

Curriculum Vitae
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Geert-Jan Boons

UGA Foundation Distinguished Professor in Biochemical Sciences

The University of Georgia
Complex Carbohydrate Research Center / Department of Chemistry
315 Riverbend Road, Athens, GA 30602-4712 (USA)

Phone: (706) 542-9161
E-mail: gjboons@ccrc.uga.edu
Website: <https://ccrc.uga.edu/team/geert-jan-boons/>

Professor and Chair

Utrecht University
Chemical Biology and Drug Discovery
Utrecht Institute for Pharmaceutical Sciences / Bijvoet Center for Biomolecular Research
David de Wied building, Office 5.72
Universiteitsweg 99, 3584 CG Utrecht (Netherlands)

Phone: (030) 253 73 96
E-mail: g.j.p.h.boons@uu.nl
Websites: <http://www.uu.nl/medewerkers/GJPHBoons> and
<https://www.uu.nl/en/research/chemical-biology-and-drug-discovery>

Date of Birth April 7, 1962 (Oisterwijk, The Netherlands)

Education

- 1987 First Degree (equivalent to M.Sc.), Chemistry, State University of Leiden (Netherlands)
1991 Ph.D., Synthetic Carbohydrate Chemistry, State University of Leiden (Netherlands),
advisor Prof. J.H. van Boom
Thesis: An approach towards the development of a synthetic vaccine against *Neisseria meningitidis*
1991-1992 Postdoctoral Research Assistant, with Prof. S.V. Ley, Imperial College, London (United Kingdom)
1992-1993 Postdoctoral Research Assistant, with Prof. S.V. Ley, University of Cambridge (United Kingdom)

Professional Experience

- 1987-1988 Research Scientist, Department of Research and Development, N.V. Organon, Oss (Netherlands)
1993-1997 Lecturer, Bioorganic Chemistry, University of Birmingham (United Kingdom)

- 1997-1998 Professor, Bioorganic Chemistry, University of Birmingham (United Kingdom)
- 1998-present Professor, Complex Carbohydrate Research Center and Department of Chemistry, University of Georgia, Athens (USA)
- 2004-2013 Appointed *Franklin Professor of Chemistry*, Franklin College of Arts and Sciences, University of Georgia
- 2006 Visiting Professor, Université de Picardie Jules Verne, Amiens (France)
- 2013-present Appointed *UGA Foundation Distinguished Professor in Biochemical Sciences*, Franklin College of Arts and Sciences, University of Georgia
- 2015-present Professor and Chair, Chemical Biology and Drug Discovery, Departments of Pharmaceutical Sciences and Chemistry, Faculty of Sciences, Utrecht University (Netherlands)

Honors and Awards

- 1991-1993 Ramsay Memorial Fellowship
- 2001 Elected co-chair, 2003 Gordon Research Conference on Carbohydrate
- 2003 Carbohydrate Research Award for Creativity in Carbohydrate Science, European Carbohydrate Organisation at EuroCarb 2003
- 2003 Elected chair, 2005 Gordon Research Conference on Carbohydrate
- 2004 Northeast Georgia American Chemical Society (NEGACS) Chemist of the Year Award for Research
- 2004 Horace S. Isbell Award, Division of Carbohydrate Chemistry, American Chemical Society
- 2004 Appointed *Franklin Professor of Chemistry*, Franklin College of Arts and Sciences, University of Georgia
- 2012 Creative Research Inventor's Award, University of Georgia Research Foundation
- 2013 Appointed *UGA Foundation Distinguished Professor in Biochemical Sciences*, Franklin College of Arts and Sciences, University of Georgia
- 2014 Roy L. Whistler International Award in Carbohydrate Chemistry, International Carbohydrate Organization (ICO)
- 2015 Lamar Dodd Creative Research Award, University of Georgia Research Foundation
- 2015 Claude S. Hudson Award, Division of Carbohydrate Chemistry, American Chemical Society
- 2016 Arthur C. Cope Mid Career Scholars Award, Arthur C. Cope Fund, American Chemical Society
- 2022 Elected Fellow by the US National Academy of Inventors

Professional Service

- 1994-1998 Member of the Safety Committee of the School of Chemistry, University of Birmingham (United Kingdom)
- 1995-1998 Member of the Biotechnology Executive Group of the University of Birmingham (United Kingdom)
- 1997-1999 Member of the Engineering and Physical Sciences Research Council (EPSRC), College for Synthetic and Biological Research (United Kingdom)
- 1999-2009 Editorial Board Member, *Carbohydrate Research*
- 2001-present Editorial Board Member, *Journal of Carbohydrate Chemistry*
- 2001 Search Committee for Pharmacy Department Head, University of Georgia

- 2001-2005 Ad Hoc NIH Study Sections: Med Chem A, Bioorganic and Natural Products Chemistry, Innate Immunity and Inflammation, Immunity and Host Defense, Drug Development & Delivery, Synthetic and Biological Chemistry-A
- 2003-present Executive Committee Member, Carbohydrate Division of American Chemical Society
- 2004-present Member of the Center for Drug Discovery, College of Pharmacy, University of Georgia
- 2004 Chair of Search Committee for Assistant Professor of Chemistry, Chemistry Department, University of Georgia
- 2004 Chair of Search Committee for Assistant Professor, Complex Carbohydrate Research Center, University of Georgia
- 2004-2014 Editorial Board Member, *Advances in Carbohydrate Chemistry and Biochemistry*
- 2005-2008 Permanent Member, Synthetic and Biological Chemistry A NIH Study Section
- 2007-present Member of the University of Georgia Cancer Center
- 2007-2012 Steering Committee Member, Consortium for Functional Glycomics (CFG)
- 2008-present Member of the Nanoscale Science and Engineering Center (NanoSEC), University of Georgia
- 2008-2018 Editorial Board Member, *Glycoconjugate Journal*
- 2008-present Executive Committee Member, Complex Carbohydrate Research Center, University of Georgia
- 2008-2010 Member of the Lamar Dodd Creative Research Award Selection Committee, University of Georgia
- 2010-2011 Member of National Academies of Science (NAS) Task Group on Assessing the Importance of Glycomics and Glycosciences
- 2011-2014 International Advisory Board Member, *European Journal of Organic Chemistry*
- 2011-2017 Scientific Advisory Board Member, Alberta Ingenuity Centre for Carbohydrate Science (AICCS)
- 2011-2012 Member of National Academies of Science (NAS) Committee on Assessing the Importance and Impact of Glycomics and Glycosciences
(Report: *Transforming Glycoscience: A Roadmap for the Future*;
http://www.nap.edu/catalog.php?record_id=13446)
- 2011 Founder of ViaMune, Inc
- 2012-2014 Scientific Advisor, SCYNEXIS, Inc
- 2012-2018 Leader of the Subgroup ‘Glycan Synthesis and Microarrays’ of the Consortium for Functional Glycomics (CFG) and CFG Steering Committee member
- 2012-present Associate Director of External Affairs, Complex Carbohydrate Research Center, University of Georgia
- 2013-present Scientific Advisory Board Member, Institute for Chemical Immunology (ICI) (Netherlands)
- 2013-present Editorial Board Member, *Carbohydrate Research*
- 2014 & 2016 Member of the PE5–Synthetic Chemistry and Materials Starting Grant Evaluation Panel of the European Research Council (ERC)
- 2014-2023 Treasurer of the American Chemical Society (ACS) Carbohydrate (CARB) Division
- 2015-2021 Advisory Board Member, Amphastar Pharmaceuticals, Inc
- 2015-2019 Scientific Advisory Board Member, Kaleido Biosciences
- 2015-present Program Leader, Utrecht Institute of Pharmaceutical Sciences, Utrecht University
- 2015-present Executive Board Member, Bijvoet Center for Biomolecular Research, Utrecht University
- 2017-present Scientific Advisory Board Member, Multidisciplinary European Joint Doctorate in the Design and Development of Glyco Drugs (PhD4GlycoDrug ITN consortium)

- 2019-2020 Scientific Advisor, Mersana Therapeutics, Inc
2020-present Scientific Advisory Board Member, Aviceda Therapeutics
2021 Chemical Synthesis Program ‘SYN-Biomolecules’ Panel Member of the National Science Foundation (NSF)
2021-present Editorial Board Member, *Glycobiology*

Conferences/Symposia Organized

- RSC Symposium, New Directions in Organic and Bioorganic Chemistry, School of Chemistry, University of Birmingham (United Kingdom) December 10, 1996: Chair
RSC Spring Meeting of the Carbohydrate Group: Synthesis, Structure and Function, School of Chemistry, University of Birmingham (United Kingdom) March 29-April 1, 1998: Chair
Gordon Research Conference on Carbohydrates, Tilton School, NH (USA) June 19-24, 2005: Chair
Symposium ‘Carbohydrate Recognition Mechanisms and Applications’ at the 231st National Meeting of the American Chemical Society, Chemistry Division of Carbohydrates, Atlanta, GA (USA) March 26-27, 2006: Co-organizer
Georgia Glycoscience Symposia, Complex Carbohydrate Research Center, University of Georgia, Athens, GA (USA) May 12, 2005; May 18, 2006; May 8, 2007; May 16, 2008; April 28, 2015: Co-organizer
Symposium ‘Synthetic Oligosaccharides and Glycoconjugates for Preventing and Combating Disease’ at the 240th National Meeting & Exposition of the American Chemical Society, Boston, MA (USA) August 23, 2010: Co-organizer
Symposium ‘Carbohydrate Recognition in Health and Disease’ at the 2010 Pacificchem Conference, Honolulu, HI (USA) December 15-20, 2010: Co-organizer
Georgia Glycoscience Symposium and CFG Workshop, Paradigms for Glycan Action in Development and Disease, Complex Carbohydrate Research Center, University of Georgia, Athens, GA (USA) March 14-15, 2011: Co-organizer
Symposium ‘Glycoscience at the Crossroad of Health, Materials, and Energy’ at the 244th ACS National Meeting, Philadelphia, PA (USA) August 21-22, 2012: Co-organizer
2013 International Symposium on Chemical Glycobiology, Consortium for Functional Glycomics (CFG) and the Chinese Academy of Sciences (CAS), Shanghai (China) June 29-July 1, 2013: Co-organizer
The 27th International Carbohydrate Symposium, Indian Institute of Science, Bangalore (India) January 12-17, 2014: Scientific Programme Committee member
CFG Workshop in Molecular and Cellular Glycoscience, ‘Exploring the Frontiers of Chemical Glycoscience’, Bethesda, MD (USA) May 19-20, 2014: Co-organizer
Symposium ‘Carbohydrate Recognition in Health and Disease’ at Pacificchem 2015, Honolulu, HI (USA) December 15-20, 2015: Co-organizer
Symposium ‘Synthesis of Carbohydrates, Glycoconjugates & Glycan-Based Biomaterials’ at the XXVIII International Carbohydrate Symposium (ICS 2016), New Orleans, LA (USA) July 18-19, 2016: Co-organizer
Symposium ‘Enzymes in Glycoscience’ at the 256th ACS National Meeting & Exposition, Boston, MA (USA) Aug 19-23, 2018: Co-organizer
Eurocarb XX, Leiden (Netherlands) June 30-July 4, 2019: Local Organising Committee member

Professional Societies

- 1986-present Royal Dutch Society of Chemistry (KNCV)
2000-present American Chemical Society (ACS)
2001-present American Association for the Advancement of Science (AAAS)
2002-present Society for Glycobiology
2006-2016 American Society for Microbiology (ASM)

