS for outstanding achievements in and contributions to Science, the Profession, and the Society.” Fellows come from academe, industry, and government. The official list of names was published in the August 8 issue of *Chemical & Engineering News* (C&EN).



2011 ACS Fellows (from l-r): Alvin L. Crumbliss, Bishop-MacDermott Family Professor of Chemistry and Dean of the Natural Sciences at Duke University; Alan E. Tonelli, INVISTA Professor of Fiber & Polymer Chemistry, NC State University; Orlin D. Velev, INVISTA Professor of Chemical and Biomolecular Engineering, NC State University; and J. Michael Ramsey, Minnie N. Goldby Distinguished Professor of Chemistry, UNC Chapel Hill.

Nick Oberlies Chosen as 2011 Distinguished Lecturer Awardee



Nicholas Oberlies is Associate Professor in the Department of Chemistry and Biochemistry at UNC Greensboro. His research focuses on the isolation and structure elucidation of bioactive compounds

from natural sources, including filamentous fungi, predator bacteria, and plants. Such studies have ramifications both in the realm of drug discovery (in search of new anticancer and/or antibiotic agents) and in the area of herbal drugs (developing reference standards and studying herb-drug interactions).

Before coming to UNC Greensboro, Nick spent time at RTI International in the Natural Products Laboratory, coming to RTI specifically to be mentored by Dr. Mansukh C. Wani and the late Dr. Monroe E. Wall, who are most well known as the co-discoverers of taxol and camptothecin. He rose progressively through the ranks of RTI and eventually directed the Natural Products Laboratory. He had also served the NC-ACS as Alternate Councilor from 2004-2009.

Nick received his B.S. in Chemistry from Miami University (Oxford, Ohio) in 1992

and his Ph.D. in Medicinal Chemistry and Pharmacognosy from Purdue University (West Lafayette, Indiana) in 1997, where he studied under Professor Jerry L. McLaughlin. He then spent a year as a postdoctoral chemist at American Cyanamid (Princeton, New Jersey), where he investigated leads with insecticidal, herbicidal, and fungicidal properties from natural sources.

His research is currently supported by various institutes within the National Institutes of Health, including the National Cancer Institute and the National Institute of General Medical Sciences.

Needles in the Hay Stack: Structurally Diverse Anticancer Leads from Filamentous Fungi

Abstract:

Natural products have a long history of providing new drug leads, with taxol and camptothecin probably being the most notable examples discovered in the Triangle. Fungi, in particular, have yielded several drugs that have had a dramatic impact on society. Indeed, it has been posited that penicillin may have had the greatest impact on life expectancy in the 20th century. Presently, the statins are one of the largest selling drugs in the history of mankind. Even the newest agent for the treatment of multiple sclerosis, fingolimod, was hailed as one of the top 10 medical inventions of 2010. Common to all of these drugs is fungi as the initial source of the lead.

For the past four years, the Oberlies Laboratory has been examining the Micosynthetix library of >55,000 filamentous fungi grown in culture for anticancer agents. Several leads have been identified; many of these are produced in a high yield, providing an entry point into medicinal chemistry studies. The chemical diversity of the leads compares favorably to FDA-approved anticancer agents, particularly when evaluated against leads from other source materials, such as cyanobacteria and tropical plants.

General NC-ACS Section Announcements



Younger
Chemists'
Committee

We are interested in reinvigorating the YCC. If you are interested in helping, please [email an Executive Committee member](#). Thank you!



Members of the American Chemical Society who live in the region covered by the North Carolina Section can utilize this group to network, participate in topical discussions, post jobs and events, etc.

Visit the local section on LinkedIn by clicking on this [link](#).

Local Section Discussion Groups

Information on the NC-ACS Local Discussion Groups can be found at the following link: <http://ncacs.sites.acs.org/discussiongroups.htm>

Discussion groups include:

- [Polymer Discussion Group](#)
- [Triangle Area Mass Spectroscopy Discussion Group](#)
- [Triangle Chromatography Discussion Group](#)
- [Triangle Magnetic Resonance Discussion Group](#)
- [Women Chemists Committee](#)
- [Younger Chemists Committee](#)

Check them out and consider joining a discussion group.



Science Café Web Links

RTP: <http://www.rtp-sigmaksi.org/events.shtml>

UNC: <http://www.moreheadplanetarium.org>

Duke: <http://www.ncmls.org/periodictables>

Raleigh: <http://naturalsciences.org/programs-events/science-talks>

Does ACS Have Your Current Contact Information?

