

Newsletter Spring 2017

AMERICAN CHEMICAL SOCIETY DIVISION OF CARBOHYDRATE CHEMISTRY



CARBOHYDRATES IN THE NEWS

CONGRATULATIONS TO PROFESSOR CAROLYN R. BERTOZZI ON RECEIVING AN ARTHUR C. COPE AWARD!



Dr. Carolyn R. Bertozzi, Anne T. and Robert M. Bass Professor of Chemistry, at Stanford University, has received a 2017 Arthur C. Cope Award from the American Chemical Society (ACS) for 'pioneering the field of bioorthogonal chemistry, and for its innovative applications to the field of glycobiology'.

Dr. Bertozzi earned her A.B. in chemistry from Harvard University in 1988. She completed her PhD in Chemistry at UC Berkeley in 1993 under the direction of Professor Mark Bednarski and latter performed postdoctoral work in the laboratory of Professor Steven Rosen at UC San Francisco. Prof. Bertozzi joined UC Berkeley faculty in 1996. She has been an Investigator at the Howard Hughes Medical Institute since 2000 and is a member of the National Academy of Sciences. In addition to other awards, she has been previously recognized with the Roy L. Whistler International Award in Carbohydrate Chemistry (2008) and the Horace S. Isbell Award in Carbohydrate Chemistry (ACS, 1997).

The Bertozzi group studies cell surface interactions that contribute to human health and disease with projects in the areas of cancer, inflammation and bacterial infection. There lab uses a combination organic synthesis, genetics and biochemistry as tools to study and manipulate cellular processes.

DIVISION OFFICERS

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FUTURE NEWSLETTERS

The Carbohydrate Division Newsletter is published twice a year, just before the two annual National ACS meetings. If you have items for inclusion in future please send the information to:

Secretary/Newsletter Editor

Steve Sucheck:
steve.sucheck@utoledo.edu

KUDOS

SPRING 2017

CONGRATULATIONS TO PROFESSOR DAVID CRICH ON RECEIVING THE 2017 CLAUDE S. HUDSON AWARD!



Professor David Crich, Schaap Professor of Organic Chemistry at Wayne State University in Detroit, has received the 2017 Claude S. Hudson Award from the American Chemical Society for his work in the field of Carbohydrate Chemistry. Professor Crich is a native of Chesterfield, England and graduate of the University of Surrey. Earned his B.Sc. in Chemistry with French in 1981. He then joined the group of Sir Derek Barton at the Institut de Chimie des Substances Naturelles (ICSN) in Gif sur Yvette, France. Under Barton he was responsible for the development of the Barton decarboxylation reaction, for which he was awarded the degree of Docteur ès Sciences by the Université de Paris XI (Orsay) in 1984. After a further year at the ICSN as postdoc with Barton and Potier he took up a lectureship in chemistry in the Christopher Ingold Laboratories of University College London. After five years at UCL working in the areas of diastereoselective free radical chemistry, acyl radical chemistry, enantioselective synthesis of amino acids, and carbohydrate chemistry, Crich moved to the University of Illinois at Chicago (UIC) where he worked for seventeen years, rising to the rank of Liberal Arts and Sciences Distinguished Professor of Organic Chemistry. In 2007, Crich relocated to Wayne State University as the Schaap Professor of Chemistry, before taking up the position of Director of the ICSN in Gif-sur-Yvette in 2009. Crich returned to Wayne State as the Schaap Professor in 2011 and leads a group working in the areas of glycochemistry, organic reactivity and antibiotic chemistry. His more than 320 published papers cover areas as diverse as the total synthesis of alkaloids, the development of new glycosylation methods, catalysis of radical reactions, and improved methods for peptide synthesis. **Professor Crich will present a lecture on his work at the 253rd ACS National Meeting to be held in San Francisco, CA April 3, 2017.**

CONGRATULATIONS TO PROFESSOR XUEFEI HUANG ON RECEIVING THE 2017 MELVILLE L. WOLFROM AWARD!



Professor Xuefei Huang, a Professor at Michigan State University in East Lansing, has received the 2017 Melville L. Wolfrom Award from the American Chemical Society in acknowledgement of his outstanding service to the ACS Carbohydrate Division, and to the field of carbohydrate chemistry in general. Huang received his B.S. from the University of Science and Technology of China and both a M.A. and PhD from Columbia University under the direction of Professor Koji Nakanishi. He was a Postdoctoral Fellow at The Scripps Research Institute from 1999 - 2001 for Professor Chi-Huey Wong and again with Professor Nakanishi at Columbia University from 2001 – 2002. He was an Associate Professor at the University of Toledo just prior to joining the Michigan State University faculty in 2008. In addition to this award, he won the ACS Carbohydrate Division Horace S. Isbell Award in 2011, and was named an ACS Fellow in 2013. The major emphasis of his research is on the chemistry and biology of carbohydrates. His work encompasses several areas including synthetic organic chemistry, nanoscience and chemical immunology. **Professor Huang will present a lecture on his work at the 253rd ACS National Meeting to be held in San Francisco, CA April 2, 2017.**

CONGRATULATIONS TO PROFESSOR LARA. K. MAHAL ON RECEIVING THE 2017 HORACE S. ISBELL AWARD!



