

Curriculum Vitae
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Geert-Jan Boons

UGA Foundation Distinguished Professor in Biochemical Sciences

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Professor

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<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, 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
- 2012-2023 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
- 2017-2022 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*
2023-present Mirage Array Working Group Member

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) August 19-23, 2018: Co-organizer
Eurocarb XX, Leiden (Netherlands) June 30-July 4, 2019: Local Organising Committee member

HS-SEQ Symposium ‘Unraveling the Glycan Code’, Berlin (Germany), December 14-15, 2023

Session at the Carbohydrate Chemistry & Chemical Glycobiology Symposium at the 2024 Fall ACS meeting, Denver, CO (USA), August 18-22, 2024

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 (SFG)
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
2023-2024	Future Medicine Advanced Organic Synthesis (Lectures and Tutorials) CPS Organic Chemistry

Postdoctoral Associates Supervised

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

Qi Gao	2012-2016	Victor Somovilla	2017-2019
Min Huang	2013-2015	Yugen Zhu	2016-2019
Yongjiang Wang, Visiting Professor, Zhejiang University of Science and Technology (China)	2013	Anthony Prudden Justin Ragains, Visiting Professor, Louisiana State University (USA)	2017-present 2019
Chantelle Capicciotti	2014-2018	Luca Unione	2019-2020
Anju Sirohiwal	2014-2015	Julia Weber	2019-2020
Ning Ding, Visiting Professor, Fudan University, Shanghai (China)	2014-2016	Nino Trattnig Shaofu Du	2019-2020 2019-2021
Maria Jesus Moure Garcia	2015-2019	Jiabin Zhang	2020-2021
Pradeep Chopra	2015-present	Qiang Liu	2020-2021
Tiehai Li	2015-2019	Ana Gimeno	2020-2023
Yukun Qin, Visiting Professor, IOCAS, Qingdao, Shandong (China)	2015-2016	Anna Ehlers	2021-present
Oier Aizpurua Olaizola, Visiting Scientist, University Basque Country (Spain)	2016	Cristina Bueno Diaz	2021-2023
Postdoc	2017-2018	Ravi Sankar Loka	2022-present
Nuria Martínez Sáez	2016-2019	Lifeng Sun	2022-2023
		Mehman Bunyatov	2022-2023
		Balasaheb Ghotekar	2023-present
		Saptashwa Chakraborty	2023-present

Graduate Students Supervised

Steven Isles, Ph.D.	1993-1996	Martin McWatt, Ph.D.	1997-2000
Andrew Burton, Ph.D.	1994-1997	Cristina De Meo, Ph.D.	1998-2001
Robert Eveson, Ph.D.	1994-1997	Galal Elsayed, Ph.D.	1998-2003
Richard Geurtsen, Ph.D.	1994-1998	Carmen Galan-Hurtado, Ph.D.	1998-2002
Robin Gibson, Ph.D.	1994-1998	Smita Thobhani, Ph.D.	1998-2001
Tiina Kärkkäinen, M.Sc.	1994-1996	Paul Dietzel, M.Sc.	1999-2002
Anne Keromnes, M.Sc.	1994-1997	Brian Ember, Ph.D.	1999-2006
Nathalie Navarre, Ph.D.	1994-1998	Debatosh Majumdar, Ph.D.	1999-2004
Simeon Bowers, Ph.D.	1995-1998	Malene Ryborg Jørgensen, Visiting Student	1999-2000
Sander Henzing, Visiting Student	1995-1996	Balaji Santhanam, Ph.D.	1999-2004
Floris Hout, Visiting Student	1995-1996	Christopher Dodson, M.Sc.	2000-2005
Mathew Johnson, Ph.D.	1995-1998	Yanhong Li, Ph.D.	2000-2004
Frank Reichel, Ph.D.	1995-1998	Abhijit Roychowdhury, Ph.D.	2000-2005
Tong Zhu, Ph.D.	1995-1998	Charles Stanton, M.Sc.	2000-2004
Gianluca Belogi, Ph.D.	1996-2000	David Cato, M.Sc.	2001-2005
Christopher Clarke, Ph.D.	1996-2000	Sameer Kawatkar, Ph.D.	2001-2006
Michael Haller, Ph.D.	1996-2001	Douglas Miller, Ph.D.	2001-2008
Petri Setälä, M.Sc.	1996	Arati Prabhu, M.Sc.	2001-2004
Nicolas Amiot, Ph.D.	1997-2001	Hai Yang, M.Sc.	2001-2006
Christelle Arles, M.Sc.	1997	Sampat Ingale, Ph.D.	2002-2007
Yu Bai, Ph.D.	1997-2000	Jin Park, Ph.D.	2002-2009
		Yu Rao, Ph.D.	2002-2007

