

CURRICULUM VITAE

Carol Vivien Robinson DBE FRS FMedSci

Personal and Contact Details

Date of Birth 10th April 1956
Maiden Name Bradley
Nationality British

Contact details Department of Physical and Theoretical Chemistry
University of Oxford
South Parks Road
Oxford OX1 3QZ
Tel : +44 (0)1865 275473
E-mail : carol.robinson@chem.ox.ac.uk
Web : <https://robinsonweb.chem.ox.ac.uk/>

Education and Appointments

2021 Founder Director, Kavli Institute for NanoScience Discovery, Oxford

2016 Founder Director, OMass Therapeutics, Oxford

2009 Professorial Fellow, Exeter College, Oxford

2009 Dr Lee's Professor of Physical and Theoretical Chemistry, University of Oxford

2006 - 2016 Royal Society Research Professorship

2003 - 2009 Senior Research Fellow, Churchill College, University of Cambridge

2001 - 2009 Professor of Mass Spectrometry, Dept. of Chemistry, University of Cambridge

1999 - 2001 Titular Professor, University of Oxford

1998 - 2001 Research Fellow, Wolfson College, Oxford

1995 - 2001 Royal Society University Research Fellow, University of Oxford

1991 - 1995 Postdoctoral Research Fellow, University of Oxford. Supervisor: Prof. C. M. Dobson FRS

1991 - 1991 Postgraduate Diploma in Information Technology, University of Keele

1983 - 1991 Career break: birth of three children

1982 - 1983 MRC Training Fellowship, University of Bristol Medical School

1980 - 1982 Doctor of Philosophy, University of Cambridge. Supervisor: Prof. D. H. Williams FRS

1979 - 1980 Master of Science, University of Wales. Supervisor: Prof. J. H. Beynon FRS

1976 - 1979 Graduate of the Royal Society of Chemistry, Medway College of Technology, Kent

1972 - 1976 ONC and HNC in Chemistry, Canterbury College of Technology, Kent

1972 - 1979 Laboratory Technician, Pfizer, Sandwich, Kent

Accolades and Distinctions

2021	International Honorary Member of the American Academy of Arts and Sciences
2018 - 2020	President of the Royal Society of Chemistry
2017	Foreign Associate of the US National Academy of Sciences
2017	President Elect of the Royal Society of Chemistry
2013	Dame Commander of the Order of the British Empire
2009	Fellow of the Academy of Medical Sciences
2004	Fellow of the Royal Society

Medals, Awards, Prizes

2021	Othmer Gold Medal from the Science History Institute
2019	Royal Medal A from the Royal Society
2019	Stein and Moore Award from the Protein Society
2019	Novozymes Prize from the Novo Nordisk Foundation
2018	Field and Franklin Award from the American Chemical Society
2017	Hans Krebs Medal from the FEBS
2016	Astra Zeneca Award from the Biochemical Society
2016	Torbern Bergmann Award from the Swedish Chemical Society
2015	Havinga Medal from the Havinga Foundation
2015	Women in Science Award from L'Oreal-UNESCO
2014	Kaj Linderstrøm-Lang Prize from the Carlsberg Research Center
2014	Thomson Medal Award from the International Mass Spectrometry Foundation
2013	Anatrace Award for Membrane Proteins from the Biophysical Society USA
2012	Distinguished Achievement in Proteomic Sciences from HUPO
2011	Interdisciplinary Prize from the Royal Society of Chemistry
2011	Woman of the Year Award from FEBS/EMBO
2011	Aston Medal from the British Mass Spectrometry Society
2010	Davy Medal from the Royal Society
2010	Prelog Medal from ETH, Zurich
2008	Anfinsen Award from the Protein Society

2004	Rosalind Franklin Award from the Royal Society
2003	Biemann Medal from the American Society for Mass Spectrometry
2002	Silver Medal from the Royal Society of Chemistry for Mass Spectrometry