Professor Mahal, Professor at New York University, New York, NY, has received the 2017 Horace S. Isbell Award from the American Chemical Society. Professor Mahal received her B.A. in Chemistry at the University of California, Santa Cruz in 1995. As an undergraduate she worked in the laboratory of Professor Rebecca Braslau. In 1995, Professor Mahal joined the laboratory of Professor Bertozzi at the University of California, Berkeley where she worked on incorporation of unnatural functionalized sialic acid derivatives onto the surface of cells. For this landmark work, Professor Mahal was awarded an American Chemical Society Medicinal Chemistry Pre-doctoral Fellowship. After graduating in 2001, Professor Mahal completed postdoctoral research in the laboratory of Professor Jim Rothman at Memorial Sloan-Kettering Cancer Research Center. In 2003, she joined the faculty of the University of Texas at Austin as an Assistant Professor and later moved to New York University as an Associate Professor in the Biomedical Chemistry Institute. She was promoted to Professor in 2016. Work in her laboratory focuses on understanding the role of carbohydrates in signaling and on using systems-based approaches to decode the role of glycosylation in cell differentiation and pathogenesis. Professor Mahal has received several major awards, including the Beckman Young Investigators Award, an NSF Career Award, the Sloan Foundation Fellowship, the 2008 NIH Director's New Innovator Award. **Professor Mahal will present a lecture on her work at the 253rd ACS National Meeting to be held in San Francisco, CA April 2, 2017.**

CONGRATULATIONS PROFESSOR ZHONGPING TAN ON RECEIVING THE 2017 DAVID Y. GIN YOUNG INVESTIGATOR AWARD!



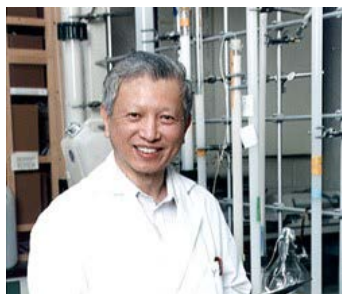
Professor Zhongping Tan is an Assistant Professor at The University of Colorado, Boulder and has been awarded the David Y. Gin Young Investigator Award for his work on the study and applications of protein glycosylation. Professor Tan received his B.S. in Organic Chemistry from the Peking University in 1997. He later studied under the direction of Professor Virginia W. Cornish at Columbia University and earned M.A., M.Phil. and PhD degrees. He was a Postdoctoral Fellow at the Memorial Sloan-Kettering Cancer Center from 2005-2011 working under the direction of Professor Samuel J. Danishefsky. His work is focused on effects of glycosylation on protein structure and activity. **Professor Tan will present a lecture on his work at the 253rd ACS National Meeting to be held in San Francisco, CA April 2, 2017.**

CONGRATULATIONS DR. FRANCESCO BERTI ON RECEIVING THE INAUGURAL DEREK HORTON AWARD!



Dr. Francesco Berti, Head of Vaccine Chemistry and Formulation at Novartis Vaccines, was recently awarded the inaugural Derek Horton Award for work on carbohydrate-based vaccines. Francesco Berti earned a PhD in Chemical Sciences from the University of Siena, Italy in 2002. During his PhD he investigated the physicochemical characterization of metal-peptide complexes and on the preparation and structural characterization of meningococcal ACW135Y polysaccharide-protein conjugate vaccines. Afterward, he moved to Novartis Vaccines and began research and development on carbohydrate-based vaccines, focusing on glycoconjugates against *Neisseria meningitidis*, group B Streptococcus, group A Streptococcus, *Staphylococcus aureus*, *Salmonella typhi* VI, *Candida albicans* and other bacterial and fungal infectious diseases.

CONGRATULATIONS TO PROFESSOR YUAN CHUAN LEE - ELECTED AAAS FELLOW!



Professor Yuan Chuan Lee from the Department of Biology at Johns Hopkins University has been elected an American Association for the Advancement of Science (AAAS) Fellow for his distinguished contributions to glycoscience. These contributions include key discoveries of glycoside clustering effects in protein-carbohydrate interactions, and for his groundbreaking work in the analysis of glycans. Lee's laboratory has been working to understand how carbohydrate groups in glycoconjugates are recognized in biological systems and how they function as biological signals. His research extends to drug delivery systems and involves nanotechnology.