Yanghui Zhang, Ph.D.	2002-2007	Tiantian Sun, Ph.D.	2011-2017
Wei Zhong, Ph.D.	2002-2007	Nuria Martínez Sáez,	
Vishal Khot, M.Sc.	2003-2007	Visiting Student	2012
Alok Mehta, Ph.D.	2003-2008	Apoorva Srivastava, Ph.D.	2012-2021
James Neves, M.Sc.	2003-2008	Melanie Edlin, Postgraduate	2013-2015
Xinghai Ning, Ph.D.	2003-2008	Weiyu Li, Postgraduate	2013-2015
Mahalakshmi Vasana, Ph.D.	2003-2008	Zeshi Li, Ph.D.	2013-2022
Jinkeng Asong, Ph.D.	2004-2009	Weigang Lu, Ph.D.	2013-2018
Jidnyasa Gaekwad, Ph.D.	2004-2009	Ivan Gagarinov, Ph.D.	2014-2020
Monique Phillips, M.Sc.	2004-2008	Alexandra Walker, M.Sc.	2014-2016
Sailaja Arungundram, Ph.D.	2005-2010	Kun Yuan, Ph.D.	2014-2020
Shailesh Ambre, Ph.D.	2005-2012	Huzi Sun, Ph.D.	2014-2019
Srinivasa Koutha, Ph.D.	2005-2013	Mehman Bunyatov, Ph.D.	2015--
Yusuf Vohra, Ph.D.	2005-2010	Ingrid t' Hart, Ph.D.	2015-2020
Thomas Boltje, Visiting Student	2005-2006	Fan Yi, Visiting Student	2015
Ph.D.	2006-2011	Frederik Broszeit,	
Jessica Cardot, Ph.D.	2006-2011	Visiting Student	2015-2016
Matthew Foote, M.Sc.	2006-2010	Ph.D.	2016-2021
Pamela Thompson, Ph.D.	2006-2011	Shubham Sharma, Postgraduate	2015-2017
Qinghui Wang,		Enrico Verpalen, M.Sc.	2016-2018
Visiting Student	2007-2008	Ph.D.	2018-present
Kanar Al-Mafraji, Technician	2007-2011	Na Wei, Technician	2016-2019
Roshan Baliga, Ph.D.	2007-2013	Dushen Chen, Ph.D.	2016-2022
Omkar Dhamale, Ph.D.	2007-2013	Minglong Liu, Ph.D.	2016-2021
Petr Ledin, Ph.D.	2007-2013	Xianke Meng, Ph.D.	2016-2023
Ngalle Eric Mbua, Ph.D.	2007-2012	Lifeng Sun, Ph.D.	2016-2022
Radha Sardar, Ph.D.	2007-2012	Liangwei Zhang, Ph.D.	2016-2024
Krajang Talabnin,		Ashley Carter, Ph.D.	2017-2023
Visiting Student	2007-2008	Gerlof Bosman, Ph.D.	2017-2023
Abu-Baker Abdel-Aal El-Sayed,		Gael Vos, Ph.D.	2017-2023
Visiting Student	2008	Sayani Chowdhurry, Postgraduate	2017-2019
Zoeisha Chinoy, Ph.D.	2008-2014	Yanyan Liu, Ph.D.	2017-present
Tao Fang, Ph.D.	2008-2014	Xiufen Liu, Technician	2017-2020
Brian Sanders, Postgraduate	2008-2010	Yunfei Wu, Ph.D.	2018-present
Huiquig Li, Technician	2009-2012	Pengfei Xuan, Ph.D.	2019-present
Ye Ji, Postgraduate	2009-2012	Shengzhou Ma,	
Josette Wilkes, Ph.D.	2009-2016	Visiting CSC student	2019-2021
Wei Huang, Ph.D.	2010-2016	Francesco Palmieri, Ph.D.	2019-present
Anthony Prudden, Ph.D.	2010-2016	Zhiyong Zhang, Ph.D.	2019-present
Nitin Supekar, Ph.D.	2010-2016	Yujie Ma, Ph.D.	2019-present
Chengli Zong, Ph.D.	2010-2016	Igor Sweet, Ph.D.	2020-present
Loek Eggermont,		Kyle Minder, Ph.D.	2020-present
Visiting Student	2011	Dahai Ding, Ph.D.	2020-present
Qi Gao, Visiting Student	2011-2012	Elif Uslu, Technician	2020-present
Robert Chapman, Ph.D.	2011-2017	Jelle Fok, Ph.D.	2021-present
Manish Hudlikar, Ph.D.	2011-2017	Bart Straten, Ph.D.	2022-present
Apoorva Joshi, Ph.D.	2011-2018	Patrycja Lenartowicz, Ph.D.	2022-present

Niels Ponse, Ph.D.	2022-present	Julia Vreugdenhil, Ph.D.	2023-present
Kevin Hooijschuur, Ph.D.	2022-present	Lisa Santolini, Ph.D.	2023-present
Jan-Willem Langenbach, Ph.D.	2022-present	Chen Shao, Ph.D.	2023-present
Thomas Buckley, Ph.D.	2022-present	Jaap van Trijp, Ph.D.	2024-present
Seema Bhagwat, Visiting scholar	2023-present		
Anne-Mei Klein, Postgraduate	2023-2024		

Presentations (from 1993, in reverse chronological order)

334	March 6, 2024 Seminar	Queen’s University, Belfast (Northern Ireland) Automated chemoenzymatic synthesis of complex oligosaccharides
333	February 6, 2024 Seminar	Department of Chemistry, College of Science, Purdue University, West Lafayette, IN (USA) Chemo-enzymatic synthesis of complex glycans to examine receptor specificities of pathogens of zoonotic concern
332	December 14-15, 2023 Lecture	HS-SEQ Symposium ‘Unraveling the Glycan Code’, Berlin (Germany) Automated chemoenzymatic synthesis of heparan sulfate oligosaccharides by a catch and release approach to develop antiviral agent
331	September 18-19, 2023 Invited lecture	The Royal Society, Theo Murphy International Meeting ‘Glycans in infection: challenge and opportunity’, St Albans (UK) Chemo-enzymatic synthesis of complex glycans to examine receptor specificities of pathogens of zoonotic concern
330	August 13 – 17, 2023 Invited lecture	ACS Fall 2023 National Meeting & Exposition, San Francisco, CA (USA) Automated chemoenzymatic synthesis of heparan sulfate oligosaccharides by a catch and release approach to develop antiviral agents
329	July 19, 2023 Invited lecture	UCSD GlycoBootcamp at the Glycobiology Research and Training Center (GRTC), San Diego, CA (USA) Lectins & microarrays
328	June 11-15, 2023 Seminar	Summer Course Glycosciences, Session ‘Glycoscience Synthesis & Health’, Wageningen (Netherlands) Chemical enzymatic assisted carbohydrate synthesis
327	June 4-9, 2023 Invited lecture	5 th FASEB Science Research Conference (SRC) on “Origins and Benefits of Biologically Active Components in Human Milk”, Melbourne, FL (USA) Synthesis of a comprehensive HMO research library
326	January 25, 2023 Invited lecture	Minisymposium “Glycoscience in health & disease”, Radboudumc, Nijmegen (Netherlands) Chemoenzymatic synthesis of complex glycans to probe host-guest interactions
325	November 18-19, 2022 Invited lecture	Glycobasque 5, San Sebastian (Spain) Chemo-enzymatic synthesis to probe host-guest interactions