Honorary Titles

2020	Honorary Doctorate from the Weizmann Institute of Science
2019	Honorary Doctorate from Aarhus University Denmark
2018	Honorary Doctorate from Ben-Gurion University
2017	Honorary Doctorate from the University of Southern Denmark
2017	Honorary Doctorate from The Open University
2017	Honorary Doctorate from the University of Huddersfield
2016	Honorary Fellowship of Wolfson College Oxford
2016	Honorary Fellowship of the Royal Society of Chemistry
2016	Honorary Doctorate from the University of Liverpool
2014	Honorary Professorship from the Nanjing University of Science and Technology
2013	Honorary Member of the British Biophysical Society
2013	Honorary Doctorate from the University of Bristol
2012	Honorary Fellow of Churchill College, Cambridge
2010	Honorary Doctorate from the University of York
2009	Honorary Doctorate from the University of Kent

Named Lectures

2021	The Hinshelwood Lectures, University of Oxford, UK
2020	Distinguished Bashour Lecture, UT South Western, USA (virtual)
2019	Rayson Huang Visiting Lectureship, Hong Kong
2019	Annual Biophysical Society Lecture, Baltimore, USA
2018	Joe L Franklin Memorial Lecture, RICE, Houston, USA
2018	Webster Lecture, Case Western Reserve University, Cleveland, USA
2018	Dame Anne McLaren Lecture, University College London, UK
2018	Lee Seng Tee Distinguished Lecture, University of Cambridge, UK
2018	The Cynthia Ann Chan Lecture, University of California, Berkeley, USA
2018	The Mabel Fitzgerald Lecture, University of Oxford, UK
2018	The Inaugural Annual David James Lecture, University of Cambridge, UK
2017	The Peter Garland Lecture, Dundee, Scotland
2017	The Fritz Lipmann Lecture, Bochum, Germany
2017	Hans Krebs Lecture, Jerusalem, Israel
2017	Baddiley Lecture, Newcastle University, UK
2017	Georgina Sweet Lecture, Melbourne, Australia
2017	Frederick Soddy Lecture, Merton College, Oxford, UK
2016	The Astra Zeneca Medal Award Lecture, Biochemistry Society, London, UK
2016	The Harry G. Day Lecture, University of Indiana, USA
2016	The Torbern Bergman Award Lecture, Umea, Sweden
2016	The Chemistry Anniversary Lecture, University of York, UK
2016	The Royal Institution Discourse, London, UK
2015	The Amgen Lecture, Shanghai, China
2015	The Havinga Medal Lecture, Leiden, The Netherlands
2015	The Irving O Shoichet Lecture, Toronto, Canada
2015	The 2015 Rodney Porter Lecture, Oxford, UK
2015	The Hobart H. Willard Memorial Lecture, University of Michigan, USA
2014	The Kaj Linderstrøm-Lang Award Lecture, Copenhagen, Denmark
2014	The Daniell Lecture, Kings College London, UK
2014	The Evans Award Lecture, The Ohio State University, USA
2014	The Cornforth Lecture, University of Sussex, UK
2014	The Thomson Medal Award Lecture, Geneva, Switzerland
2014	The Birch Lecture, The Australian National University, Canberra, Australia
2014	The Ruth and Eddie Hughes Lecture, California Institute of Technology, USA