Professor Lee earned his PhD working under the supervision of Professor Rex Montgomery at The University of Iowa. He performed postdoctoral work at the University of California, Berkeley, before joining the Johns Hopkins University faculty. Prof. Lee is also the recipient of the 2001 Claud S. Hudson Award from the American Chemical Society, the 1996 C.H. Li Memorial Award from Academia Sinica and the 1995 National Institutes of Health Fogarty Fellowship. Professor Lee has published more than 300 papers and has served as an executive editor for Analytical Biochemistry since 1978

CONGRATULATIONS TO PROFESSOR JAMES C. PAULSON - ELECTED AAAS FELLOW!



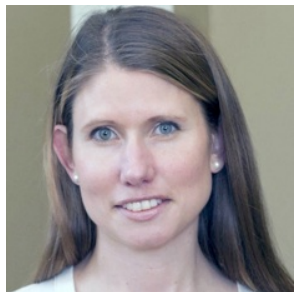
Dr. James C. Paulson, Professor and Co-Chair of the Department of Cell and Molecular Biology at The Scripps Research Institute (TSRI), La Jolla, CA has been elected an American Association for the Advancement of Science (AAAS) Fellow for his distinguished contributions to glycoscience. Dr. Paulson received his B.S. from MacMurray College in Chemistry/Biochemistry, and an M.S. and PhD in Biochemistry from the University of Illinois at Champaign-Urbana. Dr. Paulson completed a postdoctoral fellowship at Duke University Medical Center, before joining the UCLA School of Medicine as an Assistant Professor. After moving through the ranks he transitioned to industry from 1990-1999 holding positions at Cytel Corporation as Vice President, Chief Scientific Officer, General Manager (Glytec Division), and Member of the Board of Directors. He joined TSRI as a Professor in 1999. From 2014-2015 he was President and CEO of TSRI. Research in the Paulson Group centers on elucidating the roles of siglec receptors in immune function, and defining the biochemical basis for how the interaction with their carbohydrate ligands modulate their function. Dr. Paulson was the 2016 recipient of the Melville L. Wolfrom Award from the American Chemical Society.

DR. KEVIN HICKS NAMED PRESIDENT OF THE PHILADELPHIA SOCIETY FOR PROMOTING AGRICULTURE



Kevin Hicks, a 40 year member and past Chairman of CARB, has been named the President of the nation's oldest agricultural society, the Philadelphia Society for Promoting Agriculture (pspaonline.com), established in 1785. Kevin, formerly of the Eastern Regional Research Center, ARS, USDA also currently serves as the Senior Vice President of Venturesources Inc., a consulting company where he leads studies on bioenergy, food, and biobased products.

PROFESSOR CATHERINE LEIMKUHLER GRIMES NAMED SLOAN RESEARCH FELLOW



Professor Catherine Leimkuhler Grimes, an Assistant Professor at the University of Delaware in the Department of Chemistry and Biochemistry has received a Sloan Research Fellowship. The prestigious two-year, \$60,000 fellowship is awarded annually to 126 early-career scholars from the U.S. and Canada whose accomplishments mark them as the next generation of scientific leaders. Professor Leimkuhler Grimes received her B.S. in Chemistry from Villanova University in 2001. She earned a M.S. degree at Princeton University in 2003 with Professor Daniel E. Kahne. Later she completed a PhD in Chemistry at Harvard University also with Professor Kahne. Professor Grimes completed postdoctoral work at the Cancer Research Institute at Harvard University and Massachusetts General Hospital from 2006-2011 with Professors Erin K. O'Shea and Professor Daniel K. Podolsky. Previously she was named a Pew Scholar in the Biomedical Sciences and won a Cottrell Scholar Award, as well as a National Science Foundation's Faculty Early Career Development Award. Her lab uses carbohydrate synthesis, biochemistry, molecular biology and bacterial engineering to investigate activation of the human innate immune system.

PROFESSOR MATTHEW PRATT RECEIVES AMERICAN CANCER SOCIETY HOPE AWARD



Associate Professor Matthew R. Pratt at the University of Southern California, Departments of Chemistry and Molecular and Computational Biology and Member of the Norris Comprehensive Cancer Center, has received an American Cancer Society Hope Award. Professor Pratt earned his B.S. in Biochemistry and Mathematics in 1999 from the University of Arizona, Tucson and later completed a PhD in Chemistry at the University of California, Berkeley under the supervision of Professor Carolyn Bertozzi. After completing his PhD in 2005, he became an American Cancer Society Fellow 2005-2009 at Rockefeller University working for Professor Tom Muir. He is an American Cancer Society

Research Scholar and received the American Chemical Society's David Y. Gin Young Investigator Award in 2015. The theme of the lab is understanding the molecular consequences of posttranslational modifications including glycosylation and ubiquitination. His lab also focus on the development of chemical tools that can be used to understand these biochemical pathways.