324	October 20-21, 2022 Michael H. Benn distinguished lecture	Department of Chemistry, University of Calgary (Canada) Chemo-enzymatic synthesis of complex glycans to examine receptor specificities of pathogens of zoonotic concern
323	October 18, 2022 Seminar	Chemistry Department, University of British Columbia, Vancouver (Canada) Chemo-enzymatic synthesis of complex glycans to probe-host guest interactions
322	September 12-14, 2022 Invited lecture	29 th Symposium on Glycosaminoglycans, Venice (Italy) Heparan sulfate proteoglycans as attachment factor for SARSCoV-2
321	July 14, 2022 Keynote lecture	30 th International Carbohydrate Symposium (ICS2022) – online (Brazil) Chemo-enzymatic synthesis of complex glycans to explore host-guest interactions
320	April 2-5, 2022 Invited lecture	American Society for Biochemistry and Molecular Biology (ASBMB) Annual 2022 Meeting, Philadelphia, PA (USA) Cell surface glycan engineering to examine receptor specificities of influenza and other viruses
319	November 18-19, 2021 Invited lecture	New Frontiers Symposium on Translational Glycoscience, Radboud University, Nijmegen (Netherlands) Synthetic O-acetylated sialosides facilitate functional receptor identification for human respiratory viruses
318	October 26, 2021 Seminar	IMM colloquium, Institute for Molecules and Materials, Radboud University, Nijmegen (Netherlands) Chemo-enzymatic synthesis of complex glycans to probe host-guest interactions
317	September 27-29, 2021 Invited lecture	INNOGLY "GlycosAminoGlycans: What remains to be solved?", Hybrid Symposium, University of Crete, Heraklion (Greece) 3-O-Sulfation of heparan sulfate modulates protein binding and lyase degradation
316	August 24, 2021 Invited lecture	ACS Fall 2021 National Meeting & Exposition, Atlanta, GA (USA) Synthetic HS oligosaccharides to dissect the importance of 3-O-sulfation to modulates protein binding and lyase degradation
315	July 6-7, 2021 Presentation	NIH Common Fund Glycoscience Program, via Zoom, Bethesda, MD (USA) Chemoenzymatic synthesis of <i>Campylobacter jejuni</i> lipooligosaccharide core domains to examine Guillain-Barré syndrome serum antibody specificities
314	June 17, 2021 Seminar	Summer Course 'Glycoscience', Wageningen (Netherlands) Enzymes for the synthesis of glycans and glycoconjugates
313	June 16, 2021 Presentation	European Glycoscience Community (EGC) meeting Glycoscience a new frontier in drug discovery: Scalable manufacturing and synthesis aspects
312	April 5, 2021 Invited lecture	ACS Spring 2021 National Meeting & Exposition via Zoom (USA) 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 Invited lecture	Bossche Chemische Kring, Den Bosch (Netherlands) Cell surface glycans and glycoconjugates: form cancer vaccine development to flu surveillance
297	December 9, 2019 Invited lecture	Emil Fischer Symposium, Berlin (Germany) Making complex glycan synthesis easy
296	November 12, 2019 Invited lecture	Symposium "Next Challenge – Impact of Glycosylation", Lund (Sweden) Making complex glycan synthesis easy
295	September 26, 2019 Invited lecture	Celebration of the 90th birthday of Prof. Miloslav Cerny, Charles University, Prague (Czech Republic) Complex glycans in health and disease
294	September 25, 2019 Invited lecture	Czech Academy of Science, Prague (Czech Republic) Deconstructing and reconstructing heparan sulfate
293	September 12, 2019 Seminar	University of Twente, Enschede (Netherlands) Glycan complexity and biological recognition
292	August 29, 2019 Seminar	Center for Biotechnology and Genomic Medicine, Medical College of Georgia, Augusta University, Augusta, GA (USA) Functional glycomics through chemical approaches
291	July 3-5, 2019 Plenary lecture	55th International Conference on Medicinal Chemistry (RICT), Nantes (France) Complex glycans in health and disease
290	June 23-28, 2019 Invited lecture	Gordon Research Conference 2019 Carbohydrates, Hongkong (China) Streamlining the chemoenzymatic synthesis of highly complex branched glycans
289	June 9-13, 2019 Lecture	ISOS 2019 - "A. Corbella" International Summer School on Organic Synthesis, Gargnano (Italy) Enzymes for the synthesis of glycans and glycoconjugates
288	May 29-30, 2019 Presentation	NIH Common Fund Glycoscience Program, Bethesda, MD (USA) Streamlining the chemoenzymatic synthesis of asymmetrical glycans of biological importance
287	March 31-April 4, 2019 Invited lecture	ACS Spring 2019 National Meeting & Exposition, Orlando, FL (USA) Streamlining the chemoenzymatic synthesis of complex N-glycans by a stop-and-go strategy
286	March 10-15, 2019 Invited lecture	Glycobiology Gordon Research Conference, Lucca-Barga (Italy) Chemical ways to complex glycans
285	January 28-30, 2019 Keynote lecture	GlycoBioTec2019, Berlin (Germany) Chemo-enzymatic approaches for the preparation of highly complex glycans of biological importance
284	December 5, 2018 Seminar	Mersana Therapeutics, Cambridge, MA (USA) Glycan complexity and biological recognition
283	November 12-16, 2018 Invited lecture	14 th International Kyoto Conference on New Aspects of Organic Chemistry (IKCOC-14), Kyoto (Japan) 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	1 st International Symposium on Glycovirology 2018, Schöntal (Germany)
	Keynote lecture	Cell-surface glyco-engineering to reveal functional receptors for Lassa virus
273	April 23, 2018	12 th 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	Session ‘Frontiers in Glycoscience, Bridging the Gap Between Carbohydrate & Polysaccharide Chemistries’ at the 255th ACS National Meeting, New Orleans, LA (USA)
	Invited lecture	Streamlining complex carbohydrate synthesis through enzymatic procedures
270	March 7, 2018	Center for Vaccines and Immunology, UGA, Athens, GA (USA)
	Seminar	Chemical approaches to develop carbohydrate-based vaccines and immune modulators
269	February, 9, 2018	CIC bioGUNE, Bilbao (Spain)
	Seminar	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 5 th Annual Bioconjugates - From Targets to Therapeutics, San Diego, CA (USA) Synthetic approaches to glycoconjugate vaccine development
254	May 2, 2017 Seminar	Stratingh Institute for Chemistry, University of Groningen (Netherlands) Functional glycomics through chemical synthesis
253	April 14, 2017 Seminar	University of Wisconsin, Madison, WI (USA) 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**
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- 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**
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- 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**
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- 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 (ICMB4), 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**
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- 242 November 14, 2016 Pierre and Marie Curie University (UPMC), Paris (France)
Seminar **A fully synthetic carbohydrate-based vaccine for cancer**
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- 241 August 25, 2016 Pfizer Inc, Chesterfield, MO (USA)
Seminar **Site specific conjugations for the development of vaccines and immuno-therapeutics**
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- 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	27 th 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 251 st 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 75 th birthday’ at the 251 st 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 Invited lecture	Nanjing Pharmaceutical University, Nanjing (China) Therapeutic cancer vaccine
225	September 22, 2015 Invited lecture	ANP Conference Technology, Nanjing (China) An integrated approach to identify ligands for heparin sulfate binding proteins
224	September 8, 2015 Norman L. Allinger lecture	University of Georgia, Athens, GA (USA) Adventures with complex carbohydrates
223	August 7, 2015 Seminar	Georgia Institute of Technology, Atlanta, GA (USA) Functional glycomics
222	July 19-24, 2015 Invited lecture	FASEB Science Summer Conference ‘Origins and Benefits of Biologically Active Components in Human Milk’, Big Sky, MT (USA) Unraveling functions of milk oligosaccharides using chemo-enzymatic synthesis
221	July 16, 2015 Invited lecture	Symposium marking the accomplishments of Professor David R. Bundle, University of Alberta, Edmonton (Canada) An integrated approach to uncover ligands for heparin sulfate binding proteins
220	June 26, 2015 Keynote lecture	Utrecht Chemistry Day 2015, Utrecht (Netherlands) An integrated approach to uncover ligands for heparan sulfate binding proteins
219	June 15, 2015 Invited lecture	Gordon Research Conference on Carbohydrates, West Dover, VT (USA) Functional glycomics through chemical synthesis
218	May 28, 2015 Invited lecture	NIH-FDA Glycoscience Research Day, NIH, Bethesda, MD (USA) An integrated approach to uncover ligands for heparan sulfate binding proteins
217	April 18, 2015 Invited lecture	1st Southeast Glycobiology Symposium, Georgia Consortium of Glycoscience, Georgia State University, Atlanta, GA (USA) An integrated approach to uncover ligands for heparan sulfate binding proteins
216	March 23, 2015 Invited lecture	CARB Symposium ‘Glycomimetic Compounds: An Untapped Source of Novel Therapeutics’ at the 249 th ACS National Meeting, Denver, CO (USA) Well-defined antibody-drug conjugates (ADCs) through site-specific conjugation
215	March 23, 2015 Keynote lecture	Symposium on ‘Frontiers in Glycoscience’ at the 249 th ACS National Meeting, Denver, CO (USA) Integrated approach to uncover ligands for heparan sulfate binding proteins
214	March 2-3, 2015 Invited lecture	2015 Suddath Symposium - Immunology & ImmunoEngineering, Georgia Tech, Atlanta, GA (USA) Synthetic approaches for rationale vaccine development