Teaching

- 1993-1994 Third Year Chemistry, Stereoselective Synthesis (7 Lectures)
Postgraduate Workshop, Modern Synthetic Methods (12 Lectures)
- 1994-1995 Third Year Chemistry, Stereoselective Synthesis (7 Lectures and 3 Tutorials)
Bioorganic Chemistry for Biochemistry Students (8 Lectures)
Natural Product Synthesis (3 Lectures)
Postgraduate Workshop, Modern Synthetic Methods (3 Lectures)
Demonstrator to Second Year Organic Practical (35 hours)
- 1995-1996 Third Year Chemistry, Stereoselective Synthesis (7 Lectures and 3 Tutorials)
Second Year Biochemistry, Bioorganic Chemistry (8 Lectures)
Third Year Chemistry, Protein Chemistry (7 Lectures and 2 Tutorials)
Third Year Chemistry, Carbohydrate Chemistry (13 Lectures and 2 Tutorials)
Third Year Chemistry, Natural Product Synthesis (3 Lectures and 1 Tutorials)
Postgraduate Workshop, Modern Synthetic Methods (3 Lectures)
Demonstrator to Second Year Organic Practical (35 hours)
- 1996-1997 Third Year Chemistry, Stereoselective Synthesis (12 Lectures and 3 Tutorials)
Second Year Biochemistry, Bioorganic Chemistry (11 Lectures)
Third Year Chemistry, Protein Chemistry (7 Lectures and 2 Tutorials)
Third Year Chemistry, Carbohydrate Chemistry (13 Lectures and 2 Tutorials)
- 1997-1998 Third Year Chemistry, Stereoselective Synthesis (12 Lectures and 3 Tutorials)
Second Year Biochemistry, Bioorganic Chemistry (11 Lectures)
Third Year Chemistry, Protein Chemistry (7 Lectures and 2 Tutorials)
Third Year Chemistry, Carbohydrate Chemistry (9 Lectures and 2 Tutorials)
Third Year Chemistry, Bioorganic chemistry (15 Lectures)
- 1998-1999 Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)
- 1999-2000 Organic Spectroscopy (Chemistry 8340), Graduate Course (3 credits)
- 2000-2001 Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)
- 2001-2002 Organic Chemistry Seminar (Chemistry 8130), Graduate Course (1 credit)
- 2002-2003 Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)

- 2003-2004 Organic Chemistry Seminar (Chemistry 8130), Graduate Course (1 credit)
Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)
- 2004-2005 Organic Chemistry Seminar (Chemistry 8130), Graduate Course (1 credit)
Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)
- 2005-2006 Organic Chemistry Seminar (Chemistry 8130), Graduate Course (1 credit)
Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)
- 2006-2007 Carbohydrate Chemistry and Biology (Chemistry 8390), Graduate Course (3 credits)
- 2008-2009 Carbohydrate Chemistry and Biology (Chemistry 8390), Graduate Course (3 credits)
- 2010-2011 Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)
- 2011-2012 Carbohydrate Chemistry and Biology (Chemistry 8390), Graduate Course (3 credits)
- 2013-2014 Organic Synthesis (Chemistry 8320), Graduate Course (3 credits)
- 2015-2016 Carbohydrate Chemistry and Biology (Chemistry 8390), Graduate Course (3 credits)
- 2016-2017 Organic Chemistry 2 (Lectures and Tutorials)
- 2017-2018 Carbohydrate Chemistry and Biology (Chemistry 8390), Graduate Course (3 credits)
Organic Chemistry 2 (Lectures and Tutorials)
Future Medicine
- 2018-2019 Organic Chemistry 2 (Lectures and Tutorials)
Future Medicine
Advanced Organic Synthesis (Lectures and Tutorials)
- 2019-2020 Organic Chemistry 2 (Lectures and Tutorials)
Future Medicine
Advanced Organic Synthesis (Lectures and Tutorials)
- 2020-2021 Carbohydrate Chemistry and Biology (Chemistry 8390), Graduate Course (3 credits)
Organic Chemistry 2 (Lectures and Tutorials)
Future Medicine
Advanced Organic Synthesis (Lectures and Tutorials)
CPS Organic Chemistry
- 2021-2022 Organic Chemistry 2 (Lectures and Tutorials)
Future Medicine
Advanced Organic Synthesis (Lectures and Tutorials)
CPS Organic Chemistry

2022-2023 Carbohydrate Chemistry and Biology (Chemistry 8390), Graduate Course (3 credits)
 Organic Chemistry 2 (Lectures and Tutorials)
 Future Medicine
 Advanced Organic Synthesis (Lectures and Tutorials)
 CPS Organic Chemistry

Postdoctoral Associates Supervision

Anita van Oijen	1994-1997	Floris van Delft,	
Alexei Demchenko	1995-2001	Visiting Professor, University	
Barbra Heskamp	1995-1996	of Nijmegen (Netherlands)	2008
Thomas Stauch	1995-1996	Frederic Friscourt	2008-2014
Wallace Macindoe	1996-1998	Chunxia Li,	
Maria Esther Arranz-Plaza	1998-2001	Visiting Lecturer, Ocean	
Richard Geurtsen	1998-2001	University of China, Qingdao,	
Andre Venot	1998-2015	Shandong (China)	2008-2009
Edwin Yates	1998	Kai-For Mo	2009-2012
Tong Zhu	1998-2002	Dinanath Fulse	2009-2010
Hailong Jiao	1999-2000	Zhen Wang	2009-2011
Gregory Watt	1999-2002	Abu-Baker Abdel-Aal El-Sayed	2010-2013
Therese Buskas	2000-2010	Nagesh Kolishetti	2010-2014
Nikrad Pandurang	2000-2001	Ernest Nolen,	
Aloysius Siriwardena,		Visiting Professor, Colgate	
Visiting Professor, CNRS,		University, Hamilton NY (USA)	2011
University of Paris (France)	2000-2002	Sophon Kaeothip	2011
Shaji George	2001-2002	Bhahwal Ali Shah,	
Hammad Hassan,		Visiting 2011 Indo-US Research	
Visiting Professor, University		Fellow, Indian Institute of	
of Cairo (Egypt)	2001-2002	Integrative Medicine (India)	2011-2012
Bing Li	2001-2004	Lin Liu	2012-2023
Jin-Hwan Kim	2002-2007	Rajib Panchadhayee	2012-2015
Quangbin Yang	2002-2005	Sourav Sarkar	2012-2014
Jun Guo	2003-2012	Qi Gao	2012-2016
Sanjay Kumar	2003-2005	Min Huang	2013-2015
Hyi-Seung Lee	2004-2005	Yongjiang Wang,	
Hui Lui	2004-2005	Visiting Professor, Zhejiang	
Jana Rauvolfova	2004-2008	University of Science and	
Margreet Wolfert	2004-present	Technology (China)	2013
Xiangming Zhu	2005-2006	Chantelle Capicciotti	2014-2018
Michael DeCastro	2006-2008	Anju Sirohiwal	2014-2015
Galal Elsayed,		Ning Ding,	
Visiting Lecturer,		Visiting Professor, Fudan	
University of Cairo (Egypt)	2006	University, Shanghai (China)	2014-2016
Robert Scott McGavin	2006	Maria Jesus Moure Garcia	2015-2019
Xiuru Li	2007-2020	Pradeep Chopra	2015-present
Kaustabh Maiti	2007-2009	Tiehai Li	2015-2019

Yukun Qin, Visiting Professor, IOCAS, Qingdao, Shandong (China)	2015-2016	Luca Unione	2019-2020
Oier Aizpurua Olaizola, Visiting Scientist, University Basque Country (Spain)	2016	Julia Weber	2019-2020
Postdoc	2017-2018	Nino Trattnig	2019-2020
Nuria Martínez Sáez	2016-2019	Shaofu Du	2019-2021
Victor Somovilla	2017-2019	Jiabin Zhang	2020-2021
Yugen Zhu	2016-2019	Qiang Liu	2020-2021
Anthony Prudden	2017-present	Ana Gimeno	2020-2023
Justin Ragains, Visiting Professor, Louisiana State University (USA)	2019	Anna Ehlers	2021-present
		Cristina Bueno Diaz	2021-2023
		Ravi Sankar Loka	2022-present
		Mehman Bunyatov	2022-2023
		Balasaheb Ghotekar	2023-present
		Saptashwa Chakraborty	2023-present

Graduate Students Supervision

Steven Isles, Ph.D.	1993-1996	Malene Ryborg Jørgensen, Visiting Student	1999-2000
Andrew Burton, Ph.D.	1994-1997	Balaji Santhanam, Ph.D.	1999-2004
Robert Eveson, Ph.D.	1994-1997	Christopher Dodson, M.Sc.	2000-2005
Richard Geurtsen, Ph.D.	1994-1998	Yanhong Li, Ph.D.	2000-2004
Robin Gibson, Ph.D.	1994-1998	Abhijit Roychowdhury, Ph.D.	2000-2005
Tiina Kärkkäinen, M.Sc.	1994-1996	Charles Stanton, M.Sc.	2000-2004
Anne Keromnes, M.Sc.	1994-1997	David Cato, M.Sc.	2001-2005
Nathalie Navarre, Ph.D.	1994-1998	Sameer Kawatkar, Ph.D.	2001-2006
Simeon Bowers, Ph.D.	1995-1998	Douglas Miller, Ph.D.	2001-2008
Sander Henzing, Visiting Student	1995-1996	Arati Prabhu, M.Sc.	2001-2004
Floris Hout, Visiting Student	1995-1996	Hai Yang, M.Sc.	2001-2006
Mathew Johnson, Ph.D.	1995-1998	Sampat Ingale, Ph.D.	2002-2007
Frank Reichel, Ph.D.	1995-1998	Jin Park, Ph.D.	2002-2009
Tong Zhu, Ph.D.	1995-1998	Yu Rao, Ph.D.	2002-2007
Gianluca Belogi, Ph.D.	1996-2000	Yanghui Zhang, Ph.D.	2002-2007
Christopher Clarke, Ph.D.	1996-2000	Wei Zhong, Ph.D.	2002-2007
Michael Haller, Ph.D.	1996-2001	Vishal Khot, M.Sc.	2003-2007
Petri Setälä, M.Sc.	1996	Alok Mehta, Ph.D.	2003-2008
Nicolas Amiot, Ph.D.	1997-2001	James Neves, M.Sc.	2003-2008
Christelle Arles, M.Sc.	1997	Xinghai Ning, Ph.D.	2003-2008
Yu Bai, Ph.D.	1997-2000	Mahalakshmi Vasan, Ph.D.	2003-2008
Martin McWatt, Ph.D.	1997-2000	Jinkeng Asong, Ph.D.	2004-2009
Cristina De Meo, Ph.D.	1998-2001	Jidnyasa Gaekwad, Ph.D.	2004-2009
Galal Elsayed, Ph.D.	1998-2003	Monique Phillips, M.Sc.	2004-2008
Carmen Galan-Hurtado, Ph.D.	1998-2002	Sailaja Arungundram, Ph.D.	2005-2010
Smita Thobhani, Ph.D.	1998-2001	Shailesh Ambre, Ph.D.	2005-2012
Paul Dietzel, M.Sc.	1999-2002	Srinivasa Koutha, Ph.D.	2005-2013
Brian Ember, Ph.D.	1999-2006	Yusuf Vohra, Ph.D.	2005-2010
Debatosh Majumdar, Ph.D.	1999-2004	Thomas Boltje, Visiting Student Ph.D.	2005-2006 2006-2011