PROFESSOR CARLO UNVERZAGT RECEIVES THE EMIL FISCHER CARBOHYDRATE AWARD



Professor Carlo Unverzagt of the University of Bayreuth, Germany, has received an European Carbohydrate Organization (ECO) Emil Fischer Carbohydrate Award. The Award is in recognition of distinguished contributions of excellence to glycoscience. Professor Unverzagt earned his PhD in 1988 at Johannes-Gutenberg-University, Mainz, under the direction of Professor Horst Kunz. He completed postdoctoral training with Professor Jim Paulson at UCLA and later worked at TU München with Professor Horst Kessler to obtain his habilitation in 1997. He was appointed Professor of Organic Chemistry at the LMU München in 1997 and holds a chair in Bioorganic Chemistry at the University of Bayreuth

since 1998. His research interests are focused on the chemistry and biochemistry of carbohydrates, glycoproteins and natural products. **Professor Unverzagt will present a lecture on his work at the 19th European Carbohydrate Symposium (EUROCARB2017) in Barcelona.**

PROFESSOR JEROEN CODÉE RECEIVES THE CARBOHYDRATE RESEARCH AWARD FOR CREATIVITY IN CARBOHYDRATE CHEMISTRY



Assistant Professor Jeroen Codée of the University of Leiden, The Netherlands, has received the Carbohydrate Research Award for Creativity in Carbohydrate Chemistry. The award was established by the Carbohydrate Research editorial board. The Award is presented to a carbohydrate scientist no older than 15 years past their PhD who have made significant original contributions to the field. Professor Codée earned his MSc in 1999 and a PhD in 2004 at Leiden University under the direction of Professors J.H. van Boom and C.A.A. van Boeckel. He completed postdoctoral work from 2004 – 2006 at the Eidgenössische Technische Hochschule (ETH), Switzerland, with Professor Peter H. Seeberger. He completed additional postdoctoral work from 2007 – 2009 at Leiden University with Professor G.A. van der Marel. His research interests are focused on the effective assembly of biologically relevant oligosaccharides and glycoconjugates. **Professor Codée will present a lecture on his work at the 19th European Carbohydrate Symposium (EUROCARB2017) in Barcelona.**

AWARDS FROM FALL 2016

PROFESSOR BEN SWARTS RECEIVED THE INTERNATIONAL CARBOHYDRATE ORGANIZATION YOUNG RESEARCHER AWARD 2016



Professor Ben Swarts, Assistant Professor of Chemistry at the Department of Chemistry and Biochemistry at Central Michigan University received an International Carbohydrate Organization (ICO) Young Researcher Award for 2016. The award is given to recognize outstanding international achievements on any aspect of glycochemistry and/or glycobiology. Professor Swarts studied chemistry at the College of Wooster, Ohio, and completed a PhD in 2010 at Wayne State University under the direction of Professor Zhongwu Guo. He pursued postdoctoral work from 2010-2013 with Professor Carolyn Bertozzi at The University of California, Berkeley with fellowships from the American Cancer Society and Center for Emerging and Neglected Diseases Frameworks for Global Health. He joined the Department of Chemistry and Biochemistry at Central Michigan University in 2013. Professor Swarts' work includes development of chemical biology tools for studying glycolipids and other cell envelope components of the mycobacteria, which include the pathogen that causes tuberculosis. Professor Swarts has also recently received National Science Foundation's Faculty Early Career Development Award.

PROFESSOR BENJAMIN G. DAVIS RECEIVED THE 2016 ROY L. WHISTLER INTERNATIONAL AWARD IN CARBOHYDRATE CHEMISTRY



Professor Benjamin G. Davis, Professor of Chemistry at the University of Oxford, UK, received an International Carbohydrate Organization (ICO) Roy L. Whistler International Award in Carbohydrate Chemistry for 2016. The award is given to recognize scientists 'who have made contributions of excellence in carbohydrate chemistry and biochemistry and with promise of continuing significant contributions'. The award included a check for \$25,000. Professor Davis studied chemistry at the University of Oxford where he was awarded a B.A. and later a PhD in 1996 while working under the supervision of Professor George Fleet. He performed postdoctoral work with Professor Bryan Jones at the University of Toronto. He then held a lectureship at the University of Durham and joined the Dyson Perrins laboratory at the University of Oxford with a Fellowship at Pembroke College. He was promoted to full Professor in 2005. Professor

Davis has published over 200 papers and founded the companies Glycoform and Oxford Contrast. He is also a recipient of the RSC Corday-Morgan Medal, and was elected Fellow of the Royal Society in 2015.