2014	The Dorothy Hodgkin Memorial Lecture, Oxford, UK
2014	The Burger Lecture, University of Virginia, USA
2013	The Charles E. Dohme Memorial Lecture 2013, Baltimore, USA
2013	The Krebs Lecture, University of Sheffield, UK
2013	The Anatrache Protein Award Lecture, Philadelphia, USA
2013	The Medawar Lecture, MRC, Mill Hill, UK
2013	The Clapp Lectures, Brown University, Rhode Island, USA
2012	The Randall Lecture, Kings College, London, UK
2012	The Dewar Lecture, Queen Mary University, London, UK
2012	The DeLuca lecture, University of California San Diego, USA
2012	The Carlson Lecture, John Hopkins University, Baltimore, USA
2012	EMBL Distinguished Scientist Lecture, Heidelberg, Germany
2012	Alex Hopkins Memorial Lecture, Cambridge, UK
2011	Van't Hoff Award Lecture, Royal Academy of Dutch Scientists, The Netherlands
2011	Sarkar Lecture, Hospital for Sick Children, Toronto, Canada
2010	Maud Menten Lecture, University of Western Ontario, Canada
2010	Maurice Wilkins Lecture, University of Auckland, New Zealand
2010	MacColl Lecture, British Mass Spectrometry Society, Cardiff, UK
2009	John Kendrew Lecture, Weizmann Institute, Rehovet, Israel
2008	Radcliffe Science Lecture, Harvard University, Boston, USA
2008	Dow Lecture, University of Vancouver, Canada
2007	Schorstein Lecture, William Harvey Day, St Bartholemew's Hospital, London, UK
2006	Wilson Baker Lecture, University of Bristol, UK
2005	Harry Emmett Gunning Lecture, University of Alberta, Canada
2005	Marker Lecture, University of Maryland, USA
2005	Buck Rogers Lecture, University of Georgia, USA
2004	Meloche Lecture, University of Wisconsin at Madison, USA

Current Professional Activities

2021	Commissioner of the 1851 Fellowship Board of Management
2021	Member of the Novozymes Prize Committee
2021	Member of the Jury for the 'Chemistry for the Future Solvay Prize'
2021	Associate Editor, <i>Journal of the American Chemical Society</i>
2020	Member of the Advisory Panel, Rosalind Franklin Institute, Harwell
2020	Member of the HHMI Investigator Review Panel
2018	International Advisory Board Member, <i>Angewandte Chemie</i>
2016	Member of the Selection Committee for the Dr Paul Janssen Award
2016	Member of the Selection Committee for the Infosys Prize
2016	Member of the Board of Directors, The Bert L & N Kuggie Vallee Foundation
2015	Scientific Advisory Board Member, Dept. of Biochemistry, University of Oxford
2015	Editorial Board Member, <i>Structure</i>
2015	Advisory Board Member, The Royal National Children's SpringBoard Foundation, London
2012	Editorial Board Member, <i>Current Opinion in Structural Biology</i>

Previous Professional Activities

2016 - 2018	Member, Council of the Royal Society
2015 - 2018	Member, Board of Trustees, Rhodes House, Oxford
2015 - 2018	Chair of the L'Oreal Women in Science Programme
2015 - 2017	Member, Board of Trustees, Heinrich Wieland Prize, Boehringer Ingelheim Foundation
2014 - 2017	Chair, The Royal Society, Rosalind Franklin Award Committee
2014 - 2017	Member, The Royal Society, Dorothy Hodgkin Fellowship Selection Committee
2011 - 2014	Member, The Royal Society, Awards Nominations Committee
2012 - 2013	Panel Member, ERC Synergy Grant Selection and Evaluation Panel
2012 - 2013	Associate Head, Mathematical, Physical and Life Sciences Division, University of Oxford
2012 - 2013	Member, Government Blackett Review Panel for Biosecurity
2000 - 2013	Associate Editor, <i>Journal of the American Society for Mass Spectrometry</i>
2008 - 2009	Council Member, The Royal Society
2005 - 2007	Member, The Royal Society, Physical Sciences Awards Committee
	Member, The Royal Society, Dorothy Hodgkin Fellowship Selection Panel
	Member, The Royal Society, Rosalind Franklin Award Committee
	Member, The Royal Society, Medals and Awards Selection Panel
2007 - 2009	Assistant Head, Department of Chemistry, University of Cambridge
2003 - 2009	Member, Faculty Board of The Physical Sciences, University of Cambridge

2002 – 2014 Member, Editorial Board, *Journal of Molecular and Cellular Proteomics*
1998 - 2007 Associate Editor, *Protein Science*
1998 - 2002 Committee Member, BBSRC Biomolecular Sciences Panel

Current Grants

2021 - 2026	Medical Research Council Developing mass spectrometry to understand molecular mechanisms of antibacterial and antiviral drugs	£ 1,758,852
2021 – 2026	Wellcome Trust Investigator Award Targeting membrane proteins in their native environments – Mass spectrometry meets cell biology	£ 2,188,451
2019 - 2024	Wellcome Trust Multi-user equipment grant (PI)	£ 808,928

Patents

Drug Binding to Membrane Pumps:

Detection of membrane protein-therapeutic agent complexes by mass spectrometry.