Jessica Cardot, Ph.D.	2006-2011	Mehman Bunyatov, Ph.D.	2015-present
Matthew Foote, M.Sc.	2006-2010	Ingrid t' Hart, Ph.D.	2015-2020
Pamela Thompson, Ph.D.	2006-2011	Fan Yi, Visiting Student	2015
Qinghui Wang, Visiting Student	2007-2008	Frederik Broszeit, Visiting Student	2015-2016
Kanar Al-Mafraji, Technician	2007-2011	Ph.D.	2016-2021
Roshan Baliga, Ph.D.	2007-2013	Shubham Sharma, Postgraduate	2015-2017
Omkar Dhamale, Ph.D.	2007-2013	Enrico Verpalen, M.Sc.	2016-2018
Petr Ledin, Ph.D.	2007-2013	Ph.D.	2018-present
Ngalle Eric Mbua, Ph.D.	2007-2012	Na Wei, Technician	2016-2019
Radha Sardar, Ph.D.	2007-2012	Dushen Chen, Ph.D.	2016-2022
Krajang Talabnin, Visiting Student	2007-2008	Minglong Liu, Ph.D.	2016-2021
Abu-Baker Abdel-Aal El-Sayed, Visiting Student	2008	Xianke Meng, Ph.D.	2016-2023
Zoeisha Chinoy, Ph.D.	2008-2014	Lifeng Sun, Ph.D.	2016-2022
Tao Fang, Ph.D.	2008-2014	Liangwei Zhang, Ph.D.	2016-present
Brian Sanders, Postgraduate	2008-2010	Ashley Carter, Ph.D.	2017-present
Huiquig Li, Technician	2009-2012	Gerlof Bosman, Ph.D.	2017-present
Ye Ji, Postgraduate	2009-2012	Gael Vos, Ph.D.	2017-2023
Josette Wilkes, Ph.D.	2009-2016	Sayani Chowdhury, Postgraduate	2017-2019
Wei Huang, Ph.D.	2010-2016	Yanyan Liu, Ph.D.	2017-present
Anthony Prudden, Ph.D.	2010-2016	Xiufen Liu, Technician	2017-2020
Nitin Supekar, Ph.D.	2010-2016	Yunfei Wu, Ph.D.	2018-present
Chengli Zong, Ph.D.	2010-2016	Pengfei Xuan, Ph.D.	2019-present
Loek Eggermont, Visiting Student	2011	Shengzhou Ma, Visiting CSC student	2019-2021
Qi Gao, Visiting Student	2011-2012	Francesco Palmieri, Ph.D.	2019-present
Robert Chapman, Ph.D.	2011-2017	Zhiyong Zhang, Ph.D.	2019-present
Manish Hudlikar, Ph.D.	2011-2017	Yujie Ma, Ph.D.	2019-present
Apoorva Joshi, Ph.D.	2011-2018	Igor Sweet, Ph.D.	2020-present
Tiantian Sun, Ph.D.	2011-2017	Kyle Minder, Ph.D.	2020-present
Nuria Martínez Sáez, Visiting Student	2012	Dahai Ding, Ph.D.	2020-present
Apoorva Srivastava, Ph.D.	2012-2021	Elif Uslu, Technician	2020-present
Melanie Edlin, Postgraduate	2013-2015	Jelle Fok, Ph.D.	2021-present
Weiyu Li, Postgraduate	2013-2015	Hans Bastiaansen, Technician	2021
Zeshi Li, Ph.D.	2013-2022	Bart Straten, Ph.D.	2022-present
Weigang Lu, Ph.D.	2013-2018	Patrycja Lenartowicz, Ph.D.	2022-present
Ivan Gagarinov, Ph.D.	2014-2020	Niels Ponse, Ph.D.	2022-present
Alexandra Walker, M.Sc.	2014-2016	David Aidukas, Technician	2022-present
Kun Yuan, Ph.D.	2014-2020	Kevin Hooijschuur, Ph.D.	2022-present
Huzi Sun, Ph.D.	2014-2019	Jan-Willem Langenbach, Ph.D.	2022-present
		Thomas Buckley, Ph.D.	2023-present
		Seema Bhagwat, Visiting scholar	2023-present

Lectures/Seminars (from 1993, in reverse chronological order)

- 328 June 11-15 2023 Summer Course Glycosciences, Session ‘Glycoscience Synthesis & Health’, Wageningen (Netherlands)
Seminar
Chemical enzymatic assisted carbohydrate synthesis
- 327 June 4-9, 2023 5th FASEB Science Research Conference (SRC) on “Origins and Benefits of Biologically Active Components in Human Milk”, Melbourne, FL (USA)
Invited lecture
Synthesis of a comprehensive HMO research library
- 326 January 25, 2023 Minisymposium “Glycoscience in health & disease”, Radboudumc, Nijmegen (Netherlands)
Invited lecture
Chemoenzymatic synthesis of complex glycans to probe host-guest interactions
- 325 November 18-19, 2022 Glycobasque 5, San Sebastian (Spain)
Invited lecture
Chemo-enzymatic synthesis to probe host-guest interactions
- 324 October 20-21, 2022 Department of Chemistry, University of Calgary (Canada)
Michael H. Benn distinguished lecture
Chemo-enzymatic synthesis of complex glycans to examine receptor specificities of pathogens of zoonotic concern
- 323 October 18, 2022 Chemistry Department, University of British Columbia, Vancouver (Canada)
Seminar
Chemo-enzymatic synthesis of complex glycans to probe-host guest interactions
- 322 September 12-14, 2022 29th Symposium on Glycosaminoglycans, Venice (Italy)
Invited lecture
Heparan sulfate proteoglycans as attachment factor for SARSCoV-2
- 321 July 14, 2022 30th International Carbohydrate Symposium (ICS2022) – online (Brazil)
Keynote lecture
Chemo-enzymatic synthesis of complex glycans to explore host-guest interactions
- 320 April 2-5, 2022 American Society for Biochemistry and Molecular Biology (ASBMB) Annual 2022 Meeting, Philadelphia, PA (USA)
Invited lecture
Cell surface glycan engineering to examine receptor specificities of influenza and other viruses
- 319 November 18-19, 2021 New Frontiers Symposium on Translational Glycoscience, Radboud University, Nijmegen (Netherlands)
Invited lecture
Synthetic O-acetylated sialosides facilitate functional receptor identification for human respiratory viruses
- 318 October 26, 2021 IMM colloquium, Institute for Molecules and Materials, Radboud University, Nijmegen (Netherlands)
Seminar
Chemo-enzymatic synthesis of complex glycans to probe host-guest interactions
- 317 September 27-29, 2021 INNOGLY "GlycosAminoGlycans: What remains to be solved?", Hybrid Symposium, University of Crete, Heraklion (Greece)
Invited lecture
3-O-Sulfation of heparan sulfate modulates protein binding and lyase degradation
- 316 August 24, 2021 ACS Fall 2021 National Meeting & Exposition, Atlanta, GA (USA)
Invited lecture
Synthetic HS oligosaccharides to dissect the importance of 3-O-sulfation to modulates protein binding and lyase degradation

- 315 July 6-7, 2021 NIH Common Fund Glycoscience Program, via Zoom, Bethesda, MD (USA)
Presentation **Chemoenzymatic synthesis of *Campylobacter jejuni* lipooligosaccharide core domains to examine Guillain-Barré syndrome serum antibody specificities**
- 314 June 17, 2021 Summer Course ‘Glycoscience’, Wageningen (Netherlands)
Seminar **Enzymes for the synthesis of glycans and glycoconjugates**
- 313 June 16, 2021 European Glycoscience Community (EGC) meeting
Presentation **Glycoscience a new frontier in drug discovery: Scalable manufacturing and synthesis aspects**
- 312 April 5, 2021 ACS Spring 2021 National Meeting & Exposition via Zoom (USA)
Invited lecture **Chemo-enzymatic synthesis of N-glycans for host-guest interactions**
- 311 March 18, 2021 Drug Innovation Master course, Utrecht (Netherlands)
Seminar **Complex glycans in health and disease**
- 310 February 26, 2021 Indian/International Carbohydrate E-Meeting (ICarE) via Zoom (India)
Invited lecture **Functional glycomics through chemoenzymatic synthesis**
- 309 January 29, 2021 NIH Common Fund Glycoscience Program symposium ‘Frontiers in Carbohydrate Synthesis’ via Zoom, Bethesda, MD (USA)
Invited lecture **Chemo-enzymatic synthesis of O-acetylated sialosides for host-guest interactions**
- 308 January 26, 2021 National Institute of Standards and Technology (NIST), via WebEx (USA)
Seminar **Complex glycans in health and disease**
- 307 January 6, 2021 Canadian Glycomics Network (GlycoNet) and ACS Carbohydrate Division, Joint Webinar
Seminar **Probing receptor and co-receptor specificities of coronaviruses using chemo-enzymatic synthesis and glycoarray technology**
- 306 November 9-12, 2020 2020 Annual Meeting of the Society For Glycobiology, Online (USA)
Keynote lecture **Automated chemo-enzymatic synthesis of complex glycans offers opportunities for flu surveillance**
- 305 October 23, 2020 Hunter College (via Zoom) NY (USA)
Seminar **Functional glycomics through chemoenzymatic synthesis**
- 304 September 18, 2020 NIH Common Fund Glycoscience Program workshop ‘The Biology of Glycosaminoglycans in Health & Disease’ via WebEx, Bethesda, MD (USA)
Invited lecture **3-O-Sulfation of heparan sulfate modulates protein binding and lyase degradation**
- 303 August 17-20, 2020 ACS Fall 2020 Virtual Meeting & Expo, San Francisco, CA (USA)
Invited lecture **Automated chemo-enzymatic synthesis of complex glycans offering opportunities for flu surveillance**
- 302 June 16-17, 2020 NIH Common Fund Glycoscience Program, via WebEx, Bethesda, MD (USA)
Presentation **Streamlining the chemoenzymatic synthesis of asymmetrical glycans of biological importance**

- 301 May 1, 2020 NIH CF-GSP Workshop ‘Coronaviruses, SARS-CoV-2, & Glycans’ via WebEx, Bethesda, MD (USA)
Invited lecture **Probing receptor and co-receptor specificities of betacoronaviruses using glycoarrays**
- 300 January 22-24, 2020 2020 International Symposium on Chemical Biology, Geneva (Switzerland)
Invited lecture **Complex glycans in health and disease**
- 299 December 11, 2019 Session ‘Glycans: Structure, Analysis and Synthesis’ at Dutch Chemistry meeting CHAINS, Veldhoven (Netherlands)
Invited lecture **An automated platform for the chemoenzymatic assembly of complex oligosaccharides**
- 298 December 10, 2019 Bossche Chemische Kring, Den Bosch (Netherlands)
Invited lecture **Cell surface glycans and glycoconjugates: from cancer vaccine development to flu surveillance**
- 297 December 9, 2019 Emil Fischer Symposium, Berlin (Germany)
Invited lecture **Making complex glycan synthesis easy**
- 296 November 12, 2019 Symposium "Next Challenge – Impact of Glycosylation", Lund (Sweden)
Invited lecture **Making complex glycan synthesis easy**
- 295 September 26, 2019 Celebration of the 90th birthday of Prof. Miloslav Cerny, Charles University, Prague (Czech Republic)
Invited lecture **Complex glycans in health and disease**
- 294 September 25, 2019 Czech Academy of Science, Prague (Czech Republic)
Invited lecture **Deconstructing and reconstructing heparan sulfate**
- 293 September 12, 2019 University of Twente, Enschede (Netherlands)
Seminar **Glycan complexity and biological recognition**
- 292 August 29, 2019 Center for Biotechnology and Genomic Medicine, Medical College of Georgia, Augusta University, Augusta, GA (USA)
Seminar **Functional glycomics through chemical approaches**
- 291 July 3-5, 2019 55th International Conference on Medicinal Chemistry (RICT), Nantes (France)
Plenary lecture **Complex glycans in health and disease**
- 290 June 23-28, 2019 Gordon Research Conference 2019 Carbohydrates, Hongkong (China)
Invited lecture **Streamlining the chemoenzymatic synthesis of highly complex branched glycans**
- 289 June 9-13, 2019 ISOS 2019 - "A. Corbella" International Summer School on Organic Synthesis, Gargnano (Italy)
Lecture **Enzymes for the synthesis of glycans and glycoconjugates**
- 288 May 29-30, 2019 NIH Common Fund Glycoscience Program, Bethesda, MD (USA)
Presentation **Streamlining the chemoenzymatic synthesis of asymmetrical glycans of biological importance**
- 287 March 31-April 4, 2019 ACS Spring 2019 National Meeting & Exposition, Orlando, FL (USA)
Invited lecture **Streamlining the chemoenzymatic synthesis of complex N-glycans by a stop-and-go strategy**