ANNOUNCEMENTS

Professor Alberto Fernández-Tejada joins CIC bioGUNE (Spain) to begin his independent career



Professor Alberto Fernández-Tejada has begun his independent career as Ikerbasque Research Professor at CIC bioGUNE, Center for Cooperative Research in Biosciences (Bilbao, Spain), thanks to a recently awarded €1.5M ERC Starting Grant by the European Research Council. Professor Fernández-Tejada obtained his PhD in Chemistry from the University of La Rioja (Spain) in 2009 with Prof. Jesús M. Peregrina and Professor Francisco Corzana. In 2010, he began postdoctoral studies with Prof. David Y. Gin at Memorial Sloan Kettering Cancer Center as a Fulbright scholar, and moved to the lab of Prof. Samuel J. Danishefsky in 2012 after Prof. Gin's death. In 2014, Professor Fernández-Tejada joined the group of Prof. Jesús Jiménez-Barbero at CIB-CSIC (Madrid) and then CIC bioGUNE (Bilbao), before moving to the lab of Prof. Ben G. Davis at the University of Oxford in late 2015. Professor Fernández-Tejada's current research interests as a Principal Investigator in the Chemical Immunology Lab at CIC bioGUNE are at the frontier of chemistry and immunology, including the development of synthetic subunit vaccines and the elucidation of their mechanisms of action (<https://www.cicbiogune.es/org/research/Research>).

Call for Nominations: ACS Fellows

The window for nominating 017 ACS Fellows open February 1, 2017 and close April 6, 2017 (11:59 pm PDT). The Division of Carbohydrate Chemistry can nominate one candidate. Please consider nominating a colleague for the 2017 Fellows program. Information detailing the program as well as the instructions for nominating candidates can be found at the following address: <https://www.acs.org/content/acs/en/funding-and-awards/fellows.html>

Although any ACS member can submit nominations, support from the Division will help an individual nomination carry more weight. Therefore, we kindly request that you send your suggestions to the Division Secretary at steve.sucheck@gmail.com. Nominations will be collected and shared with the Executive Committee. Please send your nominations by mid-March

Fimbrion and GSK to Develop Novel Antibacterial Therapy for Urinary Tract Infections

Fimbrion Therapeutics, Inc., a start-up biotechnology company focused on developing antibiotic-sparing drugs, has entered into collaboration with GlaxoSmithKline (GSK), a science-led global healthcare company, to develop a small molecule drug for the treatment and prevention of urinary tract infections (UTIs).

The agreement creates a joint project between Fimbrion and the Discovery Partnerships with Academia (DPAc) team at GSK. The project is focused on the preclinical development of a class of mannose-containing small molecule compounds called mannosides. Mannosides may be able to treat and prevent urinary tract infections (UTIs) without inducing antibiotic resistance. Fimbrion founders Dr. Scott Hultgren, a microbiologist and expert in UTIs, and Professor James Janetka, a medicinal chemist, combined efforts in 2009 to rationally design new classes of orally-bioavailable mannosides. Learn more about mannosides and other Fimbrion technologies at <http://www.fimbrion.com/>

University of Tennessee Institute of Agriculture Center for Renewable Carbon

Position Announcement:

Professor and Director, Center for Renewable Carbon

Overview:

The Center for Renewable Carbon (CRC) is an interdisciplinary research and development unit in the University of Tennessee Institute of Agriculture (UTIA). Its mission is to advance the potential for non-food biomass to create new economic activity for the state of Tennessee and the Nation. The CRC team advances the science needed to develop new technologies that enable the expanded use of forest and agricultural biomass for sustainable materials, chemicals, fuels, and energy; trains the workforce needed by advanced technology industries; and transfers research advances to our stakeholders and partners involved in building a sustainable bioeconomy.

The Center comprises 10 faculty tenured in various departments and more than 30 staff, students, and research associates with skills in chemistry, material (wood, polymer, etc.) science, biomass analytics and statistics. This position will be housed in the appropriate academic department at UTIA for the successful candidate's background and expertise. A link to full Position Announcement can be found here. <http://carb.sites.acs.org/jobopportunity.htm>

CARB Division Award Banquet at San Francisco ACS Meeting

During the ACS National Meeting in San Francisco next month, our division will celebrate the accomplishments of our four divisional award winners:

Claude S. Hudson Award – Professor David Crich, Wayne State University

Melville L. Wolfrom Award – Professor Xuefei Huang, Michigan State University

Horace S. Isbell Award – Professor Lara Mahal, New York University

David Y. Gin Young Investigator Award – Professor Zhongping Tang, University of Colorado Boulder

Following the award symposia, there will be an Award Banquet, which will be a great opportunity to congratulate our winners and to network with other colleagues.

Date: Monday, April 3, 2017

Time: 6:30 pm – 9:30 pm

Location: TBA (the location will be announced after confirmation)

Price: \$60 per ticket

Tickets for the banquet are available online when you register through ACS. If you purchase a ticket online, no further actions are needed. We will have your name on a list, and you can bring your confirmation notice as a back-up. However, many have had difficulty locating the online banquet information through ACS registration site. If that is the case and you would like to attend, please email Lai-Xi Wang (wang518@umd.edu) to reserve ticket(s) in advance so that we can have a head count before the event. Lai-Xi will accept cash in San Francisco for payment. Please note that the number of tickets is limited. Contact wang518@umd.edu if you need further information.