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| 213 | October 28-31, 2014 | 15 th Tetrahedron Symposium -Asia Edition ‘Challenges in Bioorganic and Organic Medicinal Chemistry’, Singapore (Singapore)
Keynote lecture | 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 248 th ACS National Meeting, San Francisco, CA (USA)
Invited lecture | Development of fully synthetic self-adjuvanting cancer vaccines |
| 209 | June 24-27, 2014 | 15 th Tetrahedron Symposium ‘Challenges in Bioorganic and Organic Medicinal Chemistry’, London (United Kingdom)
Plenary lecture | Functional glycomics through chemical synthesis |
| 208 | June 5-7, 2014 | 37 th 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 247 th 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 27 th 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 7 th 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 246 th 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	17 th 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	NICHD Workshop on Bioactive Glycans in Human Milk, Bethesda, MD (USA)
	Invited lecture	Chemo-enzymatic synthesis of asymmetrically substituted multi-antennary glycans for probing structure activity relationships
183	January 7, 2013	Pfizer, Chesterfield, MO (USA)
	Invited lecture	Fully synthetic vaccines and immune modulators
182	November 11, 2012	Joint meeting of the Society for Glycobiology (SFG) & American Society for Matrix Biology (ASMB), San Diego, CA (USA)
	Invited lecture	A rational approach to synthetic vaccines
181	November 6, 2012	SWRM Glycochemistry Symposium at the 68 th Southwest Regional Meeting (SWRM) of the ACS, Baton Rouge, LA (USA)
	Invited lecture	Chemical methods for biomarker discovery
180	October 4, 2012	Clemson University, SC (USA)
	Seminar	A fully synthetic carbohydrate-based vaccine for cancer
179	August 21, 2012	Session 'Glycoscience at the Crossroad of Health, Materials, and Energy' at the 244 th ACS National Meeting & Exposition, Philadelphia, PA (USA)
	Invited lecture	Fully synthetic immune modulators and tripartite vaccines for cancer
178	July 26, 2012	26 th International Carbohydrate Symposium, Madrid (Spain)
	Invited lecture	Chemo-enzymatic synthesis of asymmetrically substituted multi-antennary glycans for microarray development
177	July 21, 2012	CIC biomaGUNE, Workshop 'Increasing the Impact of Glycoscience through New Tools and Technologies', San Sebastian (Spain)
	Keynote lecture	Fully synthetic vaccines and immune modulators
176	June 1, 2012	SCYNEXIS, Durham, NC (USA)
	Seminar	Fully synthetic immune modulators
175	April 23, 2012	University of North Carolina, Charlotte (USA)
	Seminar	A fully synthetic carbohydrate-based vaccine for cancer
174	March 31, 2012	1 st CDT Conference, Center for Diagnostics & Therapeutics, Georgia State University, Atlanta (USA)
	Invited lecture	Chemical methods for biomarker discovery
173	March 15, 2012	Academia Sinica, Taipei (Taiwan)
	Invited lecture	Glycomics through synthetic oligosaccharides
172	January 23, 2012	College of Veterinary Medicine, UGA, Athens, GA (USA)
	Seminar	Carbohydrate-based vaccines and immune modulators
171	November 9-12, 2011	2011 Annual Conference of the Society for Glycobiology, Seattle, WA (USA)
	Invited lecture	Chemical methods for biomarker discovery
170	November 10, 2011	Infectious Disease Research Institute, Seattle, WA (USA)
	Seminar	Self-adjuvanting vaccines
169	November 1, 2011	Cellular Biology, UGA, Athens, GA (USA)
	Seminar	Carbohydrate-based cancer vaccines and immune modulators

