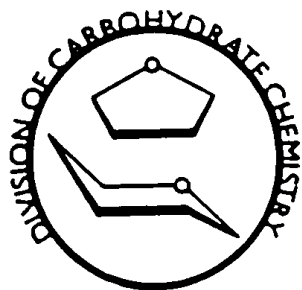




American Chemical Society  
Division of Carbohydrate Chemistry

# NEWSLETTER



Celebrating  
75 Years  
1927-1990

Summer 2000

**DIVISION OF CARBOHYDRATE CHEMISTRY  
OFFICERS AND EXECUTIVE COMMITTEE FOR 1999-2000**

<u>Office</u>	<u>Name</u>	<u>Phone, Fax, E-mail</u>
Chairman (1999-2000)	Fred Brewer	718-430-2227 718-430-8922 (fax) brewer@aecom.yu.edu
Chairman-Elect and Program Chairman (1999-2000)	John Robyt	515-294-1964 515-294-0453 (fax) jrobyt@iastate.edu
Past Chairman (1999-2000)	Manssur Yalpani	508-366-4089 myalpani@aol.com
Executive Secretary and Program Liaison (1998-2000)	Zbigniew J. Witczak	570-408-4276 570-408-7828 (fax) witczak@wilkes.edu
Secretary and Newsletter Editor (1998-2000)	Muthiah Manoharan	760-603-2381 760-929-0036 (fax) mmanoharan@isisph.com
Treasurer (1998-2002)	Gillian Eggleston	504-286-4446 gillian@nola.srrc.usda.gov
Councilor (1999-2002)	David A. Brant	949-824-6019 dbrant@uci.edu
Councilor (1998-2001)	Derek Horton	202-885-1750 202-885-1752 (fax) carbchm@american.edu
Alternate Councilor (1997-2000)	Arland Hotchkiss	215-233-6448 215-233-6559 (fax) ahotchkiss@arserrc.gov
Alternate Councilor (1998-2001)	David Baker	865-974-1066 865-974-1536 (fax) baker@utk.edu
Executive Committee (members-at-large)	(98-00) Kevin Rice	313-763-1032 krice@umich.edu
	(98-00) Peter Norris	908-932-9611 pnorris@cc.yzu.edu
	(99-01) C. Allen Bush	306-455-2506 bush@umbc.edu
	(99-01) Juan Navia	706-354-7545 jlnavia@ix.netcom.com

ACS National Meeting, August 2000  
PROGRAM FOR THE CARBOHYDRATE DIVISION  
The Convention Center  
Washington, DC August 20-24, 2000

<u>Day/Date</u>	<u>Time</u>	<u>Symposium Title</u>
Sunday 8/20	AM	Wolfrem-Isbell Awards Symposium
	PM	Inosine Monophosphate Dehydrogenase (IMPDH); Perspectives on a Major Therapeutic Target
Monday 8/21	AM	Session I: Contributed Papers
	AM	Session II: Inosine Monophosphate Dehydrogenase (IMPDH); Perspectives on a Major Therapeutic Target
	PM	Session I: Contributed Papers
	PM	Session II: Contributed Papers (Posters)
	PM	Session III: Inosine Monophosphate Dehydrogenase (IMPDH); Perspectives on a Major Therapeutic Target
Tuesday 8/22	AM	Session I: Biochemistry of Polysaccharides
	AM	Session II: Contributed Papers
	AM	P <sub>2</sub> Nucleoside Receptors (Organized by the MEDI Division)
	PM	Session I: Biochemistry of Polysaccharides
	PM	Session II: Contributed Papers: Nucleosides and Nucleotides
	PM	Biosynthesis, Enzyme Inhibitors on and Mimetics, Saccharides, Lipids (Organized by the ORG Division)
Wednesday 8/23	AM	Biochemistry of Polysaccharides
	PM	Biochemistry of Polysaccharides

UPCOMING ROUNDTABLE

XIV International Roundtable  
Nucleosides, Nucleotides and Their Biological  
Applications  
September 10-14, 2000  
San Francisco, CA, USA