Looking for Sweet Pictures

CARB webmaster, Professor Peter Andreana, is looking for recent CARB meeting related photos to enhance the website. If you have anything appropriate, please email them to peter.andreana@utoledo.edu

Advertising

If you are interested in advertising through the Carbohydrate Newsletter please email steve.suchek@utoledo.edu for advertising rates.

Changing email

Email addresses are updated monthly through www.acs.org please keep your email address up to date in your ACS profile in order to continue receiving important division updates.

Carbohydrate Division Membership

Please help keep the Carbohydrate division of the American Chemical Society strong by encouraging your students and colleagues to join the Carbohydrate division. Recruit a colleague today! Registration information can be found here: <http://carb.sites.acs.org/>

Membership is **free** of charge for the first year and \$12.50 per year thereafter; \$7.00 for students.

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UPCOMMING MEETINGS

(Click on a graphic to visit a meeting or sponsor's website)

For more information, visit <http://carb.sites.acs.org/meetings.htm>

2017 Carbohydrates GRC



Mount Snow West Dover, Vermont: Dates: June 25-30, 2017

Website: <http://grc.org/programs.aspx?id=11035>

Note: There will be an inaugural Carbohydrate Gordon Research Seminar (GRS) to be held just prior to the Carbohydrates GRC. Those interested in attending both meetings must submit separate applications. Refer to the [associated GRS program page](#) for more information.

Theme: Chemical and Biochemical Approaches to Deciphering Glycan Functions

Organizers

Chair: Lai-Xi Wang; Vice Chairs: Zhongwu Guo & Xi Chen

Sunday, June 25, 2017

Arrival and Check-in

Dinner

Enabling Technologies for Functional Glycomics

Monday, June 26, 2017

Breakfast

Glycosylation and Synthetic Methodology

Dinner

Chemical Glycobiology

Tuesday, June 27, 2017

Breakfast

Group Photo

Enzymatic and Chemoenzymatic Assembly of Glycans

Dinner

Molecular Recognition in Protein-Carbohydrate Interactions

Wednesday, June 28, 2017

Breakfast

Carbohydrate Vaccines

Dinner

Structural Chemistry and Biology of Carbohydrates

Thursday, June 29, 2017

Breakfast

Synthetic Probes for Deciphering Carbohydrate Functions

Dinner

Glycans in Biotechnology and Medicine

Friday, June 30, 2017

Breakfast

253rd ACS NATIONAL MEETING

253rd American Chemical Society NATIONAL MEETING & EXPOSITION

Advanced Materials, Technologies, Systems & Processes

San Francisco, California; Dates: April 2-6, 2017

The CARB program for the 253st ACS National Meeting in San Francisco, California has been published. Please support the Carbohydrate Division by attending these symposia:

Sunday, April 2, 2017

Morning

-Wolfrom Award Symposium

Afternoon

-Isbell Award and Gin New Investigator
Award

Monday, April 3, 2017

Morning

- Hudson Award Symposium

Afternoon

- Carbohydrate-Based Hybrid Materials for
Nanomedicine
**Sci-Mix (8:00pm-10:00pm)

Tuesday, April 4, 2017

Morning

- LPS: Chemistry, Synthesis & Applications
- Carbohydrate-Based Hybrid Materials for
Nanomedicine

Afternoon

- LPS: Chemistry, Synthesis & Applications
**General Posters (7:00pm-9:00pm)

Wednesday, April 5, 2017

Morning and Afternoon

- Carbohydrate-Based Nanomaterials &
Drug-Delivery Vehicles

For the full program and separates, please
email the Division Secretary, Prof. Steve
Sucheck at steve.sucheck@utoledo.edu

Tuesday, April 4, 2017

Afternoon

270 - Moscone Center

A symposium organized by Dr. H. N. Cheng and Dr. Atanu Biswas from USDA entitled "Advances in Polysaccharides: Practice and Applications" will be held at the ACS national meeting in San Francisco on April 4-6, 2017. The symposium location will be the Moscone Center. The symposium is sponsored by the ACS Division of Cellulose and Renewable Materials (CELL) and Multidisciplinary Program Planning Group (MPPG), and cosponsored by four other ACS Divisions (POLY, PMSE, CARB, and AGFD).

12th Carbohydrate Bioengineering Meeting



Audi Max, Augasse 2-6, 1090 Vienna/Austria; April 23 -26, 2017

The CBM12 – 12th Carbohydrate Bioengineering Meeting – continues in the spirit of the predecessor conferences aiming at providing a forum for the broad research community in carbohydrate bioengineering, to meet and discuss latest developments in this exciting and rapidly developing field. The 12th meeting will take place from April 23 -26, 2017 at Audi Max, Augasse 2-6, 1090 Vienna/Austria.