European Patent GB-201110272-DO (Granted)

Detection of membrane protein-therapeutic agent complexes by mass spectrometry.

US Patent Application US9536718B2 (Granted).

Improved DESI MS for High-Throughput Screening of Drug Candidates (Membrane Proteins):

Detection of membrane proteins from surfaces

PCT Application PCT/GB2017/050539 (Published – Filed).

GPCR Detergent:

Detection of folded GPCRS in complex with signalling proteins.

UK Application 1703033 (Unpublished – Filed).

SoLVe:

Sonicated lipid vesicle MS for ejection of complexes directly from membranes

PCT application PCT/GB2019/052421 (Unpublished - Filed).

Nativeomics:

Multiple rounds of MS for the fragmentation and detection of unknown ligands

Dendritic Detergents:

Dendritic detergents for the analysis of proteins by mass spectrometry

Publication number: 20210188902 (published 24 June, 2021)

Contributions to industry

In 1998 Professor Robinson proposed a mass spectrometry design to Micromass UK Ltd to enable the transmission and analysis of macromolecular complexes through a mass spectrometer. This contributed to a worldwide increase in sales of Q-tof and Synapt mass spectrometers, many of them incorporating her proposed modifications. In 2016 she founded, and became Director and Chief Scientific Consultant, to OMass Technologies Ltd. The company formed partnership agreements with pharmaceutical and biotechnology companies to tackle challenging targets using cutting edge mass spectrometry approaches. Within a year of its inception, Professor Robinson made her first pitch for investment to FTSE250 company, Syncona. Following successful Series A funding (£14 M) from Syncona, the company took a new direction, exploiting its platform technology for membrane protein drug targets and relaunching as OMass Therapeutics in 2018 ([Home | Omass](#)). The new company focused on understanding its targets at the molecular level and developing treatments for a range of rare conditions with high unmet patient need. With expanded series A investment (£27.5M) in 2020, the company now has two bases, one in Oxford and one in Nottingham and a head count of some 42 FTEs. OMass scientists hail from all over the world and range from chemists, computational scientists, strategists, pharmacologists, structural biologists and biochemists. Professor Robinson continues to play an active role in the company as a Founder Director and Scientific Advisor.

Teaching and Mentorship

Over the course of her career in both Cambridge and Oxford, Professor Robinson has supervised 33 graduate students, 24 DPhils and 61 postdoctoral researchers. Her research group continues to encompass many scientists with young children and she also takes an active role in mentoring early career researchers through the tenure process, particularly female scientists with family commitments. Alumni of the Robinson research group have gone on to have successful careers in both academia, occupying tenured positions in USA, Australia, New Zealand, Europe and UK, and in industry, bringing their unique MS skills to a variety of high-level posts in the UK, Denmark and USA.

Public Awareness in Science – selected media interviews

2021

- Oxford University Innovation Entrepreneurs Fellowship, 2nd February: Question and Answer with Carol Robinson
- Association for Science Education, 8th January 2021: *'Inspiring Science Teachers - Conversation with a scientist, Dame Carol Robinson'*.