**Scientific Program:**

- The History of Antivirals and Lessons Learned from Lab to Clinical Practice
- Synthesis and *In Vitro* Evaluation of Novel Nucleosides and Nucleotides
- Purine and Pyrimidine Receptors
- Recent Advances in the Discovery of Novel Oligonucleotides
- Molecular Structure, Conformation, Biochemistry and Mechanism of Action of Nucleosides, Nucleotides and Oligonucleotides
- Oligonucleotides: Clinical Development and Diagnostic Applications
- Chemistry of Nucleosides, Nucleotides and Oligonucleotides
- Preclinical and Clinical Development of Nucleosides and Nucleotides
- Poster and Oral Presentations

**Please Contact:**

Conference Secretariat  
International Medical Press  
3340 Peachtree Road  
Suite 550  
Atlanta, GA 30326  
Telephone: 404-233-6446  
Fax: 404-233-2817  
E-mail: Roundtable@gilead.com  
Website: www.xivirt.com

<http://www.acs.org/cgi-bin/ACS/personalscheduler.exe>  
Or  
[www.acs.org/meetings/washington2000](http://www.acs.org/meetings/washington2000)

**ACS National Meeting, August 2000**  
**M. L. Wolfrom and H. S. Isbell Awards Banquet**  
**Honoring Professor Zbigniew J. Witczak and**  
**Professor Laura L. Kiessling**

- The M. L. Wolfrom award for the year 2000 will be presented to **Professor Zbigniew J. Witczak** of Wilkes University. The H. S. Isbell award for the year 2000 will be presented to **Professor Laura L. Kiessling** of the University of Wisconsin-Madison. The awards will be presented at the National ACS Meeting in Washington, D. C. There will be a special symposium on Sunday morning, August 20, highlighting work by the award winners, as well as the traditional banquet on Monday evening, August 21.
- The banquet will be at the following address:  
**University Club of Washington,**  
**1135 16th Street, NW,**  
**Washington, D.C.**  
**Telephone: 202-862-8800.**
- The reception will start at 6:30 p.m., and dinner will start promptly at 7:30 p.m. This should be a popular event and seating is finite; so get your reservation in soon. The ticket price is \$50.
- Please send your reservation by e-mail or fax or phone today, and pay for your ticket at your convenience. Of course there's the usual way, when you register in advance or on site or purchase the ticket from Dr. Fred Brewer.

Please contact:

**Professor Fred Brewer**  
**Albert Einstein College of Medicine**  
**Dept. of Molecular Pharmacology**  
**Bronx, NY 10461-1988**  
**Phone: (718) 430-2227**  
**Fax: (718) 430-8922**  
**brewer@acom.yu.edu**

Dr. Muthiah Manoharan  
Secretary  
ACS Carbohydrate Chemistry Division  
Isis Pharmaceuticals Inc.  
2292 Faraday Ave.  
Carlsbad, CA 92008-7208 U.S.A.

**DIVISION OF CARBOHYDRATE CHEMISTRY  
ACS FUTURE PROGRAMS**

Program Chair: Muthiah Manoharan, Isis Pharmaceuticals, 2292 Faraday Avenue, Carlsbad, CA, Phone 760-603-2381, Fax 760-929-0036, e-mail: mmanoharan@isisph.com

**2001 SPRING MEETING SAN DIEGO, CA – April 1-5, 2001**

**Hudson Award Symposium.** John F. Robyt, Laboratory of Carbohydrate Chemistry and Enzymology, Iowa State University, IA, 4252 Molecular Biology Bldg., Ames, IA 50010, e-mail jrobyt@iastate.edu

**Glycals: Modern Chemistry and New Development.** Waldemar Priebe, The University of Texas, M. D. Anderson Cancer Center, Houston, TX 77030, e-mail utwood@wt.net

**Nucleic Acid Based Therapeutics and Related Technologies.** Muthiah Manoharan, Isis Pharmaceuticals, Inc., 2292 Faraday Avenue, Carlsbad, CA 92008

**General Contributed Papers.** Muthiah Manoharan, Isis Pharmaceuticals, Inc., 2292 Faraday Avenue, Carlsbad, CA 92008

**Contributed Papers: Nucleosides, Nucleotides and Oligonucleotides.** Muthiah Manoharan, Isis Pharmaceuticals, Inc., 2292 Faraday Avenue, Carlsbad, CA 92008

**Contributed Papers: Poster Session.** Muthiah Manoharan, Isis Pharmaceuticals, Inc., 2292 Faraday Avenue, Carlsbad, CA 92008

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**YOUR HELP IS CRITICAL!  
We need it!**

There has always been a small but very active group of individuals who have contributed to the programming of the Carbohydrate Division. If anyone has an idea for a symposium topic for future meetings, please contact any one of the officers listed in the front of this Newsletter.