It is extremely important to keep ACS informed of your current contact information. If you had a change in your address, phone number, or email address, please contact ACS to update your information. In addition to your old and new contact information, include your membership ID, which is the 8-digit number in the upper left hand corner of the C&EN address label when you correspond with ACS.

Manager, Member & Subscriber Services, ACS
PO Box 337
Columbus, OH 43210
Toll-Free Phone: 800-333-9511
Phone: 614-447-3776
E-mail: service@acs.org

Seminar Schedules for the Local Universities

Duke University Department of Chemistry Seminar Schedule: Tuesdays, 11:40 a.m., 2237 French Family Science Center unless otherwise noted. Click [here](#) to see the 2011-2012 departmental seminar schedule.

Duke University Department of Biochemistry Seminar Schedule: Fridays, 12:00 noon, 147 Naneline Duke Building unless otherwise noted. Click [here](#) to see the 2011-2012 departmental seminar schedule.

University of North Carolina at Chapel Hill Department of Chemistry Seminar Schedule: Click [here](#) to see the Seminars home page. Here, you can see the weekly seminar schedule, as well as schedules for Analytical, Biological, Inorganic, Organic, Physical, and Polymer/Materials seminars.

University of North Carolina at Chapel Hill Department of Biochemistry and Biophysics Seminar Schedule: Tuesdays at 11:00 am unless otherwise noted. Click [here](#) to see the Fall 2011 departmental seminar schedule.

North Carolina State University Department of Chemistry Seminar Schedule: Fridays, 3:40 p.m., Dabney Hall 124 unless otherwise noted. Click [here](#) to see the Fall 2011 departmental seminar schedule.

North Carolina State University Department of Biochemistry Seminar Schedule: Thursdays, 4:00 p.m., 128A Polk Hall unless otherwise noted. Click [here](#) to see the Fall 2011 departmental seminar schedule.

North Carolina Central University Department of Chemistry Seminar Schedule: Mondays, 4:00 p.m., Mary M. Townes Science Complex 1225 unless otherwise noted. Click [here](#) to see the Fall 2011 departmental seminar schedule.



ACS Employment, Economic, and Professional Activities News

ACS has created new programs to assist unemployed members and new resources for all members, from students to seasoned professionals. The first ever fully integrated onsite and virtual career fair in Denver offered job seekers and virtual participants via webcam the opportunity to interact with each other and to connect with prospective employers and programs to sharpen their career skills. The number of employers was up from Anaheim.

The Presidential Task Force on Innovation and Job Creation released their report, entitled "Innovation, Chemistry & Jobs."

The report contained four recommendations to stimulate innovation and job creation in the US chemical industry. The Committee on Economic and Professional Affairs (CEPA) and Corporation Associates co-sponsored a new program funding request to establish an entrepreneurial initiative, which would implement two of the four recommendations. First, it establishes an educational program to guide budding entrepreneurs through the creation of new chemical businesses. Second, it supports the formation of new chemical companies by providing access to the unparalleled informational

resources of the Society, as well as other professional resources. The initiative was approved by the Board, and will be implemented early next year.

CEPA is also working with ACS President Nancy Jackson, members of the Board, and other committees on the "Paying It Forward" campaign. Dr. Jackson kicked off the campaign with her comment in the August 8 issue of C&EN, emphasizing the need for, and importance of members helping members. She asks each of the Society's more than 163,000 members to help unemployed members by taking spe-

cific action now. Dr. Jackson's comment will be followed by four other C&EN comments.

Because networking is especially important in a down economy, CEPA and ACS Career Services co-sponsored the largest networking event in ACS history. The ACS Global Networking Reception allowed Denver attendees and others to attend a seminar entitled "Networking 101 - Making Your Contacts Count," and then practice networking with local sections, student chapters, international chapters, and individuals all over the world joined electronically.

Welcome to our Newest NC-ACS Local Section Members!