2020

- Nature Portfolio, 23rd May 2020: Podcast, *'A chat with Carol Robinson'*
[A chat with Carol Robinson | Nature Portfolio Chemistry Community](#)
- Article, Nature Methods, 4th May 2020: *'Identifying things small and large in one mass spec experiment, and why persistence matters'*
<https://www.nature.com/articles/s41592-020-0824-x?proof=t>

2018

- L'Oreal filming with Miranda Cresswell, 26th February 2018: *'The Making of a Scientist'*.
- Interview with Kim Hill on [RNZ National's Saturday Morning](#), 8th March 2018:
<https://www.radionz.co.nz/national/programmes/saturday/audio/2018635535/dame-carol-robinson-elemental-medicine>
- Auckland Museum, 20th March 2018: *'What's really inside your medicine cabinet?'*

2017

- BBC News, 11th January 2017: *'Oxford professor meets child superfan'*
<http://www.bbc.co.uk/news/uk-england-oxfordshire-38580944>

2015

- [The Independent on Sunday, 8th March 2015](#): *Scientist who has detected a missing element.*
- The Times Higher Education, 19th March 2015: *Q & A with Dame Carol Robinson*
<https://www.timeshighereducation.co.uk/news/people/qa-with-dame-carol-robinson/2019106.article>
- International Business Times, 25th March 2015: Professor Dame Carol Robinson: *Award-winning scientist who broke the glass ceiling at Oxbridge.*
<http://www.ibtimes.co.uk/professor-dame-carol-robinson-award-winning-scientist-who-broke-glass-ceiling-oxbridge-1493546>
- BBC Radio 4 Woman's Hour, 23rd April 2015: Interview with Jenny Murray.
- The Huffington Post, 12th May 2015: *Science should NOT be perceived as a man's world.*
http://www.huffingtonpost.co.uk/dame-carol-robinson/women-in-science_b_7263246.html

2014

- Science Careers, 11th February 2014: Comment on 'More action needed to retain women in Science'
http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2014_02_11/caredit.a1400036

- BBC Radio 4, The Life Scientific, 22nd July 2014: Interview with Jim Al-Khalili
<http://www.bbc.co.uk/programmes/b049yhcn>
- MRC Network Magazine, September 2014: Interview for 'Working Lives'
<http://www.mrc.ac.uk/news-events/publications/network-autumn-2014/>
- Financial Times, 12th December 2014: *A chemist in her element* – interview for FT 'House and Home'
<http://www.ft.com/cms/s/0/fdc185f6-7bb2-11e4-a695-00144feabdc0.html>

2013

- The Telegraph, 27th July 2013: *'Women in the workplace'*

Selected Women in Science Events

- 2019** Oxford Women in Chemistry, University of Oxford, Oxford, UK
- 2019** Hosted Kuggie Vallee Distinguished Lecture, Prof. Kyoko Nozaki
- 2019** Hosted Female Leaders in Science Workshop
- 2019** Empowering Women in Chemistry, RSC Global breakfast event
- 2018** Launch of the RSC 'Breaking the Barriers' report
- 2013** Annual Lecture at the University of Sheffield's Women's Network
- 2013** Women's Career and Networks Symposium, Opening Keynote Lecture, Goettingen, Germany
- 2012** Women in Science, Engineering and Technology Initiative Annual (WiSETI) Lecture, Cambridge
- 2012** [Interview](#) to mark 40th anniversary of admission of women, Churchill College, Cambridge
- 2011** Media interviews:
- Science, 11th March 2011: *Re-entering academia – A success story*
 - [People and Science](#), June 2011: *Are women changing science?*
 - [Nature](#), 17th August 2011: *Women in Science: In pursuit of female chemists*
 - [EMBO Encounters](#), Summer 2011: FEBS/EMBO Woman in Science Award interview
- 2010** Media interview:
- The Sunday Telegraph Stella Magazine, 30th May 2010: The working woman's dilemma
- 2008** Talk, Houses of Parliament: Experiences of a woman scientist
- 2004** Rosalind Franklin Public Lecture, The Royal Society
- 2004** Media interviews:
- The Times Higher Education, 14th May 2004: Mother wins top prize for science
 - The Guardian, 22nd June 2004: Carol Robinson: Society doyenne
 - BBC Radio 4 Woman's Hour, 28th June 2004: Professor Carol Robinson on becoming a Royal Society Fellow
http://www.bbc.co.uk/radio4/womanshour/2004_26_mon_03.shtml
 - BB2 Working Lunch: Interview on returning after a career break
- 2003 - 2004** Lectures to sixth form:
- Kesteven & Grantham Girl's School, Lincolnshire
 - St. Paul's Girl's School, London
 - Hill's Road Sixth Form College, Cambridge
- 2003 - 2009** Promotion of science in local primary schools to 11-12 year olds