**THE 19TH INTERNATIONAL LECTIN MEETING  
MARCH 25-30, 2001  
FORTALEZA, CEARA, BRAZIL**

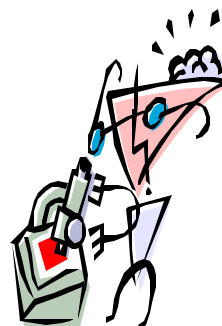
This carbohydrate-related meeting is sponsored by the BIO-MOL LAB, Laboratory of Biological Active Molecules, Federal University of Ceara. The individual to contact is Dr. A. H. Sampaio, BioMol Lab, Department of Fishing Engineering, Federal University of Ceara, PO Box 6033, 60.451-970 – Fortaleza - Ceara – Brazil. His e-mail is [interlec19@ufc.br](mailto:interlec19@ufc.br). The web site for the meeting is <http://ufc.br/interlec19>.

**A BIG THANK YOU TO SPONSORS  
OF OUR PROGRAM!**

The following companies provided financial support for the Isbell/Wolfram Awards Program at the Washington meeting

**McNeil Specialty Products Co.  
Omicron Biochemicals, Inc.  
Pfanstiehl Laboratories, Inc.  
SafeScience  
A. E. Staley Mfg. Co.**

**We are grateful for their generous support.**



**2000 Newsletter Publication Deadlines**

**Fall 2000 – October 1, 2000**



**NEW MEMBERSHIP APPLICATION  
For  
The ACS Division of Carbohydrate Chemistry**

**I wish to enroll as a member of the ACS Division of Carbohydrate Chemistry. I am currently a member or National Affiliate in good standing with the ACS.**

Name (Dr., Mr., Mrs., Miss, Ms.) \_\_\_\_\_

Affiliation \_\_\_\_\_  
(University, Institute, Company)

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip code \_\_\_\_\_

Country (if not USA) \_\_\_\_\_

Business Telephone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail address: \_\_\_\_\_

ACS Membership Number \_\_\_\_\_

(found on your ACS membership card or from the mailing label on your C&E News)

**Please pass this information to your colleagues and friends!**

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

**Mail to:** Dr. Muthiah Manoharan  
Isis Pharmaceuticals  
2292 Faraday Avenue  
Carlsbad, CA 92008-7208

E-mail: mmanoharan@isisph.com  
Phone (760) 603-2381  
Fax (760) 929-0036



**ACS  
DIVISION OF CARBOHYDRATE  
CHEMISTRY BALLOT FOR THE  
2000 ELECTION**



At least one candidate has been nominated for each office. Please cut this page, mark your ballots and return them in the provided envelope at your earliest convenience, and no later than Monday, August 14, 2000 to:

**Dr. Muthiah Manoharan  
Isis Pharmaceuticals  
2292 Faraday Avenue  
Carlsbad, CA 92008-7208**

You may also write in a candidate for any office. If you do so, be sure he or she is a member of the ACS and the Division of Carbohydrate Chemistry, and remember to place a mark in the box next to the candidate's name as well. You should not put your name or address in the envelope containing the ballot. However, please be sure to mark it with your ACS membership number (see your membership card or C&E News mailing label).