- 286 March 10-15, 2019 Glycobiology Gordon Research Conference, Lucca-Barga (Italy)
Invited lecture **Chemical ways to complex glycans**
- 285 January 28-30, 2019 GlycoBioTec2019, Berlin (Germany)
Keynote lecture **Chemo-enzymatic approaches for the preparation of highly complex glycans of biological importance**
- 284 December 5, 2018 Mersana Therapeutics, Cambridge, MA (USA)
Seminar **Glycan complexity and biological recognition**
- 283 November 12-16, 2018 14th International Kyoto Conference on New Aspects of Organic Chemistry (IKCOC-14), Kyoto (Japan)
Invited lecture **Automation of enzymatic mediated synthesis of complex oligosaccharides of biological importance**
- 282 October 3-6, 2018 Joint 2nd GlycoCom 2018 and 1st Human Glycome Project Meeting, Dubrovnik (Croatia)
Plenary lecture **Functional glycomics through cell surface glyco-editing**
- 281 September 10, 2018 Symposium: Human Milk Oligosaccharides “Mama’s Sweet Immunological Secrets”, Utrecht (Netherlands)
Lecture **Complexity of human milk oligosaccharides and biological function**
- 280 August 21, 2018 256th ACS National Meeting & Exposition, Boston, MA (USA)
Invited lecture **Glycan complexity and biological recognition**
- 279 July 2, 2018 NIH Common Fund Glycoscience Program, Bethesda, MD (USA)
Presentation **Streamlining the chemoenzymatic synthesis of asymmetrical glycans of biological importance**
- 278 June 27, 2018 GLYCOTREAT consortium annual meeting, Oegstgeest (Netherlands)
Keynote lecture **Deconstructing and reconstructing heparan sulfate**
- 277 June 7-8, 2018 CarboMet workshop ‘The Role of Carbohydrates in the Gut Microbiome’, Brussels (Belgium)
Presentation **Chemoenzymatic synthesis of human milk oligosaccharides**
- 276 May 29, 2018 InnoSyn, Geleen (Netherlands)
Seminar **Streamlining complex carbohydrate synthesis through enzymatic procedures**
- 275 May 23, 2018 Leiden University Medical Center (LUMC), Leiden (Netherlands)
Seminar **Functional glycomics using synthetic glycans**
- 274 May 3, 2018 1st International Symposium on Glycovirology 2018, Schöntal (Germany)
Keynote lecture **Cell-surface glyco-engineering to reveal functional receptors for Lassa virus**
- 273 April 23, 2018 12th Georgia Glycoscience Symposium, Georgia State University, Atlanta, GA (USA)
Invited lecture **Functional glycomics through cell surface glyco-editing**
- 272 March 20, 2018 Session ‘Recent Advances in Catalytic Carbohydrate Reaction Development’ at the 255th ACS National Meeting, New Orleans, LA (USA)
Invited lecture **Cell-surface glyco-engineering using sialyl transferases and modified CMP-Neu5Ac derivatives**

- 271 March 19, 2018
Invited lecture
Session ‘Frontiers in Glycoscience, Bridging the Gap Between Carbohydrate & Polysaccharide Chemistries’ at the 255th ACS National Meeting, New Orleans, LA (USA)
Streamlining complex carbohydrate synthesis through enzymatic procedures
- 270 March 7, 2018
Seminar
Center for Vaccines and Immunology, UGA, Athens, GA (USA)
Chemical approaches to develop carbohydrate-based vaccines and immune modulators
- 269 February, 9, 2018
Seminar
CIC bioGUNE, Bilbao (Spain)
Functional glycomics through chemical synthesis
- 268 January 24, 2018
Seminar
Max Planck Institute, Potsdam (Germany)
Glycan complexity and biological recognition
- 267 January 23, 2018
Seminar
Freie Universität Berlin, Dahlem (Germany)
Deconstructing and reconstructing heparan sulfate: from polymers to monomers to multivalent materials
- 266 December 1, 2017
Seminar
Aspen Pharma, Oss (Netherlands)
Chemical synthesis of heparan sulfate oligosaccharides
- 265 November 30, 2017
Keynote lecture
Carbohealth 2017 Symposium, Carbohydrate Competence Center, Zwolle (Netherlands)
Functional glycomics through chemical synthesis
- 264 November 10, 2017
Keynote lecture
2017 Southeast Regional Meeting ACS (SERMACS), Charlotte, NC (USA)
Functional glycomics through chemical synthesis
- 263 October 23, 2017
Seminar
Pfizer Inc, Chesterfield, MO (USA)
Functional glycomics through chemical synthesis
- 262 October 11, 2017
Seminar
Radboud UMC, Nijmegen (Netherlands)
Glycan complexity and biological recognition
- 261 October 9, 2017
Seminar
Institute of Microbiology, ETH Zürich (Switzerland)
Functional glycomics through chemoenzymatic synthesis
- 260 September 27, 2017
Invited lecture
MMD mini-symposium: Chemical Immunology, Radboud UMC, Nijmegen (Netherlands)
Immune modulation through protein glycosylation
- 259 September 7, 2017
Plenary lecture
RSC Carbohydrate Group Meeting 2017, Dublin (Ireland)
Functional glycomics through chemical synthesis
- 258 August 30-31, 2017
Presentation
NIH Common Fund Glycoscience Program, Bethesda, MD (USA)
Streamlining the chemoenzymatic synthesis of asymmetrical glycans of biological importance
- 257 Juli 6, 2017
Plenary lecture
European Symposium of Organic Chemistry (ESOC) 2017, Köln (Germany)
Complex glycans in health and disease
- 256 Juli 3, 2017
Plenary lecture
European Carbohydrate Symposium - EUROCARB 2017, Barcelona (Spain)
Functional glycomics through chemical synthesis
- 255 June 6, 2017
Invited lecture
IBC’s 5th Annual Bioconjugates - From Targets to Therapeutics, San Diego, CA (USA)
Synthetic approaches to glycoconjugate vaccine development

- 254 May 2, 2017 Stratingh Institute for Chemistry, University of Groningen (Netherlands)
Seminar **Functional glycomics through chemical synthesis**
- 253 April 14, 2017 University of Wisconsin, Madison, WI (USA)
Seminar **Fully synthetic carbohydrate-based vaccines and immune modulators**
- 252 April 5, 2017 Symposium 'Advances in Polysaccharides: Practice and Applications' at the 253rd ACS National Meeting & Exposition 2017, San Francisco, CA (USA)
Invited lecture **Chemo-enzymatic synthesis and functional properties of well-defined human milk oligosaccharides**
- 251 April 4, 2017 Symposium 'Biogenesis, Biochemistry, Synthesis and Application of Lipopolysaccharides' at the 253rd ACS National Meeting & Exposition 2017, San Francisco, CA (USA)
Invited lecture **Differential induction of innate immune responses by synthetic lipid A derivatives**
- 250 April 3, 2017 Anselme Payen Symposium at the 253rd ACS National Meeting & Exposition 2017, San Francisco, CA (USA)
Invited lecture **Precision biomaterials based on synthetic heparin sulfate oligosaccharides**
- 249 March 17, 2017 KNCV Medicinal Chemistry Spring Meeting 2017 'Small Molecules and Biologicals in Cancer Immunotherapy', Utrecht (Netherlands)
Invited lecture **Synthetic vaccines and immune modulators for cancer**
- 248 March 10, 2017 3rd Chemical Immunology Conference, Amsterdam (Netherlands)
Invited lecture **Carbohydrate-based cancer vaccine**
- 247 March 7, 2017 David de Wied Colloquium, Utrecht University, Utrecht (Netherlands)
Seminar **Deconstructing and reconstructing heparin sulfate**
- 246 January 20, 2017 13th Aarhus Winter Meeting on Modern Trends in Chemistry, Aarhus (Denmark)
Invited lecture **Metal free click reactions for site-specific modification of proteins and glycoproteins**
- 245 January 6, 2017 4th International Conference on Cellular & Molecular Bioengineering (ICCMB4), Singapore (Singapore)
Plenary lecture **Deconstructing and reconstructing heparan sulfate**
- 244 December 2, 2016 College of Chemistry and Engineering, Peking University, Beijing (China)
Xingda lecture **Functional glycomics through chemical synthesis**
- 243 December 1, 2016 Tsinghua University, Beijing (China)
Invited lecture **Fully synthetic vaccines and immune modulators**
- 242 November 14, 2016 Pierre and Marie Curie University (UPMC), Paris (France)
Seminar **A fully synthetic carbohydrate-based vaccine for cancer**
- 241 August 25, 2016 Pfizer Inc, Chesterfield, MO (USA)
Seminar **Site specific conjugations for the development of vaccines and immuno-therapeutics**

- 240 August 23, 2016 Cope Award Symposium at the 252nd ACS National Meeting & Exposition, Philadelphia, PA (USA)
Arthur C. Cope mid career scholars award lecture
Functional glycomics through chemical synthesis
- 239 July 25, 2016 Gordon Research Conference on Stereochemistry, Newport, RI (USA)
Invited lecture
Carbohydrate complexity and molecular recognition
- 238 July 20, 2016 XXVIII International Carbohydrate Symposium (ICS 2016), New Orleans, LA (USA)
Claude S. Hudson award lecture
An integrated approach to uncover ligands of heparan sulfate binding proteins
- 237 July 11, 2016 Gordon Research Conference on Proteoglycans, Andover, NH (USA)
Invited lecture
An integrated approach to uncover ligands of heparan sulfate binding proteins
- 236 July 4, 2016 27th European Colloquium on Heterocyclic Chemistry (ECHC 2016), Amsterdam (Netherlands)
Invited lecture
Metal free click reactions for glycoconjugate modification
- 235 June 28, 2016 NIH Common Fund Glycoscience Program, Bethesda, MD (USA)
Presentation
Streamlining the chemoenzymatic synthesis of asymmetrical glycans of biological importance
- 234 June 22, 2016 XV Meeting-School on Carbohydrate Chemistry (CSCC15), Certosa di Pontignano, Siena (Italy)
Plenary lecture
An integrated approach to uncover ligands for heparan sulfate binding proteins
- 233 June 15, 2016 Advanced Functional Polymers for Medicine 2016 seminar, University of Twente, Enschede (Netherlands)
Invited lecture
Deconstructing en reconstructing heparan sulfate
- 232 April 22, 2016 Glycoscience Japan - The Netherlands, 4th bilateral NWO-JSPS ‘Glycobiology in Health and Disease’, Leiden (Netherlands)
Invited lecture
An integrated approach to uncover ligands for heparan sulfate binding proteins
- 231 March 16, 2016 CARB Symposium ‘From mAb to ADCs: Tailored Antibodies & Dedicated Chemistry Technologies for Site Specific ADCs’ at the 251st ACS National Meeting & Exposition, San Diego, CA (USA)
Invited lecture
Preparation of well-defined antibody-drug conjugates through glycan remodeling and strain promoted azidealkyne cycloadditions
- 230 March 16, 2016 CARB Symposium ‘Click Chemistry in Carbohydrate, Materials Science & Biomedicine: Symposium in honor of Prof. Sharpless’s 75th birthday’ at the 251st ACS National Meeting & Exposition, San Diego, CA (USA)
Invited lecture
Metal free click reactions for glycoconjugate modification
- 229 January 22, 2016 M&M 2016 Symposium, Utrecht University (Netherlands)
Invited lecture
Functional glycomics through chemical synthesis

- 228 December 17, 2015 Symposium ‘Carbohydrate Recognition in Health and Disease’ at Pacificchem 2015, Honolulu, HI (USA)
Invited lecture **Functional glycomics through chemical synthesis**
- 227 September 25, 2015 Tongji University, Shanghai (China)
Invited lecture **A fully synthetic carbohydrate-based vaccine for cancer**
- 226 September 22, 2015 Nanjing Pharmaceutical University, Nanjing (China)
Invited lecture **Therapeutic cancer vaccine**
- 225 September 22, 2015 ANP Conference Technology, Nanjing (China)
Invited lecture **An integrated approach to identify ligands for heparin sulfate binding proteins**
- 224 September 8, 2015 University of Georgia, Athens, GA (USA)
Norman L. Allinger lecture **Adventures with complex carbohydrates**
- 223 August 7, 2015 Georgia Institute of Technology, Atlanta, GA (USA)
Seminar **Functional glycomics**
- 222 July 19-24, 2015 FASEB Science Summer Conference ‘Origins and Benefits of Biologically Active Components in Human Milk’, Big Sky, MT (USA)
Invited lecture **Unraveling functions of milk oligosaccharides using chemo-enzymatic synthesis**
- 221 July 16, 2015 Symposium marking the accomplishments of Professor David R. Bundle, University of Alberta, Edmonton (Canada)
Invited lecture **An integrated approach to uncover ligands for heparin sulfate binding proteins**
- 220 June 26, 2015 Utrecht Chemistry Day 2015, Utrecht (Netherlands)
Keynote lecture **An integrated approach to uncover ligands for heparan sulfate binding proteins**
- 219 June 15, 2015 Gordon Research Conference on Carbohydrates, West Dover, VT (USA)
Invited lecture **Functional glycomics through chemical synthesis**
- 218 May 28, 2015 NIH-FDA Glycoscience Research Day, NIH, Bethesda, MD (USA)
Invited lecture **An integrated approach to uncover ligands for heparan sulfate binding proteins**
- 217 April 18, 2015 1st Southeast Glycobiology Symposium, Georgia Consortium of Glycoscience, Georgia State University, Atlanta, GA (USA)
Invited lecture **An integrated approach to uncover ligands for heparan sulfate binding proteins**
- 216 March 23, 2015 CARB Symposium ‘Glycomimetic Compounds: An Untapped Source of Novel Therapeutics’ at the 249th ACS National Meeting, Denver, CO (USA)
Invited lecture **Well-defined antibody-drug conjugates (ADCs) through site-specific conjugation**
- 215 March 23, 2015 Symposium on ‘Frontiers in Glycoscience’ at the 249th ACS National Meeting, Denver, CO (USA)
Keynote lecture **Integrated approach to uncover ligands for heparan sulfate binding proteins**