Invited Lectures (last three years)

2021

February	University of Massachusetts-Amherst, USA (Virtual)
March	Plenary Speaker: Human Proteome Organisation (HUPO) 2021, USA (Virtual) Cambridge University Scientific Society, UK (Virtual) Purdue University, Indiana, USA (Virtual)
April	American Society for Biochemistry and Molecular Biology (ASBMB) (Virtual)
May	The Hinshelwood Lectures, University of Oxford, UK
June	ACS Publications Symposium (Virtual)
July	Babraham Lecture Series, University of Cambridge, UK (Virtual) European Biophysics Conference, Vienna, Austria (Virtual)

2020

January	Oxford Chemistry Alumni Event, Royal Society of Chemistry, London, UK
February	Kohn – IASH Workshop, Jerusalem, Israel
October	Distinguished Bashour Lecture, Dallas, USA (virtual) The Salter's Institute, Alumni Event and Awards Ceremony, London, UK (virtual) Rosalind Franklin Institute, London, UK (virtual) Keynote Speaker: Wellcome Centre for Human Genetics High Profile Seminar, Oxford, UK (virtual) UCSD, Chemistry & Chemical Biology Seminar Series, San Diego, USA (Virtual)

2019

January	ASMS Sanibel Conference, Palm Beach, Florida, USA
February	ANZMS Conference, Auckland, New Zealand 1st European Top-Down Proteomics Workshop, Paris, France
March	Biophysical Society Annual Lecture, Baltimore, USA CIFAR Meeting, Montreal, Canada Celebration of Native Mass Spectrometry, Oxford, UK
May	Cold Spring Harbour Conference, Suzhou, China
June	ASMS Atlanta, Thermo Fisher user Meeting, USA
July	Stein and Moore Lecture, The Protein Society, Seattle, USA
August	Amyloid Disease Symposium, Stockholm, Sweden Structural Biology Symposium, Zurich, Switzerland

September The MPIB Distinguished Visitor Lecture Series, Munich, Germany
iNano Lecture, Aarhus, Denmark

October Rayson Huang Visiting Lectureship, Hong Kong

November CIFAR Meeting, Toronto, Canada
Next Generation Physics Meeting, LMB, Cambridge
SBBS Seminar Series, Biozentrum, University of Basel, Switzerland
NovoNordisk, Copenhagen, Denmark
DSTL, Salisbury, UK
OUCB, University of Oxford, Oxford, UK
Oxford Women in Chemistry, University of Oxford, Oxford, UK