- 168 October 3-4, 2011 Carbohydrate Moieties as Vaccine Candidates Workshop, NIAID, Rockville, MD (USA)
Invited lecture **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
Seminar Hunter College, New York, NY (USA)
A fully synthetic multi-component carbohydrate-based cancer vaccine
-
- 154 March 23, 2011
Invited lecture Expanding the Chemical Space for Carbohydrates: Roadmap to Automated Synthesis, NIH, Bethesda, MD (USA)
Modular synthesis of heparan sulfate oligosaccharides for array development
-
- 153 March 7, 2011
Seminar Pharmaceutical and Biomedical Sciences, UGA, Athens, GA (USA)
Towards a fully synthetic carbohydrate-based vaccine for cancer
-
- 152 Jan 24, 2011
Invited lecture MedImmune, Gaithersburg, MD (USA)
Synthetic carbohydrate-based diagnostics, vaccines and immune modulators
-
- 151 Dec 15-20, 2010
Invited lecture 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, HI (USA)
Fully synthetic three-component carbohydrate-based vaccine for cancer
-
- 150 Nov 30-Dec 4, 2010
Invited lecture Joint 66th Southwest and 62nd Southeastern Regional Meeting of the American Chemical Society, New Orleans, LA (USA)
New approaches for metal-free click reactions: applications to glycoscience
-
- 149 Sept 19-21, 2010
Invited lecture Consortium for Functional Glycomics Workshop on Glycan Array / Bioinformatics, Atlanta, GA (USA)
Glycosylaminoglycan arrays and label-free detection
-
- 148 Sept 2, 2010
Invited lecture Novartis Vaccines Workshop - Moving Conjugate Vaccines Into The Future, Siena (Italy)
Fully synthetic carbohydrate-based vaccines and immunomodulators
-
- 147 August 23, 2010
Invited lecture Session ‘Synthetic Oligosaccharides and Glycoconjugates for Preventing and Combating Disease’ at the 240th National Meeting & Exposition of the American Chemical Society, Boston, MA (USA)
Modular synthesis of heparin sulfate oligosaccharides for array development
-
- 146 August 22, 2010
Invited lecture Session ‘Wolfrom-Isbell-New Investigator Award Symposium’ at the 240th National Meeting & Exposition of the American Chemical Society, Boston, MA (USA)
Development of a fully synthetic three-component carbohydrate-based cancer vaccine
-
- 145 August 1-6, 2010
Invited lecture 25th International Carbohydrate Symposium (ICS2010), Tokyo (Japan)
Modular synthesis of heparan sulfate oligosaccharides for array development
-
- 144 June 14, 2010
Seminar Mayo Clinic College of Medicine, Scottsdale, AZ (USA)
Towards a fully synthetic carbohydrate-based vaccine for cancer
-
- 143 January 28, 2010
Seminar University of Auburn, AL (USA)
A fully synthetic carbohydrate-based vaccine for cancer

