Professor Peter Seeberger, Director of the Max Plank Institute for Colloids and Interfaces, has received the 2018 Barry Cohen Prize from the Medicinal Chemistry Section of the Israel Chemical Society.

Dr. Seeberger studied chemistry in Erlangen Germany, before moving to the University of Colorado, Boulder, where he completed his Ph.D. under the direction of Marvin Caruthers in 1995. He then carried out postdoctoral studies under the direction of Samuel Danishefsky at the Memorial Sloan Kettering Institute. In 1998 he joined the Department of Chemistry at MIT, where he was promoted to Firmenich Associate Professor of Chemistry. In 2003 he moved to ETH Zurich where he spent six years before moving to Max Plank in 2009.

Professor Seeberger's research interests focus on developing automation platforms for carbohydrate and small molecule synthesis, and on carbohydrate biochemistry. He is author of greater than 490 papers, and is a member of the Berlin-Brandenburg Academy of Sciences. Professor Seeberger has won several other awards, including the Horace S. Isbell award (2003) and the Claude S. Hudson award (2009). Prof. Seeberger will also be the Newton-Abraham visiting professor at Oxford University in 2021-2022.
CONGRATULATIONS TO DR. PAMELA A. MARINO ON RECEIVING THE 2020 MELVILLE L. WOLFROM AWARD!

Dr. Pamela A. Marino, Chief of Biochemistry and Bio-related chemistry at the National Institute of General Medical Sciences, has received the 2020 Melville L. Wolfrom Award for outstanding service to the Division and to the field of carbohydrate chemistry. Dr. Marino received her B.A. in Biology from the University of Connecticut. She received her Ph.D. from the University of Connecticut under the direction of Prof. Mary Jane Osborn. Following an American Cancer Society Postdoctoral Fellowship at the NCI under the direction of Dr. Ira Pastan, Dr. Marino joined the NCI as a Senior Staff Fellow. In 1994 she moved to NIGMS, where she rose through the ranks to become Chief of Biochemistry and Bio-related Chemistry. Dr. Marino has played several critical roles in raising the profile of the field of glycoscience and bringing it into the mainstream. She was a key leader in the Consortium for Functional Glycomics, and later was instrumental in helping to establish the NIH glycoscience common fund.

CONGRATULATIONS TO DR. JOHN MAGNANI AND PROFESSOR BEAT ERNST ON RECEIVING THE DEREK HORTON AWARD IN INDUSTRIAL CHEMISTRY!

Dr. John Magnani, CSO and senior Vice President of Glycomimetics, and Professor Beat Ernst, Emeritus Professor at University of Basel, have won the 2020 Derek Horton Award for Industrial Chemistry. Dr. Magnani received his B.S. at Washington University in St. Louis before pursuing his Ph.D. in Biology with Malcolm S. Steinberg. He was a researcher at the National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases from 1979-1989 before becoming president of GlycoTech corporation. In 2003 he co-founded GlycoMimetics where he was instrumental in the development if Sialyl Lewis X agonist-based therapeutics. He is Author of over 100 papers and has won the President's Innovation Award from the Society for Glycobiology in 2015.

Prof. Ernst earned his Ph.D. in chemistry from ETH Zürich with Prof. Oskar Jerger. Following postdoctoral studies at CalTech, Prof. Ernst joined Ciba-Geigy in 1980. After spending 17 years in industry, Prof. Ernst became Professor of Molecular Sciences at the University of Basel 1998. Prof. Ernst's research program focuses on the development of glycomimetic compounds for use as therapeutics. He has authored over 300 papers and has won numerous awards, including the Werner-Price award of the Swiss chemical society (1986), the Novartis Lectureship (2003), and the Peter Speiser award from ETH Zürich (2015).
CONGRATULATIONS TO PROFESSOR PENG WU ON RECEIVING THE HORACE S. ISBELL AWARD.

Professor Peng Wu, Associate Professor in the Department of Molecular Medicine at The Scripps Research Institute, has received the 2020 Horace S. Isbell Award for excellence in and promise of continued quality of contribution to research in carbohydrate chemistry. Prof. Wu obtained his B.S. at Peking University, and his Ph.D. in Chemistry at the Scripps Research Institute under the direction of Prof. K. Barry Sharpless. From 2005-2008 he was a Postdoctoral Fellow at U.C. Berkeley under the Direction of Carolyn Bertozzi. In 2008 he joined the Department of Biochemistry at the Albert Einstein College of Medicine where he was promoted to Associate Professor. In 2015 he joined TSRI. Prof. Wu's research focuses on using metabolic engineering to study the role of protein glycosylation in human disease. He has authored over 60 publications, and is a previous recipient of the David Y. Gin New Investigator Award from the CARB division (2013).

CONGRATULATIONS TO PROFESSOR CATHERINE LEIMKUHLER GRIMES ON RECEIVING THE DAVID Y. GIN NEW INVESTIGATOR AWARD.