PUBLICATIONS

2021

1. Y. Yang, J. Liu, B. R. Clarke, L. Seidel, J. R. Bolla, P. N. Ward, P. Zhang, C. V. Robinson, C. Whitfield and J. H. Naismith.
The molecular basis of regulation of bacterial capsule assembly by Wzc.
Nat Commun, 2021, 12: 4349.
2. D. Quetschlich, T. K. Esser, T. D. Newport, F. Fiorentino, D. Shutin, S. Chen, R. Davis, S. Lovera, I. Liko, P. J. Stansfeld and C. V. Robinson.
NaViA: a program for the visual analysis of complex mass spectra.
Bioinformatics, 2021, 1-3.
3. G. Chi, R. Ebenhoch, H. Man, H. Tang, L. E Tremblay, G. Reggiano, X. Qiu, T. Bohstedt, I. Liko, F. G. Almeida, A. P. Garneau, D. Wang, G. McKinley, C. P. Moreau, K. D. Bountra, P. Abrusci, S. M. M. Mukhopadhyay, A. Fernandez-Cid, S. Slimani, J. L. Lavoie, N. A. Burgess-Brown, B. Tehan, F. DiMaio, A. Jazayeri, P. Isenring, C. V. Robinson and K. L. Durr.
Phospho-regulation, nucleotide binding and ionaccess control in potassium-chloride cotransporters.
EMBO J, 2021, e107294.
4. J. R. Bolla, F. Fiorentino and C. V. Robinson.
Mass spectrometry informs the structure and dynamics of membrane proteins involved in lipid and drug transport.
Curr Opin Struct Biol, 2021, 70: 53–60.
5. M. Agasid and C. V. Robinson.
Probing membrane protein–lipid interactions.
Curr Opin Struct Biol, 2021, 69: 78-85.
6. H. Kaur, R. P. Jakob, J. K. Marzinek, R. Green, Y. Imai, J. R. Bolla, E. Agustoni, C. V. Robinson, P. J. Bond, K. Lewis, T. Maier and. S. Hiller.
The antibiotic darobactin mimics a β -strand to inhibit outer membrane insertase.
Nature, 2021, 593: 125–129.
7. D. Wu and C. V. Robinson.
Connecting 'multi-omics' approaches to endogenous protein complexes.
Trends Chem, 2021, 3(6): 445-455.
8. F. Fiorentino, J. B. Sauer, X. Qiu, R. A. Corey, C. K. Cassidy, B. Mynors-Wallis, S. Mehmood, J. R. Bolla, P. J. Stansfeld and C. V. Robinson.
Dynamics of an LPS translocon induced by substrate and an antimicrobial peptide.
Nat Chem Biol, 2021, 17(2): 187-195.
9. P. Xu, S. Huang, H. Zhang, C. Mao, X. E. Zhou, X. Cheng, I. A. Simon, D-D. Shen, H-Y. Yen, C. V. Robinson, K. Harpsøe, B. Svensson, J. Guo, H. Jiang, D. E. Gloriam, K. Melcher, Y. Jiang, Y. Zhang and H. E. Xu.
Structural insights into the lipid and ligand regulation of serotonin receptors.
Nature, 2021m 592: 469–473.
10. M. T. Agasid, L. Sørensen, L. H. Urner, J. Yan and C. V. Robinson.
The effects of sodium ions on ligand binding and conformational states of G protein-coupled receptors—Insights from mass spectrometry.
J. Am. Chem. Soc. 2021, 143(11): 4085–4089.

11. K. K. Hoi, J. F. Bada Juarez, P. J. Judge, H-Y. Yen, D. Wu, J. Vinals, G. F. Taylor, A. Watts and C. V. Robinson.
Detergent-free lipodisq nanoparticles facilitate high-resolution mass spectrometry of folded integral membrane proteins.
Nano Lett, 2021, 21(7): 2824–2831.
12. L. M. Miller, L. F. Barnes, S. A. Raab, B. E. Draper, T. J. El-Baba, C. A. Lutomski, C. V. Robinson, D. E. Clemmer and M. F. Jarrold.
Heterogeneity of glycan processing on trimeric SARS-CoV-2 spike protein revealed by charge detection mass spectrometry.
J. Am. Chem. Soc. 2021, 143(10): 3959–3966.
13. C. C. Su, M. Lyu, C. E. Morgan, J. R. Bolla, C. V. Robinson and E. W. Yu.
A 'Build and Retrieve' methodology to simultaneously solve cryo-EM structures of membrane proteins.
Nat Methods, 2021, 18: 69–75.
14. D. A. Gray, J. B. R. White, A. O. Oluwole, P. Rath, A. J. Glenwright, A. Mazur, M. Zahn, A. Baslé, C. Morland, S. L. Evans, A. Cartmell, C. V. Robinson, S. Hiller, N. A. Ranson, D. N. Bolam and B. van den Berg.
Insights into SusCD-mediated glycan import by a prominent gut symbiont.
Nat Commun, 2021, 12: 44.
15. C. J. Serpell, A. Y. Park, C. V. Robinson and P. J. Beer.
Imidazolium-based catenane host for bromide recognition in aqueous media.
Chem Commun, 2021, 57: 101-104.