Besides focusing on carbohydrate-active enzymes, a topic central to all previous CBM conferences, the CBM12 encourages contributions from all areas of carbohydrate bioengineering, including the technological application and industrial realization. The scientific agenda will be complemented with a networking social programme. Young scientists are particularly encouraged to participate and present their latest works. The meeting has been organized by Prof. Bernd Nidetzky and Prof. Dietmar Haltrich <https://cbm12.org/>

In case of questions please contact: scico@acib.at

The 2nd National Youth Conference on Synthetic Carbohydrate Chemistry

The 2nd National Youth Conference on Synthetic Carbohydrate Chemistry will be held by Chinese Chemical Society and organized jointly by National Glycoengineering Research Center of Shandong University and National Engineering Research Center for Carbohydrate Synthesis of Jiangxi Normal University. The conference will take place in May 13-14, 2017 at Shandong University, Jinan. The 2nd meeting will be chaired by Profs. Peng George Wang, Zhongwu Guo, Xinshan Ye and Biao Yu.

19th EuroCarb2017



Barcelona, Spain; July 2-6, 2017

The 19th EUROCARB to be held in Barcelona on July 2nd-6th, 2017 and will be hosted by the Institut Químic de Sarrià, University Ramon Llull, under the auspices of the European Carbohydrate Organization. EUROCARB is positioned as a leading symposium at the forefront of Glycosciences in Europe.

The conference will be organized in four main topics that cover all aspects of Glycosciences, aimed at showing the latest developments in the field, provide a forum for discussions and networking and highlight the challenges and future trends in carbohydrate-related scientific disciplines and applied technologies:

- Synthesis of Carbohydrates, Glycoconjugates, and glycan-based biomaterials: chemical, enzymatic, and synthetic biology approaches. Supramolecular entities and biomaterials.
- Carbohydrate Structures, Analytical Tools, and Glycotechnology: advanced analytical and structural tools, glycomics, integrative databases, and computational methods.
- Glycobiology and Glycobiology: carbohydrate active enzymes, cellular and molecular biology of glycans, glycomicrobiology and metagenomics
- Applied Glycosciences in medicine, nutrition, and biotechnology: glycans in health and disease (cancer, immunity, vaccination, rare diseases, etc), in food science, in the emerging bioeconomy, and industrial biotech.

EuroCarb2017 <http://www.eurocarb2017.com/>

UK & Latin-America Workshop “Glycobiotechnology Tools for Human Health.”, Manchester



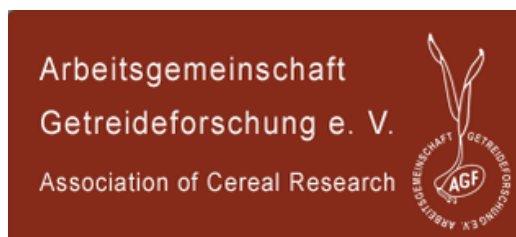
Glycobiotechnology Tools for Human Health will be held in Manchester 2-3th May 2017.

The aim of this workshop is to establish strong links between the glycoscience research communities in the UK and Latin-America, from academia and industry, working in the area of glycoscience.

Through a series of invited talks and flash presentations, the current status of research will be reviewed. Strategic areas of research identified through group discussions and networking (formal and informal) sessions will be considered in the context of anticipating future calls from respective national funding bodies such as the BBSRC (UK) and CONACYT (Mexico) e.g. the Global Challenges Research Fund, UK, a £1.5bn fund to support cutting edge research that addresses challenges faced by developing countries in various areas including sustainable health and wellbeing.

For all queries about this event please contact the IBCarb Network Manager claire.doherty@manchester.ac.uk

66th ANNUAL STARCH CONVENTION



The 68th annual Starch Convention will be organized in Detmold, Germany on April 4 and 5, 2017. The convention deals with all aspects of starch research including food and non-food applications. More information can be found using the link: <http://www.agfdt.de/en/>

Canadian Glycomics Symposium 2017



The 2017 Canadian Glycomics Symposium will take place May 10 – 12, 2017, in Banff, Alberta, Canada.

GlycoNet and the Alberta Glycomics Centre cordially invite you to the second annual **Canadian Glycomics Symposium**, to be held in Banff, Alberta at the **Banff Park Lodge from May 10 to 12, 2017**. The Canadian Glycomics Network (GlycoNet) is a pan-Canadian initiative connecting more than 110 researchers from 26 academic and research institutions, working together with numerous industry and international partners. As part of the thriving GlycoNet community, these members collaborate to develop solutions to unmet health needs through the study of glycomics. The Alberta Glycomics Centre comprises a team of highly motivated individuals throughout Alberta whose research interests span a multidisciplinary array of biological processes and technologies specific to carbohydrate research.

For over a decade, Canadian researchers in the field of glycomics have attended the National Carbohydrate Symposium, organized by the Alberta Glycomics Centre. Each year, the event attracted more than 150 participants from around the globe. With the creation of GlycoNet, the National Carbohydrate Symposium was transformed into the **Canadian Glycomics Symposium—a premier North American meeting** for researchers in the field of glycomics—and will be jointly hosted by GlycoNet and the Alberta Glycomics Centre.