Professor Catherine Leimkuhler Grimes, Professor of Chemistry at the University of Delaware, has won the 2020 David Y. Gin New Investigator Award for outstanding contributions to research in carbohydrate chemistry by scientists in the first seven years of their independent career. Prof. Grimes earned her BS in chemistry from the Villanova University in 2001. Subsequently she carried out her Ph.D. research at Harvard University under the direction of Prof. Daniel Kahne. Following postdoctoral studies with Erin O'Shea and Daniel Podolsky, she began her independent career at Delaware in 2011. Prof. Grimes's research focuses on studying bacterial cell wall assembly and the innate immune system. She has previously won the ACS Infectious Disease Young Investigator Award (2017) and was an Alfred P. Sloan Research Fellow (2017).

PROFESSOR LAI-XU WANG NAMED AN ACS FELLOW

Professor Lai-Xi-Wang, Professor of Chemistry and Biochemistry at the University of Maryland, has been named a 2020 ACS Fellow. The ACS Fellows program was created by the ACS "to recognize members of the ACS for outstanding achievements in and contributions to science, the profession, and society." Professor Wang received his Ph.D. from the Shanghai Institute of Organic chemistry and carried out Postdoctoral studies at John Hopkins University (with Yuan C. Lee) and MIT (with Graham C. Walker). In 2000 he joined the Institute of Human Virology at the University of Maryland School of Medicine, where he was promoted to full professor in 2009. In 2015, he moved to the Department of Chemistry and Biochemistry at the University of Maryland College Park. Prof. Wang's research focuses on the development of chemoenzymatic approaches to homogeneous glycoprotein synthesis and chemical glycobiology. Prof. Wang has published over 200 papers and has won numerous awards, including the 2004 Young Investigator Award and the 2014 Wolfson Award from the CARB Division.
CARB Division Centennial at San Diego ACS Meeting

The division will be celebrating its centennial at the 2019 Fall ACS meeting in San Diego. August 25th through 29th. There will be a session of the perspectives of previous Division Chairs on August 25th. A celebration dinner will be held on Monday August 26th. Those interested in attending the dinner should contact Prof. Peter Andreana at peter.andreana@utoledo.edu

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 clay.bennett@tufts.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 Chemicals 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.
PROGRAM SPONSORS

A big “Thank You” to our continuing sponsors:

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

Carbohydrate Research

Lectnez Bio

Elsevier

Glycosyn

New England Biolabs

Sussex Research
Advances in Carbohydrate Chemistry and Biochemistry

Sialic Acids, Part II: Biological and Biomedical Aspects

Serial Editor: David C. Baker, Dr. Baker is Professor of Chemistry, Emeritus at the University of Tennessee in Knoxville, TN, USA. His editorial experience extends back over thirty years with editor's positions for both the Journal of Carbohydrate Chemistry and Carbohydrate Research.

Reviews the current status and future trends in carbohydrate chemistry and biochemistry, providing critical and informative articles

A Volume in the Advances in Carbohydrate Chemistry and Biochemistry series

KEY FEATURES

- Features contributions from leading authorities and industry experts who specialize in carbohydrate chemistry, biochemistry and research
- Integrates the industrial, analytical and technological aspects of biochemistry, organic chemistry and instrumentation methodology in the study of carbohydrates
- Informs and updates on all the latest developments in the field

DESCRIPTION

Sialic Acids, Volume 76, the most recent release in the Advances in Carbohydrate Chemistry and Biochemistry series, is the second volume of a two-volume set devoted to the sialic acids. Vol. 76, devoted to the biological and biomedical aspects of sialic acids, includes chapters on "Sialic Acids in Neurology," "Sialic Acids in Nonenveloped Virus Infections," and "The Biology of Gangliosides," all written by leading experts in their fields.

RELATED TITLES

- Baker, Horton, Advances in Carbohydrate Chemistry and Biochemistry, volume 72, Nov 2015, 9780128021415, $256.00
- Baker, Advances in Carbohydrate Chemistry and Biochemistry, volume 73, Dec 2016, 9780128099834, $256.00
- Baker, Advances in Carbohydrate Chemistry and Biochemistry, volume 74, Nov 2017, 9780128120774, $256.00

SERIALS Chemistry & Chemical Engineering
virtuale.elsevier.com
Carbohydrate Research publishes reports of original research in the following areas of carbohydrate science:

- action of enzymes, analytical chemistry, biochemistry (biosynthesis, degradation, structural and functional biochemistry, conformation, molecular recognition, enzyme mechanisms, carbohydrate-processing enzymes, including glycosidases and glycosyltransferases), chemical synthesis, isolation of natural products, physicochemical studies, reactions and their mechanisms, the study of structures and stereochemistry, and technological aspects.

SUPPORTS OPEN ACCESS

Carbohydrate Research offers authors the option to publish papers open access. See the journal homepage for details.
reactions and their mechanisms, the study of structures and stereochemistry, and technological aspects.
Lectenz® Bio is an Athens, GA and San Diego, CA based company specializing in the development of easy to use, cost effective, and validated glyco-research tools.