- 214 March 2-3, 2015 2015 Suddath Symposium - Immunology & ImmunoEngineering, Georgia Tech, Atlanta, GA (USA)
Invited lecture **Synthetic approaches for rationale vaccine development**
- 213 October 28-31, 2014 15th Tetrahedron Symposium - Asia Edition ‘Challenges in Bioorganic and Organic Medicinal Chemistry’, Singapore
Keynote lecture (Singapore)
Functional glycomics through chemical synthesis
- 212 October 18, 2014 American Chemical Society St. Louis Award Symposium, MO (USA)
Invited lecture **Functional glycomics through chemical synthesis**
- 211 September 22, 2014 Pennsylvania State University, College of Medicine, Hershey, PA (USA)
Seminar **Functional glycomics through chemical synthesis**
- 210 August 10-11, 2014 Session ‘Glycoconjugates: Design, Chemistry, Characterization, and Manufacturing’ at the 248th ACS National Meeting, San Francisco, CA (USA)
Invited lecture **Development of fully synthetic self-adjuvanting cancer vaccines**
- 209 June 24-27, 2014 15th Tetrahedron Symposium ‘Challenges in Bioorganic and Organic Medicinal Chemistry’, London (United Kingdom)
Plenary lecture **Functional glycomics through chemical synthesis**
- 208 June 5-7, 2014 37th Steenbock Symposium ‘The Future of Chemical Biology’, University of Wisconsin, Madison (USA)
Invited lecture **Functional glycomics through chemical synthesis**
- 207 June 4-6, 2014 IBC’s 2nd Annual, Bioconjugates: From Targets to Therapeutics, San Francisco, CA (USA)
Featured presentation **Metal free click reactions for site-specific protein and glycoprotein modification**
- 206 May 28-30, 2014 XI Carbohydrate Symposium, Logroño, La Rioja (Spain)
Plenary lecture **Functional glycomics through chemical synthesis**
- 205 May 19-20, 2014 CFG Workshop in Molecular and Cellular Glycoscience, ‘Exploring the Frontiers of Chemical Glycoscience’, Bethesda, MD (USA)
Invited lecture **Asymmetric synthesis for complex N-linked glycans**
- 204 April 14, 2014 University of Colorado, Boulder (USA)
Seminar **A carbohydrate-based therapeutic vaccine for cancer**
- 203 March 17, 2014 Symposium ‘New Directions in Carbohydrate Synthesis’ at the 247th ACS National Meeting, Dallas, TX (USA)
Invited lecture **General approach for the synthesis of libraries of symmetrical and asymmetrical N-glycans**
- 202 March 11, 2014 Tufts University, Medford, MA (USA)
Seminar **Functional glycomics through chemical synthesis**
- 201 January 25, 2014 2nd Annual Physician Oncology Symposium ‘Connections that Cure’, Athens Regional Medical Center, Athens, GA (USA)
Invited lecture **Carbohydrates, cancer, and vaccines**
- 200 January 12-17, 2014 The 27th International Carbohydrate Symposium, Indian Institute of Science, Bangalore (India)
Roy Whistler 2014 award lecture **Functional glycomics through chemical synthesis**

- 199 December 9, 2013 Department of Infectious Diseases, UGA, Athens, GA (USA)
Seminar **Functional glycomics through chemical synthesis**
- 198 November 29, 2013 Utrecht University (Netherlands)
Seminar **Functional glycomics through chemical synthesis**
- 197 November 17-20, 2013 Annual Conference of the Society for Glycobiology, St. Petersburg, FL (USA)
Invited lecture **Context dependent glycan recognition through the next generation of glycan microarray**
- 196 November 17, 2013 Consortium for Functional Glycomics (CFG) Satellite Symposium ‘Development and Application of Transformative Technologies in Glycobiology’, St. Petersburg, FL (USA)
Invited lecture **Selective labeling strategies for glycoconjugates of living cells**
- 195 November 1, 2013 UGA-GRU Cancer Research Retreat, Lake Oconee, GA (USA)
Seminar **A fully synthetic, multi-component cancer vaccine**
- 194 October 11, 2013 ICB&DD 7th Annual Symposium ‘Frontiers in Glycosciences and Chemical Biology’, Stony Brook University, NY (USA)
Plenary lecture **Glycoscience: downsizing or oversizing**
- 193 October 9, 2013 University of North Carolina, Chapel Hill, NC (USA)
Seminar **Glycoscience: downsizing or oversizing**
- 192 September 19, 2013 Molecular Basis of Disease Area of Focus (MBDAF), Georgia State University, Atlanta, GA (USA)
MBD distinguished lecture **Glycoscience: downsizing or oversizing**
- 191 September 8-9, 2013 Session ‘Current Topics in Glycobiology’ at the 246th ACS National Meeting, Indianapolis, IN (USA)
Invited lecture **Chemo-enzymatic synthesis of asymmetrically substituted multi-antennary glycans for microarray development**
- 190 July 7-11, 2013 17th European Carbohydrate Symposium, Tel Aviv (Israel)
Plenary lecture **Glycoscience oversized**
- 189 June 29-July 1, 2013 2013 International Symposium on Chemical Glycobiology, Consortium for Functional Glycomics (CFG) and the Chinese Academy of Sciences (CAS), Shanghai (China)
Invited lecture **Chemo-enzymatic synthesis of asymmetrically substituted multi-antennary glycans for probing structure activity relationships**
- 188 April 19, 2013 Colgate University, Hamilton, NY (USA)
Jean Dreyfus Boissevain lecture **A fully synthetic multicomponent vaccine for cancer**
- 187 April 16-18, 2013 World Vaccine Congress & Expo, Washington, DC (USA)
Invited lecture **Harnessing the power of the immune system to build stronger cancer vaccines**
- 186 April 8-9, 2013 Symposium ‘Heparin: Challenges and Opportunities for a Biological Drug’ at the Spring 2013 ACS National Meeting, New Orleans, LA (USA)
Invited lecture **Identification of ligands for chemokines and cytokines using a heparin sulfate microarray**
- 185 March 22, 2013 TEDxUGA, University of Georgia, Athens (USA)
Invited lecture **Carbohydrates – Cancer – Vaccines**

- 184 February 21-22, 2013
Invited lecture
NICHD Workshop on Bioactive Glycans in Human Milk, Bethesda, MD (USA)
Chemo-enzymatic synthesis of asymmetrically substituted multi-antennary glycans for probing structure activity relationships
- 183 January 7, 2013
Invited lecture
Pfizer, Chesterfield, MO (USA)
Fully synthetic vaccines and immune modulators
- 182 November 11, 2012
Invited lecture
Joint meeting of the Society for Glycobiology (SFG) & American Society for Matrix Biology (ASMB), San Diego, CA (USA)
A rational approach to synthetic vaccines
- 181 November 6, 2012
Invited lecture
SWRM Glycochemistry Symposium at the 68th Southwest Regional Meeting (SWRM) of the ACS, Baton Rouge, LA (USA)
Chemical methods for biomarker discovery
- 180 October 4, 2012
Seminar
Clemson University, SC (USA)
A fully synthetic carbohydrate-based vaccine for cancer
- 179 August 21, 2012
Invited lecture
Session ‘Glycoscience at the Crossroad of Health, Materials, and Energy’ at the 244th ACS National Meeting & Exposition, Philadelphia, PA (USA)
Fully synthetic immune modulators and tripartite vaccines for cancer
- 178 July 26, 2012
Invited lecture
26th International Carbohydrate Symposium, Madrid (Spain)
Chemo-enzymatic synthesis of asymmetrically substituted multi-antennary glycans for microarray development
- 177 July 21, 2012
Keynote lecture
CIC biomaGUNE, Workshop ‘Increasing the Impact of Glycoscience through New Tools and Technologies’, San Sebastian (Spain)
Fully synthetic vaccines and immune modulators
- 176 June 1, 2012
Seminar
SCYNEXIS, Durham, NC (USA)
Fully synthetic immune modulators
- 175 April 23, 2012
Seminar
University of North Carolina, Charlotte (USA)
A fully synthetic carbohydrate-based vaccine for cancer
- 174 March 31, 2012
Invited lecture
1st CDT Conference, Center for Diagnostics & Therapeutics, Georgia State University, Atlanta (USA)
Chemical methods for biomarker discovery
- 173 March 15, 2012
Invited lecture
Academia Sinica, Taipei (Taiwan)
Glycomics through synthetic oligosaccharides
- 172 January 23, 2012
Seminar
College of Veterinary Medicine, UGA, Athens, GA (USA)
Carbohydrate-based vaccines and immune modulators
- 171 November 9-12, 2011
Invited lecture
2011 Annual Conference of the Society for Glycobiology, Seattle, WA (USA)
Chemical methods for biomarker discovery
- 170 November 10, 2011
Seminar
Infectious Disease Research Institute, Seattle, WA (USA)
Self-adjuvanting vaccines
- 169 November 1, 2011
Seminar
Cellular Biology, UGA, Athens, GA (USA)
Carbohydrate-based cancer vaccines and immune modulators
- 168 October 3-4, 2011
Invited lecture
Carbohydrate Moieties as Vaccine Candidates Workshop, NIAID, Rockville, MD (USA)
A fully synthetic multi-component carbohydrate-based cancer vaccine

- 167 September 4-7, 2011 9th International Meeting of the Portuguese Carbohydrate Chemistry Group/5th Iberian Carbohydrate Meeting, Vila Real (Portugal)
Plenary lecture **Modulation of biological responses with synthetic glycoconjugates**
- 166 June 28, 2011 Pfizer, BioTherapeutics Unit CovX, San Diego, CA (USA)
Invited lecture **New approaches for metal-free click reactions: applications to glycoscience**
- 165 June 27, 2011 22nd American Peptide Symposium, Bioconjugation Session, San Diego, CA (USA)
Keynote lecture **Metal-free click reactions for protein labeling and glycoproteomics**
- 164 June 19-24, 2011 Gordon Research Conference on Carbohydrates, Waterville, ME (USA)
Invited lecture **Carbohydrate-based multicomponent vaccines**
- 163 June 7, 2011 94th Canadian Chemistry Conference and Exhibition, Carbohydrate and Glycobiology Symposium, Montréal, Quebec (Canada)
Invited lecture **Beyond metal- and azide-mediated click reaction: application to glycoscience**
- 162 May 26, 2011 Shandong University, College of Life Science, Jinan (China)
Seminar **Carbohydrate-based vaccines and immuno-modulators**
- 161 May 25, 2011 Nankai University, College of Chemistry and College of Pharmacy, Beijing (China)
Seminar **Towards a fully synthetic carbohydrate-based vaccine for cancer**
- 160 May 24, 2011 Tsinghua University, Beijing (China)
Seminar **Towards a fully synthetic carbohydrate-based vaccine for cancer**
- 159 April 28, 2011 Momenta Pharmaceuticals, Cambridge, MA (USA)
Invited lecture **An integrated approach for ligand identification for heparan sulfate binding proteins**
- 158 April 25, 2011 Research Collaboration Symposium ‘Hot Topics in Next-Generation Vaccines R&D’, Georgia Research Alliance/Centers for Disease Control and Prevention/CDC Foundation, CDC, Atlanta, GA (USA)
Invited lecture **Self-adjuvanting cancer vaccines**
- 157 March 28, 2011 Session ‘Click Chemistry Approaches in Carbohydrate Chemistry’ at the 241st National Meeting & Exposition of the American Chemical Society, Anaheim, CA (USA)
Invited lecture **Beyond metal- and azide-mediated click reaction: application to glycoscience**
- 156 March 27, 2011 Claude S. Hudson Award in Carbohydrate Chemistry Symposium at the 241st National Meeting & Exposition of the American Chemical Society, Anaheim, CA (USA)
Invited lecture **Combinatorial carbohydrate synthesis for glycomics**
- 155 March 25, 2011 Hunter College, New York, NY (USA)
Seminar **A fully synthetic multi-component carbohydrate-based cancer vaccine**