Our 2017 Symposium **will bring together Canadian glycomics researchers**, as well as international scientists in the field. We expect to welcome **more than 200 researchers, trainees and industry leaders in the fields of glycomics, biotechnology and pharmaceuticals**. The Symposium will showcase some of the most notable voices in Canadian glycomics research and serve as an ideal occasion to share knowledge in the emerging field of glycomics. There will also be ample opportunity for professional development and networking.

We are currently seeking sponsors and exhibitors for this exciting event. The Canadian Glycomics Symposium will be an excellent opportunity to gain exposure for your organization among the top scientists in these fields. In addition, through your support of the Symposium, your organization will be making an invaluable contribution towards the advancement of research in glycomics and human health.

We invite organizations that share our goals of achieving groundbreaking research in health, who wish to establish a presence in this dynamic community of science, and who seek direct contact with pioneers in the field of glycomics to consider partnering with us. Symposium sponsors will receive a number of benefits as part of their sponsorship package. Please find more details about our organization, the Symposium and the different opportunities for sponsorship and involvement in the attached Sponsorship Prospectus. We would also be happy to work with your organization to develop a sponsorship opportunity that suits your organization's size and goals.

For more information and to discuss your organization's involvement, please do not hesitate to contact Elizabeth Nanak at [1.780.492.7784](tel:1.780.492.7784) or Chardelle Prevatt at [1.780.492.4355](tel:1.780.492.4355). Additional details are also available at symposium.canadianglycomics.ca.

With warm regards,

Chardelle Prevatt

Communications Associate

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E5-33G Gunning/Lemieux Chemistry Centre

University of Alberta / T6G 2G2

www.glyconet.ca

254th ACS NATIONAL MEETING



Washington, DC; August 20-24, 2017

Program:

- Advances in Glycan Structure & Dynamics
- Carbohydrate-Based Vaccines & Adjuvants
- Derek Horton Award in Industrial Carbohydrate Chemistry
- Frontiers in Carbohydrate Synthesis
- Glycomimetics as Antibiotics Sparing Therapeutics for Infectious Disease
- General Posters

MIDWEST CARBOHYDRATE AND GLYCOBIOLOGY SYMPOSIUM



The 13th Annual Midwest Carbohydrate and Glycobiology Symposium (2017 MCGS) will be held in the School of Pharmacy at UW-Madison on September 22-23, 2017 (Friday evening and Saturday). Detailed information on meeting registration and abstract submission will be available in early summer, organized by Dr. Weiping Tang. Approximately 100 people, including faculty, postdoc, graduate and undergraduate students from academic institutes in the Midwest and Canada are routinely attend. Please consider registering and attending.

GLYCO XXIV, THE 24TH INTERNATIONAL SYMPOSIUM ON GLYCONJUGATES



Jeju, South Korea; August 27th to September 1st, 2017.

Program:

The meeting covers the following main topics

- Glycan binding proteins
- Glycans in Development
- Glycans in metabolisms
- Glycans in Signaling
- Glyco(proteo)mics analysis
- Glycobiology in animal model system
- Glycobiology in Plant
- Glycogene expression and regulation
- Glycoimmunology (Immunity & Sugar Chain)
- Glycolipid
- Glyconeurobiology: Glycans in Neuroscience
- Glycopathology: Glycans in Cancer
- Glycoprotein Quality Control and Trafficking
- Glycosylation disorder diseases
- Glycotechnology
- Microbial glycobiology
- O-GlcNAc modification
- Proteoglycan
- Sialic acid
- Structural glycobiology

SFG 2017 ANNUAL MEETING- PORTLAND OREGON



Portland Oregon; Sunday, November 5, 2017 - Wednesday, November 8, 2017

GLYCOSCIENCE ON THE WEB

On-line courses and lectures: <http://www.glycobiology.org/education.php>

Fundamentals in Glycobiology

Produced in association with the NHLBI/NIH-funded Glycoconjugates and Cardiovascular Disease Program of Excellence (PEG) at the Johns Hopkins University

AAI Advance Course in Immunology

This intensive course is directed toward advanced trainees and scientists who wish to expand or update their understanding of the field. Leading experts present recent advances in the biology of the immune system and address its role in health and disease.

Additional NIH Archived Symposia and lectures

<https://videocast.nih.gov/Summary.asp?Live=20222&bhcp=1>

- 1) Glycosylation and Immunology: Friends and Foes and
- 2) Sugar Metabolism and Allergic Disease

NIH & FDA Glycoscience Research Day 2016

<https://videocast.nih.gov/summary.asp?Live=19329&bhcp=1>

Glycoproteins, Allergy, and Other Diseases

<https://videocast.nih.gov/Summary.asp?Live=21709&bhcp=1>

"Disorders of Glycans in Physiology and Disease"

PROGRAM SPONSORS

A big "Thank You" to our continuing sponsors:

The following companies and organizations have provided financial support for our program:

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