- Lectenz® for Glycan Detection and Purification
  - Western blotting
  - Immunohistochemistry
  - Immunoprecipitation
  - ELISA
  - Affinity chromatography
- GlycoSense™ Glycoprofiling
- Glyco-Enzymes

www.lectenz.com  
sales@lectenz.com
Putting science first.

Post-Doctoral Fellowships at New England Biolabs®

Established in the mid 1970s, New England Biolabs, Inc. (NEB®) is the industry leader in the discovery and production of enzymes for molecular biology applications and now offers the largest selection of recombinant and native enzymes for genomic research. NEB continues to expand its research and development into areas related to DNA replication, programmable nucleases, epigenetics, molecular parasitology, sample preparation for next generation sequencing, synthetic biology, glycobiology and RNA analysis.

Scientists in the Research Department at New England Biolabs conduct basic research in the areas of Molecular Enzymology, Nucleic Acid Replication, Protein Expression and Modification, Genome Biology and RNA Biology. The Post-Doctoral Fellowship program at NEB aims to train recent Ph.D. graduates in a modern industrial molecular biology setting. Post-doctoral fellows conduct basic research, publish in high quality journals and present at scientific conferences.

Employment at NEB offers a stimulating and creative work environment in a state-of-the-art research and production facility, with a team of exceptional scientists and professional staff. The NEB culture emphasizes personal and professional growth through creativity, teamwork, respect and responsibility, while maintaining a casual campus-like working environment. Our diverse and talented team of scientists enjoy a collaborative research environment with much of the freedom and intellectual challenge of academia. Our unique corporate philosophy encourages dialogue and innovation.

For information about Post-Doctoral Fellowships at New England Biolabs please visit: https://www.neb.com/about-neb/careers
Glycoproducts & Glycodesign

Functionalized carbohydrate-based molecules and synthetic platforms for exploring & exploiting glycobiology

Carbohydrate Ligands
Biotinylated Glycans
Glycopeptides
Glycolipids
Glycoconjugate Vaccine Development

Clickable Carbohydrates
Oligosaccharides
Glycoamino Acids
Glycoprobes
Custom Synthesis & Contract R & D

Inquiries: info@sussex-research.com

www.sussex-research.com
UPCOMING MEETINGS

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

258th ACS NATIONAL MEETING

258th American Chemical Society National Meeting & Exposition
Chemistry & Water

San Diego, California; Dates: August 25-29, 2019

The CARB program for the 258th ACS National Meeting in Orlando, Florida has been published. Please support the Carbohydrate Division by attending these symposia:

Sunday, August 25, 2019
Morning
• Centennial Celebration of ACS Carbohydrate Division: Chairs Perspective

Afternoon
• Centennial Celebration of ACS Carbohydrate Division: Chairs Perspective

Evening
• General Posters

Monday, August 26, 2019
Morning
• Carbohydrate Synthesis for CARB's Next Centenary

Afternoon
• Carbohydrate Synthesis for CARB's Next Centenary
American Chemical Society Division of Carbohydrate Chemistry

* **Sci-Mix (8:00pm-10:00pm)**

**Tuesday, August 27, 2019**

**Morning**
- Japanese-American Symposium on Applied & Translational Glycoscience

**Afternoon**
- Japanese-American Symposium on Applied & Translational Glycoscience

**Wednesday, August 28, 2019**

**Morning**
- Uncovering the Biological Roles of Protein N-GlcNAcylation with Chemistry

**Afternoon**
- Uncovering the Biological Roles of Protein N-GlcNAcylation with Chemistry

**Thursday, August 28, 2019**

**Morning**
- Glycans in Context

**Afternoon**
- Glycans in Context
As for the past twenty-seven editions, the 27th Glycosaminoglycan Symposium will take place in Villa Vigoni (Loveno, Lake Como). Eminent specialists from all over the world are invited to contribute to discussion of topics of actual or emerging interest in the field of chemistry, biochemistry, biology, pharmacology, and clinical applications of heparin and other glycosaminoglycans. Both basic and applied aspects will be covered and discussed, with about twenty percent of participants being associated with industrial companies. Participation is by invitation only, however, two subscriptions for ACS Members. Interested individuals should contact Dr. Antonella Bisio at bisio@ronzoni.it
The 15th Annual Midwest Carbohydrate and Glycobiology Symposium (2019 MCGS) will be held at The University of Notre Dame in September. Detailed information on meeting registration and abstract submission can be found at: [http://sites.nd.edu/mcgs-nd2019/](http://sites.nd.edu/mcgs-nd2019/)

Organized this year by Dr. Anthony Serianni. Approximately 100 people, including faculty, postdoc, graduate and undergraduate students from academic institutes in the Midwest and Canada are expected to attend. Please consider registering and attending.

**SFG 2019 ANNUAL MEETING- PORTLAND OREGON**

Phoenix AZ; November 2, 2019-November 5, 2019
259th ACS National Meeting

Philadelphia PA; March 22-26, 2020

Abstracts are Due October 14, 2019

Program:
- CARB Division Awards Symposia
- Chemical Tools for Dissecting Microbial Glycobiology
- Carbohydrates and Infectious Disease
- Roles of Carbohydrates in Regulating Immune Responses