- 154 March 23, 2011 Expanding the Chemical Space for Carbohydrates: Roadmap to Automated Synthesis, NIH, Bethesda, MD (USA)
Invited lecture **Modular synthesis of heparan sulfate oligosaccharides for array development**
- 153 March 7, 2011 Pharmaceutical and Biomedical Sciences, UGA, Athens, GA (USA)
Seminar **Towards a fully synthetic carbohydrate-based vaccine for cancer**
- 152 Jan 24, 2011 MedImmune, Gaithersburg, MD (USA)
Invited lecture **Synthetic carbohydrate-based diagnostics, vaccines and immune modulators**
- 151 Dec 15-20, 2010 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, HI (USA)
Invited lecture **Fully synthetic three-component carbohydrate-based vaccine for cancer**
- 150 Nov 30-Dec 4, 2010 Joint 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, LA (USA)
Invited lecture **New approaches for metal-free click reactions: applications to glycoscience**
- 149 Sept 19-21, 2010 Consortium for Functional Glycomics Workshop on Glycan Array / Bioinformatics, Atlanta, GA (USA)
Invited lecture **Glycosylaminoglycan arrays and label-free detection**
- 148 Sept 2, 2010 Novartis Vaccines Workshop - Moving Conjugate Vaccines Into The Future, Siena (Italy)
Invited lecture **Fully synthetic carbohydrate-based vaccines and immuno-modulators**
- 147 August 23, 2010 Session ‘Synthetic Oligosaccharides and Glycoconjugates for Preventing and Combating Disease’ at the 240th National Meeting & Exposition of the American Chemical Society, Boston, MA (USA)
Invited lecture **Modular synthesis of heparin sulfate oligosaccharides for array development**
- 146 August 22, 2010 Session ‘Wolfrom-Isbell-New Investigator Award Symposium’ at the 240th National Meeting & Exposition of the American Chemical Society, Boston, MA (USA)
Invited lecture **Development of a fully synthetic three-component carbohydrate-based cancer vaccine**
- 145 August 1-6, 2010 25th International Carbohydrate Symposium (ICS2010), Tokyo (Japan)
Invited lecture **Modular synthesis of heparan sulfate oligosaccharides for array development**
- 144 June 14, 2010 Mayo Clinic College of Medicine, Scottsdale, AZ (USA)
Seminar **Towards a fully synthetic carbohydrate-based vaccine for cancer**
- 143 January 28, 2010 University of Auburn, AL (USA)
Seminar **A fully synthetic carbohydrate-based vaccine for cancer**
- 142 December 2, 2009 20th International Symposium on Glycoconjugates - Glycans: From Molecules to Structures to Therapeutics, San Juan, PR (USA)
Plenary lecture **Modulation of biological functions with synthetic carbohydrate-based macromolecules**

- 141 October 22-23, 2009 NIH/NIGMS Workshop, Levering Glycan Array Screens with Biological, Computational and Structural Data, Bethesda, MD (USA)
Invited lecture **Unraveling motif recognition by heparan sulfate binding proteins**
- 140 October 5, 2009 PennState University, PA (USA)
Seminar **Towards a fully synthetic carbohydrate-based vaccine for cancer**
- 139 September 8, 2009 University of Iowa, Iowa City (USA)
Seminar **Towards a fully synthetic carbohydrate-based vaccine for cancer**
- 138 August 17, 2009 238th National Meeting of the American Chemical Society, Washington, DC (USA)
Invited lecture **Synthetic oligosaccharides as vaccine candidates for microbes classified as bioterrorism agents**
- 137 July 19-23, 2009 Mucins in Health and Disease - 10th International Workshop on Carcinoma-associated Mucins, Cambridge (United Kingdom)
Invited lecture **Overcoming the poor immunogenicity of tumor-associated glycopeptides**
- 136 April 6-7, 2009 Bijvoet Tutorial Symposium 2009, Soesterberg (Netherlands)
Invited lecture **Modulation of biological functions with synthetic carbohydrate-based macromolecules**
- 135 March 29 - April 2, 2009 67th Harden - Decoding the Biology of Heparan Sulphate Proteoglycans, Cambridge (United Kingdom)
Invited lecture **Probing biological functions of heparan sulfate using synthetic compounds**
- 134 March 22-26, 2009 237th National Meeting of the American Chemical Society, Salt Lake City, Utah (USA)
Invited lecture **Chemical synthesis and immunological properties of synthetic vaccine candidates and immune modulators**
- 133 March 14-16, 2009 CFG/NIH Workshop, Glycan Microarray Technology and Applications, La Jolla, CA (USA)
Invited lecture **Parallel combinatorial synthesis of heparan sulfate derivatives for array development**
- 132 January 22, 2009 Gordon Research Conference on Glycobiology, Ventura, CA (USA)
Invited lecture **Chemical tools for glycoproteomics: novel click reagent and glycopeptide specific antibodies**
- 131 November 13, 2008 University of California, Davis (USA)
Seminar **Modulation of biological functions with synthetic glycoconjugates**
- 130 October 10, 2008 Kemisk Institute, University of Copenhagen (Denmark)
Seminar **Glycosidase inhibitors as novel cancer therapeutics**
- 129 October 9, 2008 University of Southern Denmark, Odense (Denmark)
Seminar **Modulation of biological functions with synthetic glycoconjugates**
- 128 October 8, 2008 Faculty of Life Sciences, University of Copenhagen (Denmark)
Seminar **Modulation of biological functions with synthetic glycoconjugates**
- 127 October 6, 2008 University of Bristol (United Kingdom)
Seminar **Modulation of biological functions with synthetic glycoconjugates**
- 126 September 16, 2008 FDA CBER DBPAP, Bethesda, MD (USA)
Invited lecture **Fully synthetic vaccines and immune modulators**
- 125 July 27-Aug 1, 2008 XXIV International Carbohydrate Symposium, Oslo (Norway)
Lecture **Fast click reactions for labeling of living cells and nano-particles**

- 124 June 17, 2008 Bio2008, San Diego, CA (USA)
Invited lecture **Chemical approaches for protein glycosylation**
- 123 April 25, 2008 Shanghai Institute of Organic Chemistry (China)
Seminar **Fully synthetic carbohydrate-based cancer vaccines and immune modulators**
- 122 April 23, 2008 PepCon 2008, Shenzhen (China)
Invited lecture **Increasing the antigenicity of tumor-associated glycopeptides by targeting Toll-like receptors**
- 121 April 15, 2008 Northwestern University, Evanston, IL (USA)
Seminar **Modulation of biological functions with synthetic carbohydrate-based macromolecules**
- 120 February 11, 2008 Tulane University, New Orleans, LA (USA)
Seminar **The development of a fully synthetic carbohydrate-based cancer vaccine**
- 119 February 8, 2008 University of Cincinnati, OH (USA)
Seminar **Towards a fully synthetic carbohydrate-based cancer vaccine**
- 118 November 15, 2007 Temple University, Philadelphia, PA (USA)
Seminar **Towards a fully synthetic carbohydrate-based cancer vaccine**
- 117 November 11-14, 2007 Society for Glycobiology 2007 Conference, Boston, MA (USA)
Invited lecture **Chemical glycobiology and vaccine development**
- 116 September 7, 2007 National Chaio-Tung University, Taipei (Taiwan)
Invited lecture **Glycosidase inhibitors as novel anticancer therapeutics**
- 115 September 5, 2007 National Tsing-Hua University, Taipei (Taiwan)
Invited lecture **Towards a fully synthetic vaccine for cancer**
- 114 September 3, 2007 Academia Sinica, Taipei (Taiwan)
Invited lecture **Synthetic cancer vaccines and immune modulators**
- 113 June 17-22, 2007 Gordon Research Conference on Carbohydrates, Tilton, NH (USA)
Invited lecture **Synthetic compounds to probe biological functions of complex carbohydrates**
- 112 June 6-10, 2007 The Young(-ish!) Giants of Chemistry, Edinburgh (United Kingdom)
Plenary lecture **Towards a fully synthetic three-component cancer vaccine**
- 111 March 27, 2007 University of Glasgow (United Kingdom)
Seminar **The development of a fully synthetic carbohydrate-based cancer vaccine**
- 110 March 7-9, 2007 Indian Institute of Chemical Biology, Kolkata (India)
Invited lecture **The development of a three-component carbohydrate-based cancer vaccine**
- 109 February 6, 2007 University of Michigan, Ann Arbor (USA)
Seminar **The development of a three-component carbohydrate-based cancer vaccine**
- 108 February 5, 2007 Wayne State University, Detroit, MI (USA)
Seminar **The development of a three-component carbohydrate-based cancer vaccine**
- 107 January 22, 2007 University of Illinois, Urbana-Champaign (USA)
Seminar **The development of a three-component carbohydrate-based cancer vaccine**

- 106 November 10, 2006 University of Tennessee, Chattanooga (USA)
Seminar **The development of a three-component carbohydrate-based cancer vaccine**
- 105 October 17, 2006 Tufts University, Boston, MA (USA)
Seminar **A fully synthetic three-component cancer vaccine**
- 104 September 10-14, 2006 232nd National Meeting of the American Chemical Society, San Francisco, CA (USA)
Invited lecture **Towards a fully synthetic carbohydrate-based anti-cancer vaccine**
- 103 August 22-23, 2006 Cambridge Healthtech Institute, Boston, MA (USA)
Invited lecture **A fully synthetic three-component cancer vaccine**
- 102 August 6-9, 2006 2nd International Symposium on Biomolecular Chemistry, Konan University, Kobe (Japan)
Invited lecture **Increasing the antigenicity of tumor associated carbohydrates by targeting Toll-like receptors**
- 101 August 4, 2006 Tokyo Institute of Technology (Japan)
Seminar **Stereoselective glycosylations using chiral auxiliaries**
- 100 July 23-28, 2006 23rd International Carbohydrate Symposium, Whistler, British Columbia (Canada)
Keynote lecture **A fully synthetic three-component cancer vaccine**
- 99 June 28, 2006 Ventana Medical Systems, Inc., Tucson, AZ (USA)
Seminar **Synthetic tumor associated carbohydrate antigens for imaging and cancer vaccine development**
- 98 June 12, 2006 Duke University, Durham, NC (USA)
Seminar **Increasing the antigenicity of tumor associated carbohydrates by targeting Toll-like receptors**
- 97 May 31, 2006 CERMAV-CNRS, Grenoble (France)
Seminar **Glycosidase inhibitors as novel anti-cancer therapeutics**
- 96 May 29, 2006 Université Claude Bernard, Lyon (France)
Seminar **Glycosidase inhibitors as novel anti-cancer therapeutics**
- 95 May-June, 2006 Université de Picardie Jules Vernes, Amiens (France)
Seminar **Glycosidase inhibitors as novel anti-cancer therapeutics**
- 94 **Seminar** **Stereoselective glycosylations using chiral auxiliaries**
- 93 April 17-20, 2006 22nd Conference on Combinatorial Chemistry (JCCF 22), Osaka (Japan)
Invited lecture **Glycosidase inhibitors as novel anti-cancer therapeutics**
- 92 April 5, 2006 Institute of Human Virology, Baltimore, MD (USA)
Seminar **Increasing the antigenicity of tumor associated carbohydrates by targeting Toll-like receptors**
- 91 March 26-30, 2006 231st National Meeting of the American Chemical Society, Atlanta, GA (USA)
Invited lecture **Glycosidase inhibitors as novel cancer therapeutics**
- 90 February 19-25, 2006 GLYCANS 2006, Indian Institute of Science, Bangalore (India)
Invited lecture **Glycosidase inhibitors as novel cancer therapeutics**
- 89 January 23, 2006 Albert Einstein College of Medicine, Bronx, NY (USA)
Seminar **Telling glycosidase inhibitors what to do**