142	December 2, 2009	20 th 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	238 th 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 – 10 th 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	67 th 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	237 th 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 Seminar	University of Bristol (United Kingdom) Modulation of biological functions with synthetic glycoconjugates
126	September 16, 2008 Invited lecture	FDA CBER DBPAP, Bethesda, MD (USA) Fully synthetic vaccines and immune modulators
125	July 27-Aug 1, 2008 Lecture	XXIV International Carbohydrate Symposium, Oslo (Norway) Fast click reactions for labeling of living cells and nano-particles
124	June 17, 2008 Invited lecture	Bio2008, San Diego, CA (USA) Chemical approaches for protein glycosylation
123	April 25, 2008 Seminar	Shanghai Institute of Organic Chemistry (China) Fully synthetic carbohydrate-based cancer vaccines and immune modulators
122	April 23, 2008 Invited lecture	PepCon 2008, Shenzhen (China) Increasing the antigenicity of tumor-associated glycopeptides by targeting Toll-like receptors
121	April 15, 2008 Seminar	Northwestern University, Evanston, IL (USA) Modulation of biological functions with synthetic carbohydrate-based macromolecules
120	February 11, 2008 Seminar	Tulane University, New Orleans, LA (USA) The development of a fully synthetic carbohydrate-based cancer vaccine
119	February 8, 2008 Seminar	University of Cincinnati, OH (USA) Towards a fully synthetic carbohydrate-based cancer vaccine
118	November 15, 2007 Seminar	Temple University, Philadelphia, PA (USA) Towards a fully synthetic carbohydrate-based cancer vaccine
117	November 11-14, 2007 Invited lecture	Society for Glycobiology 2007 Conference, Boston, MA (USA) Chemical glycobiology and vaccine development
116	September 7, 2007 Invited lecture	National Chaio-Tung University, Taipei (Taiwan) Glycosidase inhibitors as novel anticancer therapeutics
115	September 5, 2007 Invited lecture	National Tsing-Hua University, Taipei (Taiwan) Towards a fully synthetic vaccine for cancer
114	September 3, 2007 Invited lecture	Academia Sinica, Taipei (Taiwan) Synthetic cancer vaccines and immune modulators
113	June 17-22, 2007 Invited lecture	Gordon Research Conference on Carbohydrates, Tilton, NH (USA) Synthetic compounds to probe biological functions of complex carbohydrates
112	June 6-10, 2007 Plenary lecture	The Young(-ish!) Giants of Chemistry, Edinburgh (United Kingdom) Towards a fully synthetic three-component cancer vaccine
111	March 27, 2007 Seminar	University of Glasgow (United Kingdom) The development of a fully synthetic carbohydrate-based cancer vaccine
110	March 7-9, 2007 Invited lecture	Indian Institute of Chemical Biology, Kolkata (India) The development of a three-component carbohydrate-based cancer vaccine
109	February 6, 2007 Seminar	University of Michigan, Ann Arbor (USA) The development of a three-component carbohydrate-based cancer vaccine

108	February 5, 2007 Seminar	Wayne State University, Detroit, MI (USA) The development of a three-component carbohydrate-based cancer vaccine
107	January 22, 2007 Seminar	University of Illinois, Urbana-Champaign (USA) The development of a three-component carbohydrate-based cancer vaccine
106	November 10, 2006 Seminar	University of Tennessee, Chattanooga (USA) The development of a three-component carbohydrate-based cancer vaccine
105	October 17, 2006 Seminar	Tufts University, Boston, MA (USA) A fully synthetic three-component cancer vaccine
104	September 10-14, 2006 Invited lecture	232 nd National Meeting of the American Chemical Society, San Francisco, CA (USA) Towards a fully synthetic carbohydrate-based anti-cancer vaccine
103	August 22-23, 2006 Invited lecture	Cambridge Healthtech Institute, Boston, MA (USA) A fully synthetic three-component cancer vaccine
102	August 6-9, 2006 Invited lecture	2 nd International Symposium on Biomolecular Chemistry, Konan University, Kobe (Japan) Increasing the antigenicity of tumor associated carbohydrates by targeting Toll-like receptors
101	August 4, 2006 Seminar	Tokyo Institute of Technology (Japan) Stereoselective glycosylations using chiral auxiliaries
100	July 23-28, 2006 Keynote lecture	23 rd International Carbohydrate Symposium, Whistler, British Columbia (Canada) A fully synthetic three-component cancer vaccine
99	June 28, 2006 Seminar	Ventana Medical Systems, Inc., Tucson, AZ (USA) Synthetic tumor associated carbohydrate antigens for imaging and cancer vaccine development
98	June 12, 2006 Seminar	Duke University, Durham, NC (USA) Increasing the antigenicity of tumor associated carbohydrates by targeting Toll-like receptors
97	May 31, 2006 Seminar	CERMAV-CNRS, Grenoble (France) Glycosidase inhibitors as novel anti-cancer therapeutics
96	May 29, 2006 Seminar	Université Claude Bernard, Lyon (France) Glycosidase inhibitors as novel anti-cancer therapeutics
95	May-June, 2006	Université de Picardie Jules Vernes, Amiens (France)
94	Seminar	Glycosidase inhibitors as novel anti-cancer therapeutics
93	April 17-20, 2006 Invited lecture	22 nd Conference on Combinatorial Chemistry (JCCF 22), Osaka (Japan) Glycosidase inhibitors as novel anti-cancer therapeutics
92	April 5, 2006 Seminar	Institute of Human Virology, Baltimore, MD (USA) Increasing the antigenicity of tumor associated carbohydrates by targeting Toll-like receptors

91	March 26-30, 2006	231 st 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	230 th 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	2 nd 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	229 th 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	22 nd 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	GlaxoSmithKline, Stevenage (United Kingdom)
	Seminar	Synthetic glycoconjugates in infection and immunity
70	February 12, 2004	Case Western Reserve University, Cleveland, OH (USA)
	Seminar	Complex glycoconjugates: new synthetic approaches and probing biological functions
69	February 11, 2004	University of Toledo, OH (USA)
	Seminar	Complex glycoconjugates: new synthetic approaches and probing biological functions
68	January 16, 2004	Georgia State University, Atlanta, GA (USA)
	Seminar	Complex synthetic carbohydrates and infection and immunity
67	December 17, 2003	University of Lund (Sweden)
	Seminar	Complex glycoconjugates: new synthetic approaches and probing biological functions
66	December 16, 2003	Stockholm University (Sweden)
	Seminar	Complex glycoconjugates: new synthetic approaches and probing biological functions
65	December 15, 2003	University of Gothenburg (Sweden)
	Seminar	Glycoconjugates and the fight between host and pathogen
64	December 11, 2003	University of Oxford (United Kingdom)
	Seminar	Complex glycoconjugates: new synthetic approaches and probing biological functions
63	October 20, 2003	National Cancer Institute, NIH, Bethesda, MD (USA)
	Seminar	Selective mannosidase inhibitors as cancer therapeutics
62	October 6, 2003	University of Missouri, St. Louis (USA)
	Seminar	Complex glycoconjugates: new synthetic approaches and probing biological functions
61	Sept. 7-11, 2003	Glycobiology Symposium, ACS Meeting, New York, NY (USA)
	Invited lecture	Multivalency and the mode of action of bacterial sialidases
60	July 7, 2003	Eurocarb12 meeting, Grenoble (France)
	Carbohydrate research award lecture	Complex glycoconjugates: new synthetic approaches and probing biological functions
59	May 15, 2003	Carlsberg Institute, Copenhagen (Denmark)
	Seminar	Synthesis and biological properties of neoglycoproteins
58	May 14, 2003	University of Copenhagen (Denmark)
	Seminar	Multivalency and modular proteins