2020

16. T. J. El-Baba, C. A. Lutowski, A. L. Kantsadi, T. R. Malla, T. John, V. Mikhailov, J. R. Bolla, C. J. Schofield, N. Zitzmann, I Vakonakis and C. V. Robinson.
Allosteric inhibition of the SARS-CoV-2 main protease: Insights from mass spectrometry based assays.
Angew Chem Int Ed, 2020, 59(52): 23544-23548.
17. D. S. Chorev and C. V. Robinson.
The importance of the membrane for biophysical measurements.
Nat Chem Biol, 2020, 16(12): 1285-1292.
18. I. Winkelmann, R. Matsuoka, P. F. Meier, D. Shutin, C. Zhang, L. Orellana, R. Sexton, M. Landreh, C. V. Robinson, O. Beckstein and D. Drew.
Structure and elevator mechanism of the mammalian sodium/proton exchanger NHE9.
EMBO J, (2020), e105908.
19. L. Wang, D. Wu, C. V. Robinson, H. Wu and T-M. Fu.
Structures of a complete human V-ATPase reveal mechanisms of its assembly.
Mol Cell, 2020, 80(3): 501-511.e3.
20. L. H. Urner, K. Goltsche, M. Selent, I. Liko, M-P. Schweder, C. V. Robinson, K. Pagel and R. Haag.
Dendritic oligoglycerol regioisomer mixtures and their utility for membrane protein research.
Chem Eur J, 2020, *in press*
21. H-Y. Yen, I. Liko, J. Gault, D. Wu, W. B. Struwe and C. V. Robinson.
Correlating glycoforms of DC-SIGN with stability using a combination of enzymatic digestion and ion mobility mass spectrometry.
Angew Chem Int Ed, 2020, 132(36): 15690-15694.
22. M. A. McDowell, M. Heimes, F. Fiorentino, S. Mehmood, A Farkas, J. Coy-Vergara, D. Wu, J. R. Bolla, V. Schmid, R. Heinze, K. Wild, D. Flemming, S. Pfeffer, B Schwappach, C. V. Robinson and I. Sinning.
Structural basis of tail-anchored membrane protein biogenesis by the GET insertase complex.
Mol Cell, 2020, 80(1): 72-86.e7.
23. J. R. Bolla, A. C. Howes, F. Fiorentino and C. V. Robinson.
Assembly and regulation of the chlorhexidine specific efflux pump AceI.
Proc Natl Acad Sci USA, 2020, 117(29): 17011–17018.
24. J. D. Seixas, B. B. Sousa, M. C. Marques, A. Guerreiro, R. Traquete, T. Rodrigues, I. S. Albuquerque, M. F. Q. Sousa, A. R. Lemos, P. M. F. Sousa, T. M. Bandejas, D. Wu, S. K. Doyle, C. V. Robinson, A. N. Koehler, F. Corzana, P. M. Matias and G. J. L. Bernardes.
Structural and biophysical insights into the mode of covalent binding of rationally designed potent BMX inhibitors.
RSC Chem. Biol., 2020, 1: 251-262.
25. K. A. Black, S. He, R. Jin, D. M. Miller, J. R. Bolla, O. B. Clarke, P. Johnson, M. Windley, C. J. Burns, A. P. Hill, D. Laver, C. V. Robinson, B. J. Smith and J. M. Gulbis.
A constricted opening in Kir channels does not impede potassium conduction.
Nat Commun, 11, 3024.

26. B. Darlot, J. R. O. Eaton, L. Geis-Asteggianti, G. K. Yakala, K. Karuppanan, G. Davies, C. V. Robinson, A. Kawamura and S. Bhattacharya.
Engineered anti-inflammatory peptides inspired by mapping an evasin-chemokine interaction.
J Biol Chem, 2020, 295: 10926-10939.
27. M. Sobti, J. L. Walshe, D. Wu, R. Ishmukhametov, Y. C. Zeng, C. V. Robinson, R. M. Berry and A. G. Stewart.
Cryo-EM structures provide insight into how E. coli F₁F_o ATP synthase accommodates symmetry mismatch.
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