- 88 November 21, 2005 The Royal Swedish Academy of Science, Stockholm (Sweden)
Invited lecture **Telling glycosidase inhibitors what to do**
- 87 November 4, 2005 University of Virginia, Charlottesville (USA)
Seminar **Telling glycosidase inhibitors what to do**
- 86 October 14, 2005 van Boom Symposium, Leiden Institute of Chemistry (Netherlands)
Invited lecture **Smart molecules inspired by Jacques van Boom**
- 85 October 12, 2005 Utrecht University (Netherlands)
Seminar **Glycosidase inhibitors as novel cancer therapeutics**
- 84 August 28-Sept. 1, 2005 230th National Meeting of the American Chemical Society, Washington, DC (USA)
Invited lecture **Stereoselective glycosylations using chiral auxiliaries**
- 83 May 25-June 1, 2005 Annual Meeting of the Canadian Society for Chemistry, Saskatoon, SK (Canada)
Invited lecture **Stereoselective glycosylations using chiral auxiliaries**
- 82 April 29-30, 2005 2nd Annual Carbohydrate Symposium, Alberta Ingenuity Centre for Carbohydrate Science, Lake Louise, AB (Canada)
Plenary lecture **Complex glycoconjugates: new synthetic methods and exploring biological functions**
- 81 March 13-17, 2005 229th National Meeting of the American Chemical Society, San Diego, CA (USA)
Invited lecture **Stereoselective glycosylations using chiral auxiliaries**
- 80 March 6-11, 2005 Gordon Research Conference on Glycobiology, Ventura, CA (USA)
Invited lecture **Telling glycosidase inhibitors what to do**
- 79 December 21, 2004 University of Nijmegen (Netherlands)
Seminar **Complex carbohydrates and the fight between host and pathogens**
- 78 November 17-20, 2004 Joint Meeting of the Society for Glycobiology and the Japanese Society for Carbohydrate Research, Honolulu, HI (USA)
Invited lecture **Synthetic lipopolysaccharides and peptidoglycan derivatives as novel therapeutics for septic shock**
- 77 November 12, 2004 Iowa State University, Ames (USA)
Seminar **Complex glycoconjugates: new synthetic methods and exploring biological functions**
- 76 August 22-26, 2004 American Chemical Society National Meeting, Philadelphia, PA (USA)
Invited lecture **Synthesis and biological evaluation of lipopolysaccharide and peptidoglycan derivatives**
- 75 June 23-27, 2004 22nd International Carbohydrate Symposium, Glasgow (United Kingdom)
Seminar **The use of chiral auxiliaries for stereoselective glycosylations**
- 74 May 12, 2004 University of California, Los Angeles (USA)
Seminar **Unraveling cellular activation using chemical genomics**
- 73 March 18, 2004 University of St. Andrews (United Kingdom)
Seminar **Synthetic glycoconjugates in infection and immunity**
- 72 March 17, 2004 University of Dundee (United Kingdom)
Seminar **Synthetic glycoconjugates in infection and immunity**

- 71 March 15, 2004
Seminar GlaxoSmithKline, Stevenage (United Kingdom)
Synthetic glycoconjugates in infection and immunity
- 70 February 12, 2004
Seminar Case Western Reserve University, Cleveland, OH (USA)
Complex glycoconjugates: new synthetic approaches and probing biological functions
- 69 February 11, 2004
Seminar University of Toledo, OH (USA)
Complex glycoconjugates: new synthetic approaches and probing biological functions
- 68 January 16, 2004
Seminar Georgia State University, Atlanta, GA (USA)
Complex synthetic carbohydrates and infection and immunity
- 67 December 17, 2003
Seminar University of Lund (Sweden)
Complex glycoconjugates: new synthetic approaches and probing biological functions
- 66 December 16, 2003
Seminar Stockholm University (Sweden)
Complex glycoconjugates: new synthetic approaches and probing biological functions
- 65 December 15, 2003
Seminar University of Gothenburg (Sweden)
Glycoconjugates and the fight between host and pathogen
- 64 December 11, 2003
Seminar University of Oxford (United Kingdom)
Complex glycoconjugates: new synthetic approaches and probing biological functions
- 63 October 20, 2003
Seminar National Cancer Institute, NIH, Bethesda, MD (USA)
Selective mannosidase inhibitors as cancer therapeutics
- 62 October 6, 2003
Seminar University of Missouri, St. Louis (USA)
Complex glycoconjugates: new synthetic approaches and probing biological functions
- 61 Sept. 7-11, 2003
Invited lecture Glycobiology Symposium, ACS Meeting, New York, NY (USA)
Multivalency and the mode of action of bacterial sialidases
- 60 July 7, 2003
Carbohydrate research award lecture Eurocarb12 meeting, Grenoble (France)
Complex glycoconjugates: new synthetic approaches and probing biological functions
- 59 May 15, 2003
Seminar Carlsberg Institute, Copenhagen (Denmark)
Synthesis and biological properties of neoglycoproteins
- 58 May 14, 2003
Seminar University of Copenhagen (Denmark)
Multivalency and modular proteins
- 57 April 29, 2003
Invited lecture UCLA NanoSystems Seminar Series, UCLA, Los Angeles, CA (USA)
Modulating biological properties with carbohydrate-based macromolecules and nanoparticles
- 56 March 3, 2003
Invited lecture Gordon Research Conference on Glycobiology, Ventura, CA (USA)
Chemical approaches to glycobiology
- 55 January 17, 2003
Seminar Indian Institute of Science, Bangalore (India)
Synthesis and biological properties of neoglycoproteins
- 54 January 14, 2003
Invited lecture XVII International Symposium on Glycoconjugates, Bangalore (India)
Synthesis and proinflammatory effects of peptidoglycan-derived neoglycopeptide polymers

- 53 November 10, 2002 Society for Glycobiology Annual Meeting, Boston, MA (USA)
Invited lecture
Synthetic oligosaccharides and glycoprotein remodeling
- 52 October 16, 2002 Wayne State University, Detroit, MI (USA)
Seminar
Synthetic glycoconjugates and the innate and adaptive immune system
- 51 September 16, 2002 University of Alberta, Edmonton (Canada)
Seminar
Synthetic oligosaccharides and glycoprotein remodeling
- 50 July 14, 2002 Third Pan-Pacific Conference on Sialoglycoscience and Other Novel Forms of Glycosylation, Brisbane (Australia)
Invited lecture
Chemistry & biochemistry of sialic acids and associated proteins
- 49 July 8, 2002 XXIst International Carbohydrate Symposium, Cairns (Australia)
Plenary lecture
Synthetic glycoconjugates and the innate and adaptive immune system
- 48 February 18, 2002 8th Ibn Sina Conference of Heterocyclic Chemistry, Luxor (Egypt)
Invited lecture
Synthetic lipopolysaccharides and peptidoglycan derivatives as novel therapeutics for septic shock
- 47 October 17, 2001 Synthesis towards Bioactive Compounds Autumn Graduate School, Arnhem (Netherlands)
Invited lecture
Synthetic oligosaccharides and glycoconjugates in drug discovery
- 46 August 28, 2001 ACS National Meeting, Chicago, IL (USA)
Invited lecture
Novel methods for liquid polymer-supported synthesis of well-defined oligosaccharides and chemical libraries
- 45 April 3, 2001 Ibis, Carlsbad, CA (USA)
Seminar
Combinatorial carbohydrate chemistry
- 44 March 21, 2001 University of Lund (Sweden)
Seminar
Synthetic glycoconjugates and the innate and adoptive immune system
- 43 March 20, 2001 University of Konstanz (Germany)
Seminar
Synthetic glycoconjugates and the innate and adoptive immune system
- 42 March 4-5, 2001 Elementis Specialties, Hightstown, NJ (USA)
Seminar
Carbohydrate-based polymers
- 41 April 10-12, 2000 Bio-Organic Chemistry Series, Molecular Pharmacology & Therapeutics Program Research, Sloan-Kettering Institute, New York, NY (USA)
Invited lecture
Semi-synthetic and fully synthetic carbohydrate-based vaccines
- 40 March 25-28, 2000 7th Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Alexandria (Egypt)
Invited lecture
The synthesis of oligosaccharides of biological importance by polymer supported approaches
- 39 December 3, 1999 Umea University (Sweden)
Seminar
Semi-synthetic and fully-synthetic carbohydrate-based vaccines
- 38 November 30, 1999 University of Glasgow (United Kingdom)
Seminar
Synthetic saccharides to probe carbohydrate-protein interactions
- 37 October 18-21, 1999 Regional ACS meeting, Knoxville, TN (USA)
Invited lecture
The preparation well-defined saccharides and chemical libraries

- 36 September 10-12, 1999 Bioorganic Conference, Fribush (United Kingdom)
Invited lecture **Synthesis of conformationally constrained trisaccharides and complexation properties with concanavalin A**
- 35 January 18, 1999 University of Alberta, Edmonton (Canada)
Seminar **The preparation well-defined saccharides and chemical libraries**
- 34 July 10, 1998 Johnson & Johnson, New Jersey (USA)
Seminar **Carbohydrates for drug delivery**
- 33 July 1-5, 1998 XVII – French National Carbohydrate Meeting (France)
Invited lecture **The preparation well-defined saccharides and chemical libraries**
- 32 April 14, 1998 University of Bristol (United Kingdom)
Seminar **Combinatorial carbohydrate chemistry**
- 31 March 26-28, 1998 WEB-Meeting, Munich (Germany)
Invited lecture **The preparation of homogenous glycoforms of IgG**
- 30 March 11, 1998 University of Sheffield (United Kingdom)
Seminar **Combinatorial carbohydrate chemistry**
- 29 November 26, 1997 University of Liverpool (United Kingdom)
Seminar **Combinatorial carbohydrate chemistry**
- 28 November 12, 1997 University of London, King's College (United Kingdom)
Seminar **Combinatorial carbohydrate chemistry**
- 27 October 13, 1997 University of Cambridge (United Kingdom)
Seminar **Combinatorial carbohydrate chemistry**
- 26 September 30, 1997 University of Oxford (United Kingdom)
Seminar **Combinatorial carbohydrate chemistry**
- 25 September 12, 1997 University of Grenoble (France)
Seminar **Combinatorial carbohydrate chemistry**
- 24 July 6-11, 1997 Eurocarb, Utrecht (Netherlands)
Keynote lecture **A latent-active glycosylation strategy for the preparation of oligosaccharide libraries**
- 23 June 22-27, 1997 Gordon Research Conference on Carbohydrates, Tilton, NH (USA)
Invited lecture **Combinatorial carbohydrate chemistry**
- 22 June 20, 1997 CCRC, University of Georgia, Athens, GA (USA)
Seminar **The preparation of well-defined oligosaccharides and chemical libraries**
- 21 April 17, 1997 RSC Meeting, University of Nottingham (United Kingdom)
Invited lecture **The preparation of well-defined oligosaccharides and chemical libraries**
- 20 April 3, 1997 University of Lund (Sweden)
Seminar **The preparation of well-defined oligosaccharides and chemical libraries**
- 19 February 27, 1997 SmithKline Beecham Biologicals, Rixensart (Belgium)
Seminar **Synthetic carbohydrate-based vaccines**
- 18 February 21, 1997 National Institute for Public Health, Bilthoven (Netherlands)
Seminar **Synthetic carbohydrate-based vaccines**
- 17 February 12, 1997 University of Durham (United Kingdom)
Seminar **New methods for convergent oligosaccharide synthesis**
- 16 October 10, 1996 University of East Anglia (United Kingdom)
Seminar **Combinatorial carbohydrate chemistry**

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| 15 | September 9, 1996 | RSC Carbohydrate Group Autumn Meeting, UCL (United Kingdom) |
| | Invited lecture | Combinatorial carbohydrate chemistry |
| 14 | July 21-26, 1996 | XVIII International Carbohydrate Symposium, Milan (Italy) |
| | Lecture | Combinatorial carbohydrate chemistry |
| 13 | May 14, 1996 | Imperial College, London (United Kingdom) |
| | Seminar | New methods for convergent oligosaccharide synthesis |
| 12 | March 20, 1996 | University of Southampton (United Kingdom) |
| | Seminar | New methods for convergent oligosaccharide synthesis |
| 11 | March 25, 1996 | RSC Carbohydrate Group Spring Meeting, St. Andrews (United Kingdom) |
| | Invited lecture | Synthetic oligosaccharides as tools in glycobiology |
| 10 | February 20, 1996 | University of Nottingham (United Kingdom) |
| | Seminar | New methods for convergent oligosaccharide synthesis |
| 9 | November 29, 1995 | University of Leicester (United Kingdom) |
| | Seminar | Recent advances in oligosaccharide synthesis |
| 8 | November 22, 1995 | UMIST, Manchester (United Kingdom) |
| | Seminar | New methods for convergent oligosaccharide synthesis |
| 7 | September 15-17, 1995 | Bioorganic Conference, Fribush (United Kingdom) |
| | Invited lecture | Carbohydrate chemistry and biochemistry |
| 6 | September 5-8, 1995 | RCS Autumn Meeting, Sheffield (United Kingdom) |
| | Invited lecture | Synthetic oligosaccharides as tools in glycobiology |
| 5 | July 2-7, 1995 | Eurocarb VIII, Sevilla (Spain) |
| | Lecture | New chemoselective glycosylation |
| 4 | April 2, 1994 | Pfizer Central Research, Sandwich (United Kingdom) |
| | Seminar | Towards carbohydrate-based drugs |
| 3 | March 31, 1994 | SmithKline Beecham Pharmaceuticals, Harlow (United Kingdom) |
| | Seminar | New methods for oligosaccharide synthesis |
| 2 | February 4, 1994 | The Wellcome Foundation Limited, Beckenham (United Kingdom) |
| | Seminar | Towards carbohydrate-based drugs |
| 1 | October 24, 1993 | Glaxo Group Research, Greenford (United Kingdom) |
| | Seminar | New methods for oligosaccharide synthesis |