Ahmed Abraham	Stacy Dee	Albena Ivanisevic	Rene Lopez	Jonathan Peters	Erin Strickland
Mary Aiken	Timothy Dennehy	Michael Jarstfer	Brad Losey	Keith Petschke	Bin Sun
Adam Alman	Wayne Devonport	David Jassby	Yen Low	Desiree Plata	Torii Sutherland
Robert Andrews	Chris DiFrancesco	Upendra Joshi	Yuan Lu	Jennifer Polley	Syamal Tallury
Robert Anthony	Stephen Dirksen	Ranjeeth Kalluri	Michelle Maiden	Tierra Poteat	Abigail Tester
Samantha Attard	Michael Dumond	Joseph Kaloko	Kenneth Maksimchuk	Helen Powell	Karki Upama
Seth Barret	Thomas Eakes	Mark Kearns	Justin Malinowski	Paige Presler-Jur	Rycel Uy
Jeff Bartlett	Lee Ferguson	Roger King	Lyle Malotky	Keduo Qian	Tuan Vo Dinh
Sarah Beno	Mark Fitzgerald	Irina Koryakina	Portia Mason	James Reuther	Gregory Wahl
Barnett Bernstein	Christopher Fowler	Alexander Krois	John McGee	Joshua Ricci	James Wall
Stephanie Bettis	Nadezhda German	Ashton Lai	Greg McIntire	Natalie Rice	Xiaodong Wang
Qing Bin	Kiran Goli	Lindsay Lang	Ian McNeil	Brendan Robinson	Sounthaly White
Kenion Blakeman	William Gray	Khoa Le	Frank Mills	Donald Roncska	Brittany White
S. Gaylen Bradley	James Gustafson	Natalia Lebedeva	Mark Mitchell	Barbara Roth	Erin Wilfong
Gary Briney	Tilghman Hall	Gregory LeDonne	Gerardo Montero	Christopher Rusconi	William Wilkins
David Broadwell	Yi Han	Kiyoun Lee	Andrew Moran	Amanda Russell	Khalia Williams
Andrew Brusoe	Mark Hanna	Seong Du Lee	Thomas Morse	Michael Scott	Karen Williams
Stephen Bush	Rui Hao	Matthew Lehman	Michael Morton	Robert Sharpe	Nathan Wymer
James Cahoon	Smadar Harpaz-Saad	John Leonard	Khalil Moussa	Mark Sleeper	Zhihong Xu
Stephen Cairnes	James Harris	Nathan Letts	Sarah Murray	Charles Smith	Ye Wang
Dawn Carlson	Robert Harris	Miriam Levy	Radhika Nagarkar	Joel Smith	Wan Yang
R. T. Chern	Chad Hendrickson	Cassandra Lilly	Govindan Namboodri	David Snead	Miyoung Yoon
Daniel Colombo	Andrew Higginbotham	Shuang Fang Lim	Michael Palacioz	Benjamin Stanford	Justin Zoppe
Jody Council	Shelly Hokama	Shihong Lin	Heekwang Park	Daniel Stasiw	Yan Zou
Jennifer Dantonio	Ryan Hutchinson	Jing Liu	Ashley Parks	Blaire Steinwand	
Ian Davis	Sunhee Hwang	Jian Liu	Ronnie Pedersen	William Sterling	
Melissa Dean	Sheeba Irudayam	Jie Liu	Dana Perrin	Katherine Ann Stetson	

The NC-ACS extends condolences to the families of those members who have passed away.



Alex Anthony Arcus
Wilson Blaine Knight
Frank D. Mills

2011 ACS Membership Activity

Despite the challenging economy and continued high unemployment, the American Chemical Society's overall membership number remains stable at near 163,000. The number of new undergraduate Student Members is growing rapidly, and as of July 31, the total stands at 15,702. The Society is concentrating its efforts on retaining current members.



A Note from the Editor

In this issue, you will notice some changes. The most important change is that the newsletter is now in PDF format with pages you may print out. This will make publishing the newsletters easier. In addition, it will be easier for us to accept advertising (see panel below and on the masthead on page 2).

Please note that there are embedded links scattered throughout this newsletter as well. The embedded links appear in blue and are underlined. For example, if you click on the nameplate on page 1, you will be taken to the *TarHelium* main page. Clicking on the link on the flyer on page 3 will bring you to the NC-ACS Local Section Meeting registration page. Clicking on any of our names on page 12 will allow you to send us e-mail, which alleviates concerns about bots scavenging e-mail addresses for spam purposes.

Please let me know what you think of these changes. Remember: the newsletter is only as good as the information you bring to it. Please feel free to send me an [e-mail](#) with story ideas or other items you would like to see in future issues of the *TarHelium*.

Lyn

December TriMR North Carolina Symposium in Kannapolis

–Contributed by Marc ter Horst



The symposium of the Triangle Magnetic Resonance Discussion Group (TriMR) is scheduled on Thursday, December 1 at the David H. Murdock Research Institute (DHMRI) in Kannapolis, NC.