57	April 29, 2003	UCLA NanoSystems Seminar Series, UCLA, Los Angeles, CA (USA)
	Invited lecture	Modulating biological properties with carbohydrate-based macromolecules and nanoparticles
56	March 3, 2003	Gordon Research Conference on Glycobiology, Ventura, CA (USA)
	Invited lecture	Chemical approaches to glycobiology
55	January 17, 2003	Indian Institute of Science, Bangalore (India)
	Seminar	Synthesis and biological properties of neoglycoproteins
54	January 14, 2003	XVII International Symposium on Glycoconjugates, Bangalore (India)
	Invited lecture	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	8 th 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	7 th 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 Seminar	CCRC, University of Georgia, Athens, GA (USA) The preparation of well-defined oligosaccharides and chemical libraries
21	April 17, 1997 Invited lecture	RSC Meeting, University of Nottingham (United Kingdom) The preparation of well-defined oligosaccharides and chemical libraries
20	April 3, 1997 Seminar	University of Lund (Sweden) The preparation of well-defined oligosaccharides and chemical libraries
19	February 27, 1997 Seminar	SmithKline Beecham Biologicals, Rixensart (Belgium) Synthetic carbohydrate-based vaccines
18	February 21, 1997 Seminar	National Institute for Public Health, Bilthoven (Netherlands) Synthetic carbohydrate-based vaccines
17	February 12, 1997 Seminar	University of Durham (United Kingdom) New methods for convergent oligosaccharide synthesis
16	October 10, 1996 Seminar	University of East Anglia (United Kingdom) Combinatorial carbohydrate chemistry
15	September 9, 1996 Invited lecture	RSC Carbohydrate Group Autumn Meeting, UCL (United Kingdom) Combinatorial carbohydrate chemistry
14	July 21-26, 1996 Lecture	XVIII International Carbohydrate Symposium, Milan (Italy) Combinatorial carbohydrate chemistry
13	May 14, 1996 Seminar	Imperial College, London (United Kingdom) New methods for convergent oligosaccharide synthesis
12	March 20, 1996 Seminar	University of Southampton (United Kingdom) New methods for convergent oligosaccharide synthesis
11	March 25, 1996 Invited lecture	RSC Carbohydrate Group Spring Meeting, St. Andrews (United Kingdom) Synthetic oligosaccharides as tools in glycobiology
10	February 20, 1996 Seminar	University of Nottingham (United Kingdom) New methods for convergent oligosaccharide synthesis
9	November 29, 1995 Seminar	University of Leicester (United Kingdom) Recent advances in oligosaccharide synthesis
8	November 22, 1995 Seminar	UMIST, Manchester (United Kingdom) New methods for convergent oligosaccharide synthesis
7	September 15-17, 1995 Invited lecture	Bioorganic Conference, Fribush (United Kingdom) Carbohydrate chemistry and biochemistry
6	September 5-8, 1995 Invited lecture	RCS Autumn Meeting, Sheffield (United Kingdom) Synthetic oligosaccharides as tools in glycobiology
5	July 2-7, 1995 Lecture	Eurocarb VIII, Sevilla (Spain) New chemoselective glycosylation
4	April 2, 1994 Seminar	Pfizer Central Research, Sandwich (United Kingdom) Towards carbohydrate-based drugs
3	March 31, 1994 Seminar	SmithKline Beecham Pharmaceuticals, Harlow (United Kingdom) New methods for oligosaccharide synthesis
2	February 4, 1994 Seminar	The Wellcome Foundation Limited, Beckenham (United Kingdom) 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)