Publications (in reverse chronological order)

- 368 Bunyatov, M., M.A. Wolfert, L. Liu, R. Huizinga, M. Schreurs, B.C. Jacobs, and G.J. Boons. 2023. Chemoenzymatic synthesis of human natural killer-1 containing glycans and application as serum antibodies probes. *Nat. Synth.* Accepted for publication.
- 367 Kadirvelraj, R., B.M. Boruah, S. Wang, D. Chapla, A. Ramiah, K. Hudson, A.R. Prudden, G.J. Boons, S.G. Withers, Z.A. Wood, and K.W. Moremen. 2023. Structural basis for Lewis antigen synthesis by the α 1,3-fucosyltransferase, FUT9. *Nat. Chem. Biol.* In press (DOI: 10.1038/s41589-023-01345-y, online 18/May/23).
- 366 Maliepaard, J.C.L., J.M.A. Damen, G.J.P.H. Boons, and K.R. Reiding. 2023. Glycoproteomics-compatible MS/MS-based quantification of glycopeptide isomers. *Anal. Chem.* **95**(25): 9605-9614.
- 365 Vos, G.M., J. Weber, I.R. Sweet, K.C. Hooijschuur, J. Sastre Toraño, and G.J. Boons. 2023. Oxidative release of *O*-glycans under neutral conditions for analysis of glycoconjugates having base-sensitive substituents. *Anal. Chem.* **95**(23): 8825-8833.

- 364 Xia, M., F. Vago, L. Han, P. Huang, L. Nguyen, G.J. Boons, J.S Klassen, W. Jiang, and M. Tan. 2023. The α TSR domain of *Plasmodium* circumsporocite protein bound heparan sulfates and elicited high titers of sporozoite binding antibody after displayed by nanoparticles. *Int. J. Nanomed.*: 3087-3107.
- 363 Perrett, H.R., P.J.M. Brouwer, J. Hurtado, M.L. Newby, L. Liu, H. Müller-Kräuter, S. Müller Aguirre, J.A. Burger, J.H. Bouhuijs, G. Gibson, T. Messmer, J.S. Schieffelin, A. Antanasijevic, G.J. Boons, T. Strecker, M. Crispin, R.W. Sanders, B. Briney, and A.B. Ward. 2023. Structural conservation of Lassa virus glycoproteins and recognition by neutralizing antibodies. *Cell Rep.* **42**(5): 112524.
- 362 Hamming, P.H.E., N.J. Overeem, K. Diestelhorst, T. Fiers, M. Tieke, G.M. Vos, G.J.P.H. Boons, E. van der Vries, S. Block, and J. Huskens. 2023. Receptor density-dependent motility of influenza virus particles on surface gradients. *ACS Appl. Mater. Interfaces* **15**(20): 25066-25076.
- 361 Tomris, I., L. Unione, L. Nguyen, P. Zaree, K.M. Bouwman, L. Liu, Z. Li, J.A. Fok, M. Ríos Carrasco, R. van der Woude, A.L.M. Kimpel, M.W. Linthorst, S.A. Kilavuzoglu, E.C.J.M Verpalen, T.G. Caniels, R.W. Sanders, B.A. Heesters, R.J. Pieters, J. Jiménez-Barbero, J.S. Klassen, G.J. Boons, and R.P. de Vries. 2023. SARS-CoV-2 spike N-terminal domain engages 9-O-acetylated α 2–8-linked sialic acids. *ACS Chem. Biol.* **18**(5): 1180-1191.
- 360 Chen, D., A.K. Srivastava, J. Dubrochowska, L. Liu, T. Li, J.P. Hoffmann, J.K. Kolls and G.J. Boons. 2023. A bioactive synthetic outer-core oligosaccharide derived from a *Klebsiella pneumoniae* lipopolysaccharide for bacteria recognition. *Chem. Eur. J.* **29**(25): e202203408.
- 359 Riedel, J., M. Lettow, M. Grabarics, M Gotze, R.L. Miller, G.J. Boons, G. Meijer, G. von Helden, G.P. Szekeres, and K. Pagel. 2023. Predicting structural motifs of glycosaminoglycans using cryogenic infrared spectroscopy and random forest. *J. Am. Chem. Soc.* **145**(14): 7859-7868.
- 358 Sun, L., P. Chopra, I. Tomris, R. van der Woude, L. Liu, R.P. de Vries, and G.J. Boons. 2023. Well-defined heparin mimetics can inhibit binding of the trimeric spike of SARS-CoV-2 in a length dependent manner. *JACS Au* **3**(4): 1185-1195.
- 357 Canales, A., J. Sastre, J.M. Orduña, C.M. Spruit, J. Pérez-Castells, G. Domínguez, K.M. Bouwman, R. van der Woude, F.J. Cañada, C.M. Nycholat, J.C. Paulson, G.J. Boons, J. Jiménez-Barbero, and R.P. de Vries. 2023. Revealing the specificity of human H1 influenza A viruses to complex *N*-glycans. *JACS Au* **3**(3): 868-878.
- 356 Scheibner, D., A.H. Salaheldin, O. Bagato, L.M. Zaack, A. Mostafa, U. Blohm, C. Müller, A.F. Eweas, K. Franzke, A. Karger, A. Schäfer, M. Gischke, D. Hoffmann, S. Lerolle, X. Li, H.S. Abd El-Hamid, J. Veits, A. Breithaupt, G.J. Boons, M. Matrosovich, S. Finke, S. Pleschka, T.C. Mettenleiter, R.P. de Vries, and E.M. Abdelwhab. 2023. Phenotypic effects of mutations observed in the neuraminidase of human origin H5N1 influenza A viruses. *PLoS Path.* **9**(2): e1011135.
- 355 Sun, L., P. Chopra, and G.J. Boons. 2022. Chemoenzymatic synthesis of heparan sulfate oligosaccharides having a domain structure. *Angew. Chem. Int. Ed.* **61**(47): e202211112.
- 354 Trattnig, N., Z. Li, G. Bosman, P. Kosma, and G.J. Boons. 2022. Site-specific multifunctionalization of the carrier protein CRM₁₉₇ by disulfide rebridging for glycoconjugate vaccine development. *ChemBioChem* **23**(21): e202200408.
- 353 de Jong, H., M.J. Moure, J.E.M. Hartman, G.P. Bosman, J.Y. Ong, B.W. Bardoel, G.J. Boons, M.M.S.M. Wösten, and T. Wennekes. 2022. Selective exoenzymatic labeling of lipooligosaccharides of *Neisseria gonorrhoeae* with α 2,6-sialoside analogues. *ChemBioChem* **23**(19): e202200340.

- 352 Verheyen S, J. Blatterer J, M.R. Speicher, G.S. Bhavani, G.J. Boons, M.B. Ilse, D. Andrae, J. Sproß, F.M. Vaz, S.G. Kircher, L. Posch-Pertl, D. Baumgartner, T. Lübke, H. Shah, A. Al Kaissi, K.M. Girisha, and B. Plecko. 2022. Novel subtype of mucopolysaccharidosis caused by arylsulfatase K (ARSK) deficiency. *J. Med. Gen.* **59**(10): 957-964.
- 351 Kariyawasam, U., M. Gulati, Y. Wang, H. Bao, T. Shan, X. Li, X. Cao, N. Sumathipale, Y. Hu, X. Zhang, G.J. Boons, and H. Jiang. 2022. Preferential binding of DAP-PGs by major peptidoglycan recognition proteins found in cell-free hemolymph of *Manduca sexta*. *Insect Biochem. Mol. Biol.* **148**: 103827.
- 350 Li, Z., R. Derking, W.-H. Lee, G.P. Bosman, A.B. Ward, R.W. Sanders, and G.J. Boons. 2022. Conjugation of a Toll-like receptor agonist to glycans of an HIV native-like envelope trimer preserves neutralization epitopes. *ChemBioChem* **23**(16): e202200236. **Selected as a VIP paper.**
- 349 Danielsson, A., M.M. Kogut, M. Maszota-Zieleniak, P. Chopra, G.J. Boons, and S.A. Samsonov. 2022. Molecular dynamics-based descriptors of 3-O-sulfated heparan sulfate as contributors of protein binding specificity. *Comput. Biol. Chem.* **99**: 107716.
- 348 Madunić, K., O.A. Mayboroda, T. Zhang, J. Weber, G.J. Boons, H. Morreau, R. van Vlierberghe, T. van Wezel, G.S.M. Lageveen-Kammeijer, and M. Wuhler. 2022. Specific (sialyl-)Lewis core 2 O-glycans differentiate colorectal cancer from healthy colon epithelium *Theranostics*. **12**(10): 4498-4512.
- 347 Latchoumane, C.F., P. Chopra, L. Sun, A. Ahmed, F. Palmieri, H.F. Wu, R. Guerreso, K. Thorne, N. Zeltner, G.J. Boons,* and L. Karumbaiyah.* 2022. Synthetic heparan sulfate hydrogels regulate neurotrophic factor signaling and neuronal network activity. *ACS Appl. Mater. Interfaces* **14**(25): 28476-28488.
- 346 Sheikh, M.O., C.J. Capicciotti, L. Liu, J. Praissman, D. Ding, D.G. Mead, M.A. Brindley, T. Willer, K.P. Campbell, K.W. Moremen, L. Wells, and G.J. Boons. 2022. Cell surface glycan engineering reveals that matriglycan alone can recapitulate dystroglycan binding and function. *Nat. Commun.* **13**(1): 3617.
Featured on Nat. Commun. Editors' Highlights page “Structural biology, biochemistry and biophysics” by P. Lössl (Juli 12, 2022).
- 345 Li, Z., L. Liu, L. Unione, Y. Lang, R.J. de Groot, and G.J. Boons. 2022. Synthetic O-acetyl-N-glycolylneuraminic acid oligosaccharides reveal host-associated binding patterns of coronaviral glycoproteins. *ACS Inf. Dis.* **8**(5): 1041-1050.
- 344 Laman, J.D., R. Huizinga, G.J. Boons, and B.C. Jacobs. 2022. Guillain-Barré syndrome: expanding the concept of molecular mimicry. *Trends Immunol.* **43**(4): 296-308.
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Contributions to Edited Work (in reverse chronological order)

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- Tolentino M., D. Kunimoto, A. Krishnan, M.A. Genead, R.R. Shinde, G.J. Boons, Q. Liu, A. Prudden, and P. Chopra: International Publication Number WO 2022/060984 A1, titled “*Sialic-acid ligand decorated therapeutics*”, publication date March 24, 2022. Assignee: Aviceda Ophthalmics, Inc (Case AVQ-00125).
- Boons, G.J., R.J. van Beek, F. Broszeit, and R.P. de Vries: International Publication Number WO 2021/251827 A1, titled “*Means and methods for detecting, producing, isolating or characterizing influenza*”, publication date December 16, 2021. Assignee: Universiteit Utrecht Holding B.V. (UU Case P126899EP00).
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Boons, G.J., P.A. Cohen, S.J. Gendler, V. Lakshminarayanan, and M.A. Wolfert: U.S. Continuation Patent Application Serial Number 14/695,413, titled “*Immunogenic Vaccine*” filed on April 24, 2015. Assignees: University of Georgia Research Foundation, Inc. (UGARF Case 1596); Mayo Foundation Medical Education & Research (Mayo Case 2010-246).