**Chair Elect:** (one year term; vote for one)

Zbigniew Witczak – Wilkes University

- \_\_\_\_\_
- \_\_\_\_\_

**Executive Secretary:** (three year term; vote for one)

Muthiah Manoharan - Isis Pharmaceuticals

- \_\_\_\_\_
- \_\_\_\_\_

**Secretary/Newsletter Editor:**

Kevin Rice – University of Michigan

- \_\_\_\_\_

**Alternate Councilor:**

Waldemar Priebe – University of Texas

- \_\_\_\_\_

**Executive Committee (2):** (two year term; vote for two)

Carolyn Bertozzi, University of California Berkeley

- Chi-Huey Wong, Scripps Research Institute
- \_\_\_\_\_

**Awards Committee:** (three year term; vote for one)

Jackie Gervay-Hague, University of Arizona

- \_\_\_\_\_
- \_\_\_\_\_

**DEADLINE FOR RECEIPT OF BALLOTS IS AUGUST 14, 2000.**

**BIOGRAPHICAL SKETCHES OF THE CANDIDATES**  
(Please refer to the ballot)

**Zbigniew Witczak** - Wilkes University (Chair-Elect)

Dr. Witczak is presently the Professor of Pharmaceutical Chemistry at the Wilkes University. Dr. Witczak has served as the Executive Secretary of the Division for the past two years and before that, served as the Secretary of the Division for two years. Dr. Witczak areas of interest include the chemistry of levoglucosenone and levoglucosans; the synthesis of natural products from carbohydrates; chemistry of thio-, seleno-, and phosphoro sugars as potential antitumor and anti-viral agents; oligosaccharide synthesis, C-glycosides, C-di- and C-oligosaccharides.

**Mano Manoharan** – Isis Pharmaceuticals (Executive Secretary)

Dr. Manoharan has been the Secretary of the Division for the past two years and is the Director of Medicinal Chemistry at Isis Pharmaceuticals. His research interests include oligonucleotide chemistry, antisense therapeutics, structure-function relationships of oligonucleotides.

**Kevin Rice** – University of Michigan (Secretary)

Dr. Rice is an Associate Professor of Medicinal Chemistry and Pharmaceutics at the University of Michigan, College of Pharmacy. He is a member of the Executive Committee of the CARB Division. Dr. Rice has research interests in the function of N-linked oligosaccharides on glycoproteins; isolation, structure elucidation, chemical and enzymatic modification; conformational analysis by fluorescence energy transfer; binding specificity to mammalian lectins.

**Carolyn Bertozzi** – Univ. of California, Berkeley (Member, Executive Committee)

Dr. Bertozzi is an Associate Professor of Chemistry, University of California Berkeley. Dr. Bertozzi won the H. S. Isbell Award of the CARB Division in 1998. In her research program, organic chemistry; molecular and cell biology are combined to investigate the biological functions of glycoconjugates and develop new therapeutic strategies.

**BIOGRAPHICAL SKETCHES OF THE CANDIDATES (Continued)**  
(Please refer to the ballot)

**Chi-Huey Wong** – Scripps Research Institute (Member, Executive Committee)

Dr. Wong is the Ernest W. Hahn Professor of Chemistry at the Skaggs Institute of Chemical Biology, Scripps Research Institute, San Diego, CA. He was the recipient of the ACS Claude S. Hudson Award in Carbohydrate chemistry awarded by the CARB Division in 1999. His research programs are directed toward development of new chemical-enzymatic strategies for the synthesis of biologically active compounds and chiral intermediates, rational modification of enzyme stability, specificity and specific activity, design and synthesis of mechanism-based inhibitors of enzymes or receptors, development of new enzymatic catalysts for organic reactions, design and synthesis of small molecules targeting RNA, and investigation of reaction mechanisms.

**Jacquelin Gervay-Hague** – University of Arizona (Member, Awards Committee)

Dr. Gervay-Hague is an Associate Professor, Department of Chemistry, University of Arizona. She was the recipient of the H. S. Isbell Award of the CARB Division in 1999. Her research areas are the development of drug delivery systems targeting HIV and cancer, synthesis of carbohydrate-based peptide mimics, development of new synthetic methods, structural studies of oligosaccharides using NMR and circular dichroism.

**Waldemar Priebe** – University of Texas (Alternate Councillor)

Dr. Priebe is an Associate Professor of Medicinal Chemistry, University of Texas, M. D. Anderson Cancer Center, and University of Texas Graduate School for Biomedical Sciences. Dr. Priebe has played an active role in the functions of the Division of Carbohydrate Chemistry, serving on both the program and executive committees. Dr. Priebe's research involves design, synthesis, and biological evaluation of carbohydrate-based anticancer agents. His current research includes the study of the sugar moiety in anthracycline antibiotics on multidrug resistance and molecular interaction with drug transports (P-gp and MRP). He is also working in the design of carbohydrate-based DNA interactive agents that control gene expression at the transcriptional level and agents that are based-specific alkylators of DNA. He has organized numerous symposia for the CARB division in the past and served in the executive committee for a long period.