The keynote speaker is Chad M. Rienstra (University of Illinois at Urbana-Champaign), and his talk is titled **“Taking Solid-State NMR to Extremes: Membrane Proteins, Fibrils, and Enabling Methods.”**

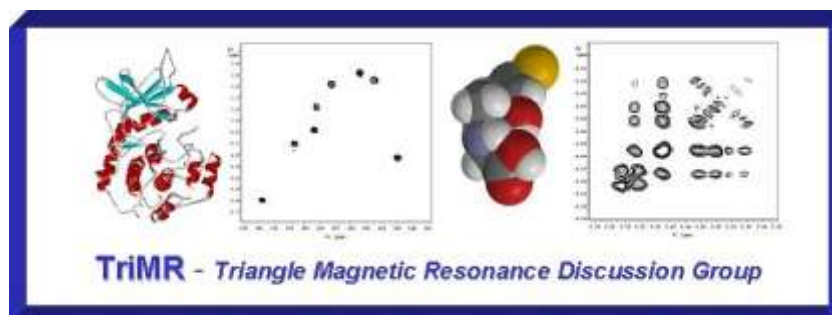
There will also be a tour of the DHMRI facility as well as a brief poster session for interested parties.

For more information, please [email Geoffrey Mueller](#).

DHM | RI

Other confirmed speakers include:

Geoffrey Mueller, NIEHS
 Nick Oberlies, UNC Greensboro
 Homayoun Valafar, USC
 Mirko Hennig, MUSC
 Alex Nevzorov, NC State
 Warren Warren, Duke
 Dieter Weber, UNC Chapel Hill



Your Ad May Go Here!



We are accepting camera-ready advertisements for inclusion in the *TarHelium*. Please note our current ad prices in the masthead on page 2. We can accommodate three sizes: half-page, quarter page, and business-card sizes.

For more information, please contact [Lyn Francisco via e-mail](#).

NC-ACS Local Section Executive Committee – Fall 2011

Name	Affiliation	Office	Term	Phone
Voting Members				
Kenneth Tomer	NIEHS	Chair	2011	919-541-1966
Keith E. Levine	RTI International	Chair-Elect	2011	919-541-8886
Melissa Pasquinelli	NCSU	Secretary	2009-2011	919-515-9426
Joan T. Bursey	NCBA at EPA	Treasurer	2011-2013	919-541-2253
Maria E. Francisco		<i>TarHelium</i> Editor		919-688-9719
James Lee Chao	IBM (retired)	Councilor	2009-2011	919-481-2060
Alvin L. Crumbliss	Duke University	Councilor	2010-2012	919-660-1540
Richard A. Palmer	Duke University	Councilor	2010-2012	919-660-1539
Sara Paisner	PN&S Consulting, LLC	Councilor	2011-2013	919-830-5275
Laura S. Sremaniak	NCSU	Councilor	2011-2013	919-515-2937
Russell E. Gorga	NCSU	Alternate Councilor	2009-2011	919-515-6553
Dorian A. Canelas	Duke University	Alternate Councilor	2010-2012	919-660-1537
Kenneth Lyle	Duke University	Alternate Councilor	2010-2012	919-660-1621
Suraj Dhungana	RTI International	Alternate Councilor	2011-2013	919-541-6601
Reshan Fernando	RTI International	Alternate Councilor	2011-2013	919-541-6730
Melissa Pasquinelli	NCSU	Alternate Councilor	2011-2013	919-515-9426
Marc ter Horst	UNC-CH	Past Chair 2010		919-843-5802
John Hines	RTI International	Past Chair 2009		919-541-6647
Jay M. Brown	Law Offices of Jay Brown	Past Chair 2008		919-522-0312
Alan E. Tonelli	NCSU	Councilor and Past Chair 2007	2011-2013	919-515-6588
Non-Voting Members				
Melinda Box	Duke University	Webmaster		
Maurice M. Bursey	UNC-CH (retired)	<i>Ex Officio</i>		919-493-3025
Kenneth A. Cutler	NCCU	Project SEED, <i>Ex Officio</i>		919-530-6172
Stephen D. Cooper	RTI International	TCDG, <i>Ex Officio</i>		
Thomas M. O'Connell	UNC-CH	TMRDG, <i>Ex Officio</i>		919-483-1535
Michael C. Fitzgerald	Duke University	TAMS, <i>Ex Officio</i>		
Larry K. Krannich	Alabama Academy of Science	Director, District IV	2011-2013	