- 384 Verpalen, E.C.J.M., A.J. Brouwer, M.A. Wolfert, and G.J. Boons. 2024. Structure-based design and synthesis of lipid A derivatives to modulate cytokine responses. *Chem. Eur. J.*: e202400429, In press (DOI: 10.1002/chem.202400429).
- 383 Li, T., C.M. Spruit, N. Wei, L. Liu, M.A. Wolfert, R.P. de Vries, and G.J. Boons. 2024. Chemoenzymatic synthesis of tri-antennary *N*-glycans terminating in sialyl-Lewis^x reveals the importance of glycan complexity for influenza A virus receptor binding. *Chem. Eur. J.*: e202401108, In press (DOI: 10.1002/chem.202401108).
- 382 Unione, L., A.N.A. Ammerlaan, G.P. Bosman, E. Uslu, R. Liang, F. Broszeit, R. van der Woude, Y. Liu, S. Ma, L. Liu, M. Gomez-Redondo, I.A. Bermejo, P. Valverde, T. Diercks, A. Ardá, R.P. de Vries, and G.J. Boons. 2024. Probing altered receptor specificities of antigenically drifting human H3N2 viruses by chemoenzymatic synthesis, NMR, and modeling. *Nat. Commun.* **15**(1): 2979.
- 381 Vigeveno, R.M., X. Han, R.P. de Vries, E. Parker, K. Dijkman, S. van Leeuwen, K.D. Hulme, A.J. te Velthuis, G.J. Boons, R. Fouchier, C.A. Russell, M.D. de Jong, and D. Eggink. 2024. Long term evolution of human seasonal influenza virus A(H3N2) is associated with an increase in polymerase complex activity. *Virus Evolution*, Accepted for publication.
- 380 Joshi, A., P. Chopra, A. Venot, and G.J. Boons. 2024. Chemical synthesis of Δ-4,5 unsaturated heparan sulfate oligosaccharides for biomarker discovery. *Org. Lett.* **26**(12): 2462-2466.
- 379 Wu, Y., G.P. Bosman, D. Chapla, C. Huang, K.W. Moremen, R.P. de Vries, and G.J. Boons. 2024. A biomimetic synthetic strategy can provide keratan sulfate I and II oligosaccharides with diverse fucosylation and sulfation patterns. *J. Am. Chem. Soc.* **146**(13): 9230-9240.
- 378 Spruit, C.M., D.I. Palme, T. Li, M. Rios Carrasco, A. Gabarroca García, I.R. Sweet, M. Kuryshko, J.C.L. Maliepaard, K.R. Reiding, D. Scheibner, G.J. Boons, E.M. Abdelwhab, and R.P. de Vries. 2024. Complex *N*-glycans are important for interspecies transmission of H7 influenza A viruses. *J. Virol.*: e0194123, In press (DOI: 10.1128/jvi.01941-23). **Selected as Editor's Pick.**
- 377 Filius, M., R. van Wee, C. de Lannoy, I. Westerlaken, Z. Li, S.H. Kim, C. de Agrela Pinto, Y. Wu, G.J. Boons, M. Pabst, D. de Ridder, and C. Joo. 2024. Full-length single-molecule protein fingerprinting. *Nat. Nanotechnol.* In press (DOI: 10.1038/s41565-023-01598-7).
- 376 Ma, S., L. Liu, D. Eggink, S. Herfst, R.A.M. Fouchier, R.P. de Vries, G.J. Boons. 2024. Asymmetrical bi-antennary glycans prepared by a Stop-and-Go strategy reveal receptor binding evolution of human influenza A viruses. *JACS Au* **4**(2): 607-618. **Featured as an ACS Editors' Choice.**
- 375 Vos, G.M., Y. Wu, R. van der Woude, R.P. de Vries, and G.J. Boons. 2024. Chemo-enzymatic synthesis of isomeric I-branched poly lactosamines using traceless blocking groups. *Chem. Eur. J.* **30**(5): e202302877).
- 374 de Jong, S.P.J. , Z.C. Felix Garza, J.C. Gibson, S. van Leeuwen, R.P. de Vries, G.J. Boons, M. van Hoesel, K. de Haan, L.E. van Groeningen, K.D. Hulme, H.D.G. van Willigen, E. Wynberg, G.J. de Bree, A. Matser, M. Bakker, L. van der Hoek, M. Prins, N.A. Kootstra, D. Eggink, B.E. Nichols, A.X. Han, M.D. de Jong, and C.A. Russell. 2024. Determinants of epidemic size and the impacts of lulls in seasonal influenza virus circulation. *Nat. Commun.* **15**(1): 591.

- 373 Bunyatov, M., M.A. Wolfert, R. Huizinga, M. Schreurs, B.C. Jacobs, and G.J. Boons. 2024. Chemoenzymatic synthesis of human natural killer-1 containing glycans and application as serum antibodies probes. *Nat. Synth.* **3**: 85-98. **Featured in a Nat. Synth. Research Briefing.** Jacobs, B.C. and G.J. Boons. 2024. Research Briefing: Synthetic glycans provide insight in binding properties of toxic serum antibodies. *Nat. Synth.* **3**: 15-16.
- 372 Pronker, M.F., R. Creutzmacher, I. Drulyte, R.J.G. Hulswit, Z. Li, F.J.M. van Kuppeveld, J. Snijder, Y. Lang, B.-J. Bosch, G.J. Boons, M. Frank, R.J. de Groot, and D.L. Hurdiss. 2023. Sialoglycan binding triggers spike opening in a human coronavirus. *Nature* **624**(7990): 201-206.
- 371 Wu, Y., G.M. Vos, C. Huang, D. Chapla, A.L.M. Kimpel, K.W. Moremen, R.P. de Vries, and G.J. Boons. 2023. Exploiting substrate specificities of 6-*O*-sulfotransferases to enzymatically synthesize keratan sulfate oligosaccharides. *JACS Au* **3**(11): 3155-3164. **Selected for front cover picture.**
- 370 Spruit, C.M., I.R. Sweet, J.C.L. Maliepaard, T. Bestebroer, P. Lexmond, B Qiu, M.J.A. Damen, R.A.M. Fouchier, K.R. Reiding, J. Snijder, S. Herfst, G.J. Boons, and R.P. de Vries. 2023. Contemporary human H3N2 influenza A viruses require a low threshold of suitable glycan receptors for efficient infection. *Glycobiology* **33**(10): 784-800.
- 369 Vos, G.M., K.C. Hooijschuur, Z. Li, J. Fjeldsted, C. Klein, R.P. de Vries, J. Sastre Toraño, and G.J. Boons. 2023. Sialic acid *O*-acetylation patterns and glycosidic linkage type determination by ion mobility-mass spectrometry. *Nat. Commun.* **14**(1): 6795.
- 368 Chopra, P., T. Yadavalli, F. Palmieri, S.A.K. Jongkees, L. Unione, D. Shukla, and G.J. Boons. 2023. Synthetic heparanase inhibitors can prevent herpes simplex viral spread. *Angew. Chem. Int. Ed.* **62**(41): e202309838.
- 367 Kadirvelraj, R., B.M. Boruah, S. Wang, D. Chapla, C. Huang, A. Ramiah, K.L. 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.* **19**(8): 1022-1030.
- 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.
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Prudden, A., R. Rajesh, A. Krishnan, L. Liu, and G.J. Boons: U.S. Patent Application Serial Number 63/295698, titled “*Glycomimetic ligands*” filed on December 30, 2022. Assignees: Aviceda Ophthalmics, Inc (Case AVQ-00360); University of Georgia Research Foundation, Inc. (UGARF Case 2022-056).

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).