# CURRICULUM VITAE
# Carol Vivien Robinson DBE FRS FMedSci

## Contact Details


**Contact details**

Professor Dame Carol Robinson DBE FRS FMedSci
Dr Lee's Professor of Physical Chemistry
Kavli Institute for Nanoscience Discovery
Dorothy Crowfoot Hodgkin Building
Department of Chemistry, University of Oxford
South Parks Road, Oxford, OX1 3QU, UK

E-mail : carol.robinson@chem.ox.ac.uk
Web : https://robinsonweb.chem.ox.ac.uk/
https://kavlinano.ox.ac.uk
https://www.omass.com


## 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

| | |
|---|---|
| **2024** | Inducted to the National Academy of Inventors |
| **2023** | Elected to the American Philosophical Society |
| **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

| | |
|---|---|
| **2024** | Lifetime Achievement Award, European Patent Office, Europe |
| **2024** | Van Deenen Medal, IB, University of Utrecht, The Netherlands |
| **2023** | John B. Fenn Award for a Distinguished Contribution in Mass Spectrometry, ASMS, USA |
| **2022** | The Louis-Jeantet Prize for Medicine, Louis-Jeantet Foundation, Switzerland |
| **2022** | Benjamin Franklin Medal in Chemistry, The Franklin Institute, USA |
| **2022** | European Chemistry Gold Medal, European Chemistry Society (EuChemS), Belgium |
| **2021** | Biological and Medicinal Chemistry Sector Medal, Royal Society of Chemistry, UK |
| **2021** | Othmer Gold Medal, Science History Institute, USA |
| **2020** | A. I. Scott Medal for Excellence in Biological Chemistry Research, Texas A & M, USA |
| **2020** | Academy Prize, Royal Academy of Belgium |
| **2019** | Royal Medal A, The Royal Society, UK |
| **2019** | Stein and Moore Award, The Protein Society**,** USA |
| **2019** | Novozymes Prize, Novo Nordisk Foundation, Denmark |
| **2018** | Field and Franklin Award, American Chemical Society, USA |
| **2017** | Hans Krebs Medal, FEBS, Cambridge, UK |
| **2016** | Astra Zeneca Award, The Biochemical Society, London, UK |
| **2016** | Torbern Bergmann Award, The Swedish Chemical Society, Stockholm, Sweden |
| **2015** | Havinga Medal, The Havinga Foundation, The Netherlands |
| **2015** | Women in Science Award, L'Oreal-UNESCO, Paris, France |
| **2014** | Kaj Linderstrøm-Lang Prize, Carlsberg Research Center, Copenhagen, Denmark |
| **2014** | Thomson Medal Award, International Mass Spectrometry Foundation |
| **2013** | Anatrace Award for Membrane Proteins, The Biophysical Society, USA |
| **2012** | Distinguished Achievement in Proteomic Sciences, HUPO, Canada |
| **2011** | Interdisciplinary Prize, The Royal Society of Chemistry, UK |

**2011** Woman of the Year Award, FEBS/EMBO, Cambridge, UK
**2011** Aston Medal, British Mass Spectrometry Society, UK
**2010** Davy Medal, The Royal Society, UK
**2010** Prelog Medal, ETH, Zurich, Switzerland
**2008** Anfinsen Award, The Protein Society, USA
**2004** Rosalind Franklin Award, The Royal Society, UK
**2003** Biemann Medal, American Society for Mass Spectrometry, USA
**2002** Silver Medal, The Royal Society of Chemistry for Mass Spectrometry, UK

## Honorary Titles

**2025** Honorary Professorship from Tsinghua University Beijing, China
**2024** Honorary Doctorate from the University of Cambridge
**2022** Honorary Doctorate from the University of Swansea
**2022** Honorary Doctorate from the University of Sussex
**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

| | |
|---|---|
| **2026** | 36th Lady Masson Memorial Lecture, Melbourne University, Australia |
| **2026** | Leach Lecture, Lorne Proteins, Australia |
| **2025** | Sir Geoffrey Wilkinson Lecture, Imperial College, London, UK |
| **2025** | The Twenty-Fifth Irving L. Schwartz Lectureship, Icahn School of Medicine, USA |
| **2024** | The William R. Veatch endowed lecture, Harvard Medical School, USA |
| **2024** | Van't Hoff, Royal Netherlands Academy of Arts and Sciences, Amsterdam, Netherlands |
| **2024** | Rolf-Sammet Endowed Professorship, Frankfurt, Germany |
| **2023** | John B. Fenn ASMS Award Lecture, Houston, Texas, USA |
| **2023** | A. I. Scott Medal Award Lecture, Houston, Texas**,** USA |
| **2022** | Jordan Translational Medicine Lecture 2022, Oxford, UK |
| **2022** | Louis-Jeantet Award Lecture, Geneva, Switzerland |
| **2022** | EuChemS Gold Medal Award Lecture, Lisbon, Portugal |
| **2022** | Franklin Institute Award Lecture, USA |
| **2022** | McConnell Lecture, Stanford University and Caltech, USA |
| **2021** | Michael Smith Distinguished Research Lecture, University of BC, Canada (virtual) |
| **2021** | The Redfearn Memorial Lecture, University of Leicester, UK (virtual) |
| **2021** | The Jones Lecture, Queens University, Kingston, Ontario, Canada (virtual) |
| **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 Anatrace 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

**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

**2026** Co-chair UK-South Korea bilateral International Meeting, Royal Society, London

**2026** Chair, Royal Society's Newton International Fellowship Programme

**2023** Scientific Panel Member of the MRC Weatherall Institute of Molecular Medicine

**2023** Scientific Panel Member of the World Laureates Association, Shanghai, China

**2021** Commissioner of the 1851 Fellowship, Chair of the Science Committee

**2021** Member of the Novozymes Prize Committee

**2021** Member of the Jury for the 'Chemistry for the Future Solvay Prize'

**2021** Associate Editor, *Journal of the American Chemical Society*

**2020** Member of the Advisory Panel, Rosalind Franklin Institute, Harwell

**2020** Member of the HHMI Investigator Review Panel

**2018** International Advisory Board Member, *Angewandte Chemie*

**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, *Structure*

**2015** Advisory Board Member, The Royal National Children's SpringBoard Foundation, London

**2012** Editorial Board Member, *Current Opinion in Structural Biology*

## 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, *Journal of the American Society for Mass Spectrometry* |
| **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

| | | |
|---|---|---|
| **2025-2027** | **Boehringer Ingelheim International GmbH**<br>Native-mass spectrometry and G-protein coupled receptor de-orphanisation studies | **£ 397,265** |
| **2024-2027** | **BD2 Bipolar Disorder Grant** | **£ 1,027,341** |
| **2023-2028** | **ERC Advanced Grant**<br>Project title: IMPLEMENT | **£ 1,237,262** |
| **2021 - 2026** | **Medical Research Council**<br>Developing mass spectrometry to understand molecular mechanisms of antibacterial and antiviral drugs | **£ 1,758,852** |
| **2021 – 2026** | **Wellcome Trust Investigator Award**<br>Targeting membrane proteins in their native environments – Mass spectrometry meets cell biology | **£ 2,188,451** |

## Patents

**Barcoded Nanobodies** (Unpublished, filed, 2022-2023)

**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 B investment > $110M ) in 2023, the company now has bespoke premises at ARC Oxford, a leading since campus. More than 60 OMass scientists hail from all over the world and range from chemists, computational scientists, strategists, pharmacologists, structural biologists and biochemists. Professor Robinson plays an active role in the company as Founder Director and Chair of the Scientific Advisory Board.

## Teaching and Mentorship

Over the course of her career in both Cambridge and Oxford, Professor Robinson has supervised 40 graduate students, 28 DPhils and 65 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 academia, occupying tenured positions in USA, Australia, New Zealand, Europe and UK, as well as 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

**2025**

- BBC Radio 4 Desert Island Discs.

**2024**

- BBC Radio 4 Women's Hour.
  https://www.bbc.co.uk/programmes/m0020qjs
- Presentation to the New Zealand Government on the Importance of Spinout culture and Innovation

**2023**

- In conversation with Carol Robinson, Paraminder Dhillon.
  *FEBS Journal*, 3, 2023
  https://febs.onlinelibrary.wiley.com/doi/10.1111/febs.16743

**2022**

- Carol Robinson, winner of the 2022 Louis-Jeantet Prize for Medicine, 21st October 2022
  Carol Robinson, winner of the 2022 Louis-Jeantet Prize for Medicine (youtube.com)
- The Franklin Institute, 6th May 2022
  Dr. Carol Robinson: Bringing The Art and Science of Mass Spectrometry to Bioscience - YouTube

**2021**

- Journal of the American Chemical Society in conversation with Carol Robinson (A Conversation with Carol Robinson | ACS Central Science)
- 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 Porfolio, 23rd May 2020: Podcast, *'A chat with Carol Robinson'*
  A chat with Carol Robinson | Nature Portfolio Chemistry Community
- Article, Nature Methods, 4thMay 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'*
- https://www.telegraph.co.uk/finance/jobs/9985111/Forget-women-at-the-top-business-must-work-harder-to-appeal-to-school-girls.html

## Selected Women in Science Events

| | |
|---|---|
| **2026** | Royal Society Women and the Future of Science Conference, London |
| **2024** | FeMS+ Workshop, Melbourne, Australia |
| **2024** | Laidlaw Scholarships Dinner, University of Oxford |
| **2024** | IUPAC Global Women's Breakfast, University of Oxford |
| **2024** | NDORMS Women in Science Dinner, University of Oxford |
| **2023** | Women in Science Forum, Shenzhen, China |
| **2019** | Oxford Women in Chemistry, University of Oxford |
| **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 six years)

### 2026

| | |
|---|---|
| **June** | Invited Lecture, Celebration of High-Resolution Mass Spectrometry, Bremen, Germany |
| **June** | Plenary Lecture, Nebraska Drug Discovery and Development Pipeline (ND3P), University of Nebraska, Canada (virtual) |
| **April** | Invited Lecture, CML distinguished lecture series**,** Uppsala University, Sweden |
| **April** | Plenary Lecture, Target to Patient 2026, Cambridge |
| **March** | Opening Lecture, Gordon Research Conference, Tuscany, Italy |
| **January** | Invited Lecture, The Festival of Genomics & Biodata, London |

### 2025

| | |
|---|---|
| **November** | Plenary Lecture, SMART Symposium, Shenzhen, China |
| **May** | Invited Lecture, Department of Cell Biology, Yale School of Medicine, USA |
| **May** | Invited Lecture, Graduate School of Medical Science, Weill Cornell Medicine, USA |
| **May** | Invited Lecture, 'ALLOSTERY TURNS 60', Accademia Nazionale Dei Lincei, Rome |
| **May** | Invited Lecture, Department of Chemistry, University of Otago, New Zealand |

### 2024

| | |
|---|---|
| **October** | CRC 1507 Symposium 2024 – New Horizons in Membrane Biology, Frankfurt, Germany |
| **September** | New Horizons in Membrane Biology, Frankfurt Intl Symposium, Germany |
| | Plenary Lecture, Nuffield Department of Medicine, Research Symposium, Oxford |
| **August** | The Walter and Eliza Hall Institute, Melbourne, Australia |
| **August** | Plenary Lecture, IMSC2024, Melbourne, Australia |
| **April** | UCLA CTSI Distinguished Speaker Series, USA (sponsored by the Vallee Foundation) |
| **March** | Genentech Inc., Visit and Lecture, California, USA |
| | Thousand Oaks Science Lecture Series, Amgen, California, USA |
| | UCSF, Visit and Lecture, California, USA |
| **February** | Platforms for Transformative Scientific Discovery and Economic Growth, Presentation for the New Zealand Government, Wellington. |

## 2023

| | |
|---|---|
| **November** | Distinguished Lecture, SMART Symposium, Shenzhen, China |
| **October** | Boehringer Ingelheim MedChem Seminar, Germany |
| **October** | Biophysical Seminar, Department of Chemistry, University of Cambridge |
| **June** | Gordon Research Conference Lecture, Les Diablerets, Switzerland |
| **May** | Plenary Lecture, AOHUPO 2023, Singapore |
| **March** | The Protein Society Webinar Series, USA (virtual) |
| **February** | 4th Inter Academy Workshop, Stockholm, Sweden |
| **January** | Keynote Lecture, ASMS 33rd Sanibel Conference: Membrane Proteins and their Complexes: Mass Spectrometry and Beyond, Florida, USA |

## 2022

| | |
|---|---|
| **October** | Jordan Translational Medicine Lecture 2022, Oxford, UK |
| | Amgen Thousand Oaks Lecture Series, California, USA (virtual) |
| | The Francis Crick Institute Lecture Series, London, UK |
| | Louis-Jeantet Award Lecture, Geneva, Switzerland |
| **August** | EuChemS Gold Medal Award Lecture, Lisbon, Portugal |
| **June** | COMPAA Symposium, New York, USA |
| **May** | McConnell Lecture, Stanford University and Caltech, USA |
| **March** | Seminar, University of Wisconsin Madison, USA |

## 2021

| | |
|---|---|
| **December** | Michael Smith Distinguished Research Lecture, University of BC, Canada (virtual) |
| **November** | University of Heidelberg, Germany (virtual) |
| | Redfearn Memorial Lecture, University of Leicester, UK (virtual) |
| | International Chemical Biology Society, Emory University, USA (virtual) |
| **October** | Max Planck Institute for Solid State Research, Stuttgart, Germany (virtual) |
| | The Jones Lecture, Queens University, Ontario, Canada (virtual) |
| | Oxford University Dept of Pharmacology, UK (virtual) |
| **September** | Scripps University, Frontiers in Chemical Biology Series, USA (virtual) |
| | Rosalind Franklin Institute, Harwell, UK (virtual) |
| | Cambridge Medicinal Chemistry Conference, UK (virtual) |
| **July** | Babraham Lecture Series, University of Cambridge, UK (Virtual) |
| | European Biophysics Conference, Vienna, Austria (Virtual) |

| | |
|---|---|
| **June** | ACS Publications Symposium (Virtual) |
| **May** | The Hinshelwood Lectures, University of Oxford, UK |
| **April** | American Society for Biochemistry and Molecular Biology (ASBMB) (Virtual) |
| **March** | Plenary Lecture: Human Proteome Organisation (HUPO) 2021, USA (Virtual) |
| | Cambridge University Scientific Society, UK (Virtual) |
| | Purdue University, Indiana, USA (Virtual) |
| **February** | University of Massachusetts-Amherst, USA (Virtual) |

## 2020

| | |
|---|---|
| **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 Lecture: Wellcome Centre for Human Genetics High Profile Seminar, Oxford, UK (virtual) |
| | UCSD, Chemistry & Chemical Biology Seminar Series, San Diego, USA (Virtual) |
| **February** | Kohn – IASH Workshop, Jerusalem, Israel |
| **January** | Oxford Chemistry Alumni Event, Royal Society of Chemistry, London, UK |

## PUBLICATIONS

### 2026

1. S. Jung, H. Yeo, H. Li, S. Kokane, T. Reichenbach, A. Gulati, G. Albano, C. Kirschbaum, T. Manh Ho, M. Landreh, M. Abramsson, C. V. Robinson, D. G. Fuster and D. Drew.
   Structure of NHE6 and its lipid-mediated interactions regulating endosomal pH.
   ***Nat Commun,*** 2026, 17, 8177.

2. Y. Wang, H. Squires, M. A. Addo, J. P. Gerdt, T. J. El-Baba, R. C. MacLean, C. V. Robinson and J. R. Bolla.
   Native mass spectrometry reveals DltA catalysis, DltC loading, and inhibition in the d-alanylation pathway.
   ***RSC Adv,*** 2026, 2, 16, (32), 29834-29843.

3. T. J. El-Baba, C. A. Lutomski, J. L. Bennett, S. A. S. Lawrence, S. A. Burnap, F. I. Butroid, O. B. Ramsay, T. Radzevicius, D. Wu, H. Song, K. L. Chan, L. F. Parise, E. Parise, W. B. Struwe, J. W. Murrough, S. B. Russo and C. V. Robinson.
   Molecular dissection of protein complexes isolated from sections of human brain.
   ***BioRxiv,*** [Preprint], 2026, 4, 11, 717886.

4. C. V. Robinson and E. Lalande
   Welcome Editorial from the new Editor in Chief.
   ***QRB Discovery,*** 2026, 7, e6.

5. C. J. Sadler, M. Miller, K. K. Darmawan, J. P. Sandler, H-C. Ng, A. Shamsabadi, A. Creamer, C. V. Robinson, I. Yarovsky and M. M. Stevens.
   Bionano Interface Optimization for Rational Lateral Flow Assay Development
   ***ACS Nano,*** 2026, 20, 13897-13912.

6. C. Kirschbaum, H. M. Lennartz, K. C. Cook, K. Böhlig, A. Papangelis, C. V. Robinson and A. Nadler.
   Bifunctional Lipid–Protein Cross-linking Efficiency and Reaction Products.
   ***J Am Chem Soc,*** 2026, 148, 15349-15353.

7. S. Helmi, R. Asor, M. Miller, J. C. Thiele, D. Wu, R. van Wee, S. Song, K. C. Zouboulis, J. L. P. Benesch, C. V. Robinson and P. Kukura.
   Modular DNA nanosensors enable state-aware multiplexed single-molecule mass photometry in complex media.
   ***bioRxiv,*** 2026, [Preprint].

8. J. L. Bennett, O. B. Ramsay, C. A. Lutomski, C. Kirschbaum and C. V. Robinson.
   Quantitative Mapping of NHS Ester–Protein Reactivity Using Native Top-Down Mass Spectrometry.
   ***J Am Soc Mass Spectrom,*** 2026, 37, 3, 702-709.

9. J. Fan, C. De'Ath, L. Eriksson, C. von Hallerstein, L. J. Persson, A. O. Oluwole, N. Naseeb, A. Qureshi, S. Mesoy, L. T. Seeley, S. B. Knoblauch, N. Kalmankar, E. G. Marklund, T. Esser, C. V. Robinson, L. Baker and S. Rauschenbach.
   Membrane proteins retain native architecture through native ESI and soft-landing.
   ***bioRxiv,*** 2026, [Preprint].

10. C. Kirschbaum, S. Lawrence, J. Bennett, O. Ramsay, Y. Ahmed, T. El-Baba, S. Vanni and C. V. Robinson.

Differential lipid selectivity of StARD phospholipid transporters revealed by native MS.
***Nature Portfolio,*** 2026, [Preprint].

## 2025

11. M. A. McDowell, K. Wild, F. Fiorentino, D. Bausewein, A. Metschies, A. Chiapparino, Y. Hackmann, F. L. Bilsing, D. Brenske, S. Mortensen, D. Wu, C. V. Robinson, S. Strahl and I. Sinning.
Structural characterisation of the fungal Pmt4 homodimer.
***Nat Commun,*** 2025, 16, 11134.

12. F. Fiorentino, M. Cervoni, Y. Wang, L. H. Urner, J. B. Sauer, A. Tran, R. A. Corey, D. Rotili, A. Mai, P. J. Stansfeld, F. Imperi, E. W. Yu, C.-C. Su, C. V. Robinson and J. R. Bolla.
Structural snapshots of Pseudomonas aeruginosa LptB2FG and LptB2FGC reveal insights into lipopolysaccharide recognition and transport
***Nat Commun,*** 2025, 16, 11384.
13. L.H. Urner, D. Shutin, M.T. Agasid and C.V. Robinson.
Hybrid Detergents Facilitate Scalable Charge Reduction and Stabilize Membrane Proteins While Retaining Lipid Interactions
***Chem Eur J.,*** 2025, 31, e03191.

14. J. Bennett, T. El-Baba, K. C. M. Zouboulis, C. Kirschbaum, H. Song, F. Butroid, J. Benesch, C. Lutomski and C. V. Robinson.
Uncovering hidden protein modifications with native top-down mass spectrometry.
***Nature Methods,*** 2025, 22, 10, 2127-2137.

15. C. Kirschbaum, J. L. Bennett and C. V. Robinson.
Deep Structural Characterization of Protein-Bound Lipids via Native MS and Ultraviolet Photodissociation.
***Anal Chem,*** 2025, 97, 35, 19331-19339.

16. Z. Wang, G. Cao, M. P. Collier, X. Qui, S. Broadway-Stringer, D. Šaman, J. Z. Y. Ng, N. Sen, A. J. Azad, C. Hooper, J. Zimmermann, M. A. McDonough, J. Brem, P. Rabe, H. Song, T. Reid Alderson, C. J. Schofield, J. R. Bolla, K. Djinovic-Carugo, D. O. Fürst, B. Warscheid, M. T. Degiacomi, T. M. Allison, G. K. A. Hochberg, C. V. Robinson, K. Gehmlich and J. L. P. Benesch.
Filamin C dimerisation is regulated by HSPB7.
***Nat Commun,*** 2025, 16, 4090.

17. S. A. S. Lawrence, A. Dolan, M. M. Miller and C. V. Robinson.
Membrane Protein Complexity Revealed Through Native Mass Spectrometry
***Ann Rev Biochem***, 2025, 94, 111-135.

18. M. L. Abramsson, R. A. Corey, J. L. Skerle, L. J. Persson, O. Anden, A. O. Oluwole, R. J. Howard, E. Lindahl, C. V. Robinson, K. Strisovsky, E. G. Marklund, D. Drew, P. J. Stansfeld and M. Landreh.
Engineering cardiolipin binding to an artificial membrane protein reveals determinants for lipid-mediated stabilization.
***eLife***, 2025 14, 104237.

19. C. Kirschbaum, J. L. Bennett, Q. Tian, N. Sen, I. P. S. Smith, D. Wu, J. L. P. Benesch, S. Khalid, G. Isom and C. V. Robinson.

Following phospholipid transfer through the OmpF3-MlaA-MlaC lipid shuttle with native mass spectrometry.
***Proc Natl Acad Sci USA***, 2025, 122, 14, e2420041122.

20. Y. Yang, M. Batista, B. R. Clarke, M. R. Agyare-Tabbi, H. Song, N. M. Kuehfuss, A. Le Bas, C. V. Robinson, C. Whitfield, P. J. Stansfeld, J. H. Naismith and J. Liu.
Molecular basis for the phosphorylation of bacterial tyrosine kinase Wzc.
***Nat Commun***, 2025, 16, 3437.

21. H. M. Britt and C. V. Robinson
Traversing the drug discovery landscape using native mass spectrometry.
***Curr Opin Struct Biol,*** 2025, 91, 102993.

22. C. A. Lutomski, J. L. Bennett, T. J. El-Baba, D.Wu, J. D. Hinkle, S. A. Burnap, I. Liko, C. Mullen, J. E. P. Syka, W. B. Struwe and C. V. Robinson.
Defining proteoform-specific interactions for drug targeting in a native cell signalling environment.
***Nature Chem***, 2025, 17, 204-214.

## 2024

23. M. Barekatain, L. C. Johansson, J. H. Lam, H. Chang, A. V. Sadybekov, G. W. Han, J. Russo, J. Bliesath, N. L. Brice, M. B. L. Carlton, K. S. Saikatendu, H. Sun, S. T. Murphy, H. Monenschein, H. H. Schiffer, P. Popov, C. A. Lutomski, C. V. Robinson, Z-J. Liu, T. Hua, V. Katritch and Vadim Cherezov.
Structural insights into the high basal activity and inverse agonism of the orphan receptor GPR6 implicated in Parkinson's disease.
***Sci Signal***, 2024, 17, eado8741.

24. X. Qiu, K. Chao, S. Song, Y-Q. Wang, Y-A. Chen, S. L. Rouse, H-Y. Yen and C. V. Robinson.
Coupling and Activation of the β1 Adrenergic Receptor – The Role of the Third Intracellular Loop.
***J Am Chem Soc***, 2024, 146, 28527-28537.

25. A. O. Oluwole, N. V. Kalmankar, M. Guida, J. L. Bennett, G. Poce, J. R. Bolla and C. V. Robinson.
Lipopeptide antibiotics disrupt interactions of undecaprenyl phosphate with UptA.
***Proc Nat Acad Sci***, 2024, 121, 41, e2408315121.

26. L. Xiao, X. Pi, A. C. Goss, T. El-Baba, J. F. Ehrmann, E. Grinkevich, S. Bazua-Valenti, V. Padovano, S. L. Alper, D. Carey, N. D. Udeshi, S. A. Carr, J. Lorenzo Pablo, C. V. Robinson, A. Greka and H. Wu.
Molecular basis of TMED9 oligomerization and entrapment of misfolded protein cargo in the early secretory pathway.
***Sci Adv,*** 2024, 10, 38.

27. D. Wu, H. Tang, X. Qiu, S. Song, S. Chen, C. V. Robinson
Native MS-guided lipidomics to define endogenous lipid microenvironments of eukaryotic receptors and transporters.
***Nature Protoc,*** 2024.

28. N. Senoo, D. K. Chinthapalli, M. G. Baile, V. K. Golla, B. Saha, A. O. Oluwole, O. B. Ogunbona, J. A. Saba, T. Munteanu, Y. Valdez, K. Whited, M. S. Sheridan, D. Chorev, N. N. Alder, E. R. May, C. V. Robinson and S. M. Claypool.
Functional Diversity Among Cardiolipin Binding Sites on the Mitochondrial ADP/ATP Carrier.
***EMBO J***, 2024, 43, 2979-3008.

29. Y. Yan, J. Xiao, F. Huang, W. Xian, B. Yu, R. Cheng, H. Wu, X. Lu, X. Wang, W. Huang, J. Li, G. K. Oyejobi, C. V. Robinson, H. Wu, D. Wu, X. Liu, L. Wang and B. Zhu.
Phage Defence System CBASS is Regulated by a Prokaryotic E2 Enzyme that Imitates the Ubiquitin Pathway.
***Nature Microbiol***, 2024.

30. D. Wu, R. Yan, S. Song, A. K. Swansiger, Y. Li, J. S. Prell, Q. Zhou and C. V. Robinson.
The complete assembly of human LAT1-4F2hc complex provides insights into its regulation, function and localisation.
***Nat Commun***, 2024, 15, 3711.

31. J. Shin, J. Park, J. Jeong, J. H. Lam, X. Qiu, D. Wu, K. Kim, J.-Y. Lee, C. V. Robinson, J. Hyun, V. Katritch, K. P. Kim and Y. Cho.
Constitutive activation mechanism of a class C GPCR.
***Nat Struct Mol Biol***, 2024, 31, 678-687.

32. L. H. Urner, F. Fiorentino, D. Shutin, J. B. Sauer, M. T. Agasid, T. J. El-Baba, J. R. Bolla, P. J. Stansfeld and C. V. Robinson.
Detergents with Scalable Properties Identify Noncanonical Lipopolysaccharide Binding to Bacterial Inner Membrane Proteins.
***J Am Chem Soc***, 2024, 146, 16, 11025-11030.

33. S. A. S. Lawrence, C. Kirschbaum, J. L. Bennett, C. A. Lutomski, T. J. El-Baba and C. V. Robinson.
Phospholipids Differentially Regulate Ca2+ Binding to Synaptotagmin-1.
***ACS Chem Biol***, 2024, 19, 4, 953-961.

34. G. Du, L. B. Healy, L. David, C. Walker, T. J. El-Baba, C. A. Lutomski, B. Goh, B. Gu, X. Pi, P. Devant, P. Fontana, Y. Dong, X. Ma, R. Miao, A. Balasubramanian, R. Puthenveetil, A. Banerjee, H. R. Luo, J. C. Kagan, S. F. Oh, C. V. Robinson, J. Lieberman and Hao Wu.
ROS-dependent S-palmitoylation activates cleaved and intact gasdermin D.
***Nature***, 2024. https://doi.org/10.1038/s41586-024-07373-5.

35. H. Tang and C. V. Robinson.
From G-protein-coupled receptors to solute carriers—mass spectrometry informs dynamics, function, and regulation.
***Chem,*** 2024, 10, 8, 2358-2372.

36. A. O. Oluwole, V. M. Hernández-Rocamora, Y. Cao, X. Li, W. Vollmer, C. V. Robinson and J. R. Bolla
Real-Time Biosynthetic Reaction Monitoring Informs the Mechanism of Action of Antibiotics
***J Am Chem Soc***, 2024, 146, 10, 7007-7017.

37. T. K. Esser, J. Böhning, A. Önür, D. K. Chinthapalli, L. Eriksson, M. Grabarics, P. Fremdling, A. Konijnenberg, A. Makarov, A. Botman, C. Peter, J. L. P. Benesch, C. V. Robinson, J. Gault, L. Baker, T. A. M. Bharat and S. Rauschenbach.
Cryo-EM of Soft-landed β-galactosidase: Gas-phase and Native Structures are remarkably similar
***Sci Adv,*** 2024, 10, 7, eadl4628.

38. J. Shin, J. Park, J. Jeong, J. H. Lam, X. Qiu, D. Wu, K. Kim, J. Y. Lee, C. V. Robinson, J. Hyun, V. Katritch, K. P. Kim and Y. Cho.
Constitutive Activation Mechanism of a Class C GPCR
***Nat Struct Mol Biol***, 2024, 01224-7.

39. J. W. Young, E. Pfitzner, R. van Wee, C. Kirschbaum, P. Kukura and C. V. Robinson.
Characterization of Membrane Protein Interactions by Peptidisc-mediated Mass Photometry.
***iScience***, 2024, 27, 2, 108785.

## 2023

40. C. Gerle, Y. Misumi, A. Kawamoto, H. Tanaka, H. Kubota-Kawai, R. Tokutsu, E. Kim, D. Chorev, K. Abe, C. V. Robinson, K. Mitsuoka, J. Minagawa and G. Kurisu.
Three structures of PSI-LHCI from Chlamydomonas reinhardtii suggest a resting state re-activated by ferredoxin.
***Biochimica et Biophysica Acta,*** 2023, 1864, 4, 148986.

41. P. Dhillon and C. V. Robinson.
In conversation with Carol Robinson.
***FEBS J***, 2023, 290I, 18, 4376-4381.

42. G. Chi, L. Dietz, H. Tang, M. Snee, A. Scacioc, D. Wang, G. Mckinley, S. M. M. Mukhopadhyay, A. C. W. Pike, R. Chalk, N. A. Burgess-Brown, J. P. Timmermans, W. van Putte, C. V. Robinson and K. L. Dürr.
Structural Characterization of Human Urea Transporters UT-A and UT-B and Their Inhibition.
***Sci Adv***, 2023, 9, eadg8229.

43. C. A. Lutomski, T. J. El-Baba, J. D. Hinkle, I. Liko, J. L. Bennett, N. V. Kalmankar, A. Dolan, C. Kirschbaum, K. Greis, L. H. Urner, P. Kapoor, H-Y Yen, K. Pagel, C. Mullen, J. E. P. Syka, and C. V. Robinson.
Infrared Multiphoton Dissociation Enables Top-Down Characterization of Membrane Protein Complexes and G Protein Coupled Receptors.
***Angew Chem Int Ed***, 2023, 62, e202305694.

44. H. Hu, A-M. M. van Roon, G. E. Ghanim, B. Ahsan, A. O. Oluwole, S-Y Peak-Chew, C. V. Robinson and T. Hoang Duong Nguyen.
Structural basis of telomeric nucleosome recognition by shelterin factor TRF1
***Sci. Adv***, 2023, 9, eadi4148.

45. H. Tang, H. Li, D. Prakaash, C. Pedebos, X. Qiu, D. B. Sauer, S. Khalid, K. Duerr and Carol V. Robinson.
The solute carrier SPNS2 recruits PI(4,5)P2 to synergistically regulate transport of sphingosine-1-phosphate.
***Mol Cell***, 2023, 83, 1-14.

46. K. R. Durbin, M. T. Robey, L. N. Voong, R. T. Fellers, C. A. Lutomski, T. J. El-Baba, C. V. Robinson and Neil L. Kelleher.
ProSight Native: Defining Protein Complex Composition from Native Top-Down Mass Spectrometry Data.
***J Proteome Res***, 2023, 22, 8, 2660-2668.

47. L. Smithers, O. Degtjarik, D. Weichert, C-Y Huang, C. Boland, K. Bowen, A. Oluwole, C. Lutomski, C. V. Robinson, E. M. Scanlan, M. Wang, V. Olieric, M. Shalev-Benami and M. Caffrey.
Structure snapshots reveal the mechanism of a bacterial membrane lipoprotein N-acyltransferase.
***Sci Adv,*** 2023, 9, 26, eadf579.

48. H. Y. Yen, A. Jazayeri and C. V. Robinson.
G Protein-Coupled Receptor Pharmacology-Insights from Mass Spectrometry
***Pharm Reviews***, 2023, 75 (3) 397-415;

49. L. H. Urner, F. Junge, F. Fiorentino, T. J. El-Baba, D. Shutin, G. Nölte, R. Haag and C. V. Robinson. Rationalizing the Optimization of Detergents for Membrane Protein Purification. ***Chemistry, A European Journal***, 2023, 29, 30, e202300159.

50. B. Hardy, A. M. Hermosilla, D. K. Chinthapalli, C. V. Robinson, J. L. R. Anderson and P. Curnow. Cellular production of a de novo membrane cytochrome. ***Proc Natl Acad Sci USA***, 2023, 120, (16), e2300137120.

51. A. Ottonello, J. A. Wyllie, O. Yahiaoui, S. Sun, R. A. Koelln, J. A. Homer, R. M. Johnson, E. Murray, P. Williams, J. R. Bolla, C. V. Robinson, T. Fallon, T. P. Soares da Costa and J. E. Moses. Shapeshifting bullvalene-linked vancomycin dimers as effective antibiotics against multidrug-resistant gram-positive bacteria. ***Proc Natl Acad Sci USA***, 2023, 120, (15), e2208737120.

52. T. J. El-Baba, C. A. Lutomski, S. A. Burnap, J. R. Bolla, L. A. Baker, A. J. Baldwin, W. B. Struwe, and C. V. Robinson. Uncovering the Role of N-Glycan Occupancy on the Cooperative Assembly of Spike and Angiotensin Converting Enzyme 2 Complexes: Insights from Glycoengineering and Native Mass Spectrometry. ***J Am Chem Soc,*** 2023, 145, 8021-8032.

53. D. Wu, M. Guo and C. V. Robinson. Connecting single-nucleotide polymorphisms, glycosylation status, and interactions of plasma serine protease inhibitors. ***Chem***, 2023, 9, 665–681.

54. G. D. Noske, Y. Song, R. S. Fernandes, R. Chalk, H. Elmassoudi, L. Koekemoer, C. D. Owen, T. J. El-Baba, C. V. Robinson, COVID Moonshot Consortium, G. Oliva, A. S. Godoy. An in-solution snapshot of SARS-COV-2 main protease maturation process and inhibition. ***Nature Comms***, 2023, 14, 1, 1545.

## 2022

55. O. Akkermans, C. Delloye-Bourgeois, C. Peregrina, M. Carrasquero-Ordaz, M. Kokolaki, M. Berbeira-Santana, M. Chavent, F. Reynaud, R. Raj, J. Agirre, M. Aksu, E. S. White, E. Lowe, D. B. Amar, S. Zaballa, J. Huo, I. Pakos, P. T. N. McCubbin, D. Comoletti, R. J. Owens, C. V. Robinson, V. Castellani, D. del Toro and E. Seiradake GPC3-Unc5 receptor complex structure and role in cell migration. **Cell,** 2022, 185(21), 3931-3949.e26.

56. D. Wu and C. V. Robinson Native Top-Down Mass Spectrometry Reveals a Role for Interfacial Glycans on Therapeutic Cytokine and Hormone Assemblies. ***Angew Chemie Intl Ed***, 2022, 61(49): e2022131.

57. X. Yao, Y. Wang, Z. Wang, X. Fan, D. Wu, J. Huang, A. Mueller, S. Gao, M. Hu, C. V. Robinson, Y. Yu, S. Gao and N. Yan. Structures of the R-type human Cav2.3 channel reveal conformational crosstalk of the intracellular segments. ***Nat Comms,*** 2022, 13(1): 7358.

58. P. A. M. Schmidpeter, D. Wu, J. Rheinberger, P. M. Riegelhaupt, H. Tang, C. V. Robinson and C. M. Nimigean. Anionic lipids unlock the gates of select ion channels in the pacemaker family. ***Nat Struct & Mol Biol***, 2022, 29(11): 1092-1100.

59. M. Webby, A. Oluwole, C. Pedebos, P. Inns, A. Olerinyova, D. Prakaash, N. Housden, G. Benn, D. Sun, B. Hoogenboom, P. Kukura, S. Mohammed, C. V. Robinson, M. A. Khalid and C. Kleanthous. Lipids mediate supramolecular outer membrane protein assembly in bacteria. ***Sci Adv***, 2022. 8(44): eadc9566.

60. T. K. Esser, J. Böhning, P. Fremdling, M. T. Agasid, A. Costin, K. Fort, A. Konijnenberg, J. D. Gilbert, A. Bahm, A. Makarov, C. V Robinson, J. L. P. Benesch, L. Baker, T. A. M. Bharat, J. Gault and S. Rauschenbach.
Mass-selective and ice-free electron cryomicroscopy protein sample preparation via native electrospray ion-beam deposition.
***Proc Natl Acad Sci USA***, 2022, 1(4): 153.

61. L. R. Kjølbye, L. Sørensen, J. Yan, N. A. Berglund, J. Ferkinghoff-Borg, C. V. Robinson and B. Schiøtt.
Lipid modulation of a class B GPCR: Elucidating the modulatory role of PI(4,5)$P_2$ lipids.
***J Chem Inf Model***. 2022, 2022, 62, 24, 6788–6802.

62. H-Y Yen, I. Liko, W. Song, P. Kapoor, F. Almeida, J. Toporowska, K. Gherbi, J. T. S. Hopper, S. J. Charlton, A. Politis, M. S. P. Sansom, A. Jazayeri and C. V. Robinson.
Mass spectrometry captures biased signaling and allosteric modulation of a G-protein coupled receptor.
***Nature Chem,*** 2022, 14, 1375–1382.

63. L. H. Urner, I. Liko, K. Pagel, R. Haag and C. V. Robinson.
Non-ionic hybrid detergents for protein delipidation.
***Biochim Biophys Acta Biomembr***, 2022, 1864(9): 183958.

64. C. A. Lutomski, T. J. El-Baba, C. V. Robinson, R. RiekSjors, H. W. Scheres, N. Y. Mohammed, A. Quraishi and L. Gan.
The next decade of protein structure.
***Cell***, 2022, 185(15): 2617-2620.

65. Y. Zi Tan, Y. M. Abbas, J. Ze Wu, D. Wu, K. A. Keon, G. G. Hesketh, S. A. Bueler, A-C. Gingras, C. V. Robinson, S. Grinstein and J. L. Rubinstein.
CryoEM of endogenous mammalian V-ATPase interacting with the TLDc protein mEAK-7.
***Life Sci***, 5, 11: p.e202201527.

66. H. K. H. Fung, S. Grimes, A. Huet, R. L. Duda, M. Chechik, J. Gault, C. V. Robinson, R. W. Hendrix, P. J. Jardine, J. F. Conway, C. G. Baumann and A. A. Antson.
Structural basis of DNA packaging by a ring-type ATPase from an archetypal viral system.
***Nucleic Acids Res,*** 2022, gkac647.

67. R. Khera, A. R. Mehdipour, J. R. Bolla, J. Kahnt, S. Welsch, U. Ermler, C. Muenke, C. V. Robinson, G. Hummer, H. Xie and H. Michel.
Cryo-EM structures of pentameric autoinducer-2 exporter from Escherichia coli reveal its transport mechanism.
***EMBO J***, 2022, e109990.

68. D. Wu and C. V. Robinson.
Understanding glycoprotein structural heterogeneity and interactions: Insights from native mass spectrometry.
***Curr Opin Struct Biol***, 2022, 74: 102351.

69. P. A. Lang, R. Raj, A. Tumber, C. T. Lohans, P. Rabe, C. V. Robinson, J. Brem and C. J. Schofield.
Studies on enmetazobactam clarify mechanisms of widely used β-lactamase inhibitors.
***Proc Natl Acad Sci USA,*** 2022, 119(18): e2117310119.

70. A. O. Oluwole, R. A. Corey, C. M. Brown, V. M. Hernández-Rocamora, P. J. Stansfeld, W. Vollmer, J. R. Bolla and C. V. Robinson.
Peptidoglycan biosynthesis is driven by lipid transfer along enzyme-substrate affinity gradients.
***Nat Commun***, 2022, 13(2278): 1-12.

71. S. Chen, T. Getter, D. Salom, D. Wu, D. Quetschlich, D. S. Chorev, K. Palczewski and C. V. Robinson.
Capturing a rhodopsin receptor signalling cascade across a native membrane.
***Nature***, 2022, 604: 384-390.

72. T. Pukala and C. V. Robinson.
Introduction: Mass Spectrometry Applications in Structural Biology.
***Chem Rev***, 2022, 122(8): 7267.

73. H-Y. Yen, M. L. Abramsson, M. T. Agasid, D. Lama, J. Gault, I. Liko, M. Kaldmäe, M. Saluri, A. A. Qureshi, A. Suades, D. Drew, M. T. Degiacomi, E. G. Marklund, T. M. Allison, C. V. Robinson and M. Landreh.
Electrospray ionization of native membrane proteins proceeds via a charge equilibration step.
***RSC Adv,*** 2022, 12: 9671-9680.

74. R. Matsuoka, R. Fudim, S. Jung, C. Zhang, A. Bazzone, Y. Chatzikyriakidou, C. V. Robinson, N. Nomura, S. Iwata, M. Landreh, L. Orellana, O. Beckstein and D. Drew.
Structure, mechanism and lipid-mediated remodeling of the mammalian $Na^+/H^+$ exchanger $NHA_2$.
***Nat Struct Mol Biol***, 2022, 29(2): 108.

75. R. Jin, S. He, K. A. Black, O. B. Clarke, D. Wu, J. R. Bolla, P. Johnson, A. Periasamy, A. Wardak, P. Czabotar, P. M. Colman, C. V. Robinson, D. Laver, B. J. Smith and J. M. Gulbis.
Ion currents through Kir potassium channels are gated by anionic lipids.
***Nat Commun***, 2022, 13(1): 490.

76. C. Guffick, P. Y. Hsieh, A. Ali, W. Shi, J. Howard, D. Chinthapalli, A. C.Kong, I. Salaa. L. I. Crouch, M. R. Ansbro, S. C. Isaacson, H. Singh, N. P. Barrera, A. V. Nair, C. V. Robinson, M. J. Deery and H. W. van Veen.
Drug-dependent inhibition of nucleotide hydrolysis in the heterodimeric ABC multidrug transporter PatAB from Streptococcus pneumoniae.
***FEBS J***, 2022, 289: 3770–3788.

77. D. N. Patil, S. Singh, T. Laboute, T. S. Strutzenberg, X. Qiu, D. Wu, S. J. Novick, C. V. Robinson, P. R. Griffin, J. F. Hunt, T. Izard, A. K. Singh and K. A. Martemyanov.
Cryo-EM structure of human GPR158 receptor coupled to the RGS7-Gβ5 signaling complex.
***Science,*** 2022, 375(6576): 86-91.

78. T. V. Seraphim, N. Nano, Y. W. S. Cheung, S. Aluksanasuwan, C. Colleti, Y. Q. Mao, V. Bhandari, G. Young, L. Höll, S. Phanse, Y. Gordiyenko, D. R. Southworth, C. V. Robinson, V. Thongboonkerd, L. M. Gava, J. C. Borges, M. Babu, L. R. S. Barbosa, C. H. I. Ramos, P. Kukura and W. A. Houry.
Assembly principles of the human R2TP chaperone complex reveal the presence of R2T and R2Pcomplexes.
***Structure,*** 2022, 30(1): 156-171.e12.

## 2021

79. H. Ochner, S. Szilagyi, S. Abb, J. Gault, C. V. Robinson, L. Malavolti, S. Rauschenbach and K. Kern.
Low-energy electron holography imaging of conformational variability of single-antibody molecules from electrospray ion beam deposition.
***Proc Natl Acad Sci USA,*** 2021, 118(51): e2112651118.
doi: 10.1073/pnas.2112651118.PMID: 34911762

80. M. L. Abramsson, C. Sahin, J. T. S. Hopper, R. M. M. Branca, J. Danielsson, M. Xu, S. A.Chandler, N. Österlund, L. L. Ilag, A. Leppert, J. Costeira-Paulo, L. Lang, K. Teilum, A. Laganowsky, J. L. P. Benesch, M. Oliveberg, C. V. Robinson, E. G. Marklund, T. M. Allison, J. R. Winther and M. Landreh.
Charge engineering reveals the roles of ionizable side chains in electrospray ionization mass spectrometry.
***JACS Au,*** 2021, 1(12): 2385-2393.

81. J. Prince, J. R. Bolla, G. Fisher, J. Makela, M. Fournier, C. V. Robinson, L. Arciszewska and D. Sherratt.
Acyl Carrier Protein is essential for MukBEF action in Escherichia coli chromosome organization-segregation.
***Nat Commun,*** 2021 12(1):6721.

82. L. H. Urner, E. Mohammadifar, K. Ludwig, D. Shutin, L. Fiorentino, I. Liko, F. G. Almeida, D. Kutifa, R. Haag and C. V. Robinson.
Anionic dendritic polyglycerol for protein purification and delipidation.
***ACS Appl Polym Mater,*** 2021, 3: 5903−5911.

83. F. Fiorentino, D. Rotili, A. Mai, J. R. Bolla and C. V. Robinson.
Mass spectrometry enables the discovery of inhibitors of an LPS transport assembly via disruption of protein–protein interactions.
***Chem Commun,*** 2021, 57: 10747-10750.

84. G. L. Fisher, J. R. Bolla, K. V. Rajasekar, J. Mäkelä, R. Baker, M. Zhou, J. P. Prince, M. Stracy, C. V. Robinson, L. K. Arciszewska and D. J. Sherratt.
Competitive binding of MatP and topoisomerase IV to the MukB hinge domain.
***Elife,*** 2021,10: e70444.

85. B. van den Berg, C. Pedebos, J. R. Bolla, C. V. Robinson, A. Baslé and S. Khalid.
Structural basis for silicic acid uptake by higher plants.
***J Mol Biol,*** 2021, 433(21): 167226.

86. R. Cohen-Khait, A. Harmalkar, P. Pham, M. N. Webby, N. G. Housden, E. Elliston, J. T. S. Hopper, S. Mohammed, C. V. Robinson, J. J. Gray and C. Kleanthous.
Colicin-mediated transport of DNA through the iron transporter FepA.
***mBio,*** 2021, 12(5): e01787-21.

87. C. A. Lutomski, T. J. El-Baba, J. R. Bolla and C. V. Robinson.
Multiple roles of SARS-CoV-2 N Protein facilitated by proteoform-specific interactions with RNA, host proteins, and convalescent antibodies.
***J Am Chem Soc Au***, 2021 1(8):1147-1157.

88. C. E. Melia, J. R. Bolla, S. Katharios-Lanwermeyer, D. B. Mihaylov, P. C. Hoffmann, J. Huo, M. R. Wozny, L. M. Elfari, J. Böhning, A. N. Morgan, C. J. Hitchman, R. J. Owens, C. V. Robinson, G. A. O'Toole and T. A. M. Bharat.
Architecture of cell–cell junctions in situ reveals a mechanism for bacterial biofilm inhibition.
***Proc Natl Acad Sci USA,*** 2021, 118 (31): e2109940118.

89. S. Chen, D. Wu, C. V. Robinson and W. B. Struwe.

Native mass spectrometry meets glycomics: Resolving structural detail and occupancy of glycans on intact glycoproteins.
***Anal Chem*** 2021, 93(30): 10435–10443.

90. N. G. Housden, M. N. Webby, E. D. Lowe, T. J. El-Baba, R. Kaminska, C. Redfield, C. V. Robinson and C. Kleanthous.
Toxin import through the antibiotic efflux channel TolC.
***Nat Commun***, 2021, 12: 4625.

91. P. Lukacik, C. D. Owen, G. Harris, J. R. Bolla, S. Picaud, I. Alibay, J. E. Nettleship, L. E. Bird, R. J. Owens, P. C. Biggin, P. Filippakopoulos, C. V. Robinson and M. A. Walsh.
The structure of nontypeable Haemophilus influenzae SapA in a closed conformation reveals a constricted ligand-binding cavity and a novel RNA binding motif.
***PloS One***, 2021, 16(10): e0256070.

92. 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.

93. 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.

94. 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 ion access control in potassium-chloride cotransporters.
***EMBO J***, 2021, e107294.

95. 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.
96. M. Agasid and C. V. Robinson.
Probing membrane protein–lipid interactions.
***Curr Opin Struct Biol,*** 2021, 69: 78-85.

97. 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.

98. D. Wu and C. V. Robinson.
Connecting 'multi-omics' approaches to endogenous protein complexes.
***Trends Chem,*** 2021, 3(6): 445-455.

99. 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.

100. 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***, 2021, 592: 469–473.

101. 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.

102. 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.

103. 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.

104. 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.

105. 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.

106. 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

107. T. J. El-Baba, C. A. Lutomski, 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.

108. D. S. Chorev and C. V. Robinson.
The importance of the membrane for biophysical measurements.
***Nat Chem Biol***, 2020, 16(12): 1285-1292.

109. 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.

110. 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.

111. 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*

112. 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.

113. 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.

114. 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.

115. 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. Bandeiras, 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.

116. 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.

117. B. Darlot, J. R. O. Eaton, L. Geis-Asteggiante, 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.

118. 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 F1Fo ATP synthase accommodates symmetry mismatch.
***Nat Commun,*** 2020, 11: 2615.

119. K. B. Jansen, P. G. Inns, N. G. Housden, J. T. S. Hopper, R. Kaminska, S. Lee, C. V. Robinson, H. Bayley and C. Kleanthous.
Bifurcated binding of the OmpF receptor underpins import of the bacteriocin colicin N into *Escherichia coli.*
***J Biol Chem,*** 2020, 295: 9147-9156.

120. L. H. Urner, M. Schulze, Y. B Maier, W. Hoffmann, S. Warnke, I. Liko, K. Folmert, C. Manz, C. V. Robinson, R. Haag R and K. Pagel.
A new azobenzene-based design strategy for detergents in membrane protein research.
***Chem Sci,*** 2020, 11: 3538-3546.

121. C. V. Robinson.
Christopher Dobson, 1949-2019: Mentor, Friend, Scientist Extraordinaire.
***Annu Rev Biochem***, 2020, 89: 1-19.

122. Y. M. Abbas, D. Wu D, S. A. Bueler, C. V. Robinson and J. L. Rubinstein.
Structure of V-ATPase from the mammalian brain.
***Science,*** 2020, 367(6483): 1240-1246.

123. J. Gault, 1. Liko, M. Landreh, D. Shutin, J. R. Bolla, D. Jefferies, M. Agasid, H - Y Yen, M. J. G. W. Ladds, D. P. Lane, S. Khalid, C. Mullen, P. Remes, R. Huguet, G. McAlister, M. Goodwin, R. Viner, J. Syka and C. V. Robinson.
Combining 'Native' with 'omics' based mass spectrometry to identify endogenous ligands bound to membrane proteins.
***Nat Methods***, 2020, 17: 505–508.

124. A. Kono, T. H. Chou, A. Radhakrishnan, J. R. Bolla, K. Sankar, S. Shome, C. C. Su, R. L. Jernigan, C. V. Robinson, E. W. Yu and M. H. Spalding.
Structure and function of LCI1: a plasma membrane CO2 channel in the Chlamydomonas CO2 concentrating mechanism.
***Plant J,*** 2020, 102(6): 1107-1126.

125. D. S. Chorev, H. Tang, S. L. Rouse, J. R. Bolla, A. von Kügelgen, L. A. Baker, D. Wu, J. Gault, K. Grünewald, T. A. M. Bharat, S. J. Matthews and C. V. Robinson.
The use of sonicated lipid vesicles for mass spectrometry of membrane protein complexes.
***Nat Protoc,*** 2020, 15: 1690–1706.

126. L. H. Urner, I. Liko, H-Y Yen, K. K. Hoi, J. R. Bolla, J. Gault, F. G. Almeida, M. P. Schweder, D. Shutin, S. Ehrmann, R. Haag, C. V. Robinson and K. Pagel.
Modular detergents tailor the purification and structural analysis of membrane proteins including G-protein coupled receptors.
***Nat Commun***, 2020, 11(1): 564.

127. V. E. Pye, A. Rosa, C. Bertelli, W. B. Struwe, S. L. Maslen, R. Corey, I. Liko, M. Hassall, G. Mattiuzzo, A. Ballandras-Colas, A. Nans, Y. Takeuchi, P. J. Stansfeld, J. M. Skehel, C. V. Robinson, M. Pizzato and P. Cherepanov.
A bipartite structural organization defines the SERINC family of HIV-1 restriction factors.
***Nat Struct Mol Biol***, 2020, 27: 78–83.

128. A. von Kügelgen, H. Tang, G. G. Hardy, A. Kureisaite-Ciziene, Y. V. Brun, P. J. Stansfeld, C. V. Robinson and T. A. M. Bharat.
*In-situ* structure of an intact lipopolysaccharide-bound bacterial surface layer.
***Cell,*** 2020, 180(2):348-358.

129. J. R. Bolla, R. A. Corey, C. Sahin, J. Gault, A. Hummer, J. T. S. Hopper, D. P. Lane, D. Drew, T. M. Allison, P. J. Stansfeld, C. V. Robinson and M. Landreh.
A mass spectrometry-based approach to distinguish annular and specific lipid binding to membrane

proteins.
***Angew Chem Int Ed,*** 2020; 59(9):3523-3528.

## 2019

130. D. S. Chorev and C. V. Robinson.
Response to Comment on "Protein assemblies ejected directly from native membranes yield complexes for mass spectrometry".
***Science,*** 2019, 366(6466): 700.

131. S. Shakeel, E. Rajendra, P. Alcón, F. O'Reilly, D. S. Chorev, S. Maslen, G. Degliesposti, C. J. Russo, S. He, C. H. Hill, J. M. Skehel, S. H. W. Scheres, K. J. Patel, J. Rappsilber, C. V. Robinson and L. A. Passmore.
Structure of the Fanconi anaemia monoubiquitin ligase complex.
***Nature,*** 2019, 575(7781): 234-237.

132. C. Marculescu, A. Lakshminarayanan, J. Gault, J. C. Knight, L. K. Folkes, T. Spink, C. V. Robinson, K. Vallis, B. G. Davis and B. Cornelissen.
Probing the limits of Q-tag bioconjugation of antibodies.
***Chem.Commun,*** 2019, 55: 11342.

133. J. Gault and C. V. Robinson.
Cracking Complexes To Build Models of Protein Assemblies.
***ACS Cent Sci,*** 2019, 58: 310-1311.

134. L. M. Smith, P. M. Thomas, M. R. Shortreed, L. V. Schaffer, R. T. Fellers, R. D. LeDuc, T. Tucholski, Y. Ge, J. N. Agar, L. C. Anderson, J. Chamot-Rooke, J. Gault, J. A. Loo, L. Paša-Tolić, C. V. Robinson, H. Schlüter, Y. O. Tsybin, M. Vilaseca, J. A. Vizcaíno, P. O. Danis and N. L. Kelleher.
A five-level classification system for proteoform identifications.
***Nat Methods,*** 2019, 16: 939–940.

135. K. V. Rajasekar, R. Baker, G. L. M. Fisher, J. R. Bolla, J. Mäkelä, M. Tang, K. Zawadzka, O. Koczy, F. Wagner, C. V. Robinson, L. K. Arciszewska and D. J. Sherratt.
Dynamic architecture of the Escherichia coli structural maintenance of chromosomes (SMC) complex, MukBEF.
***Nucleic Acids Res,*** 2019, 47(18): 9696-9707.

136. W. B. Struwe and C. V. Robinson.
Relating glycoprotein structural heterogeneity to function – insights from native mass spectrometry.
***Curr Opin Struct Biol,*** 2019, 52: 1–8.

137. D. G. W. Alanine, D. Quinkert, R. Kumarasingha, S. Mehmood, F. R. Donnellan, N. K. Minkah, B. Dadonait, A. Diouf, F. Galaway, S. E. Silk, A. Jamwal, J. M. Marshall, K. Miura, L. Foquet, S. C. Elias, G. M. Labbé, A. D. Douglas. J. Jin, R. O. Payne, J. J. Illingworth, D. J. Pattinson, D. Pulido, B. G. Williams, W. A. de Jong, G. J. Wright, S. H. I. Kappe, C. V. Robinson, C. A. Long, B. S. Crabb, P. R. Gilson, M. K. Higgins and S. J. Draper.
Human antibodies that slow erythrocyte invasion potentiate malaria-neutralizing antibodies.
***Cell,*** 2019, 178: 216–228.

138. C-C Su, P. A. Klenotic, J. R. Bolla, G. E. Purdy, C. V. Robinson CV and E. W. Yu.
MmpL3 is a lipid transporter that binds trehalose monomycolate and phosphatidylethanolamine.
***Proc Natl Acad Sci USA,*** 2019, 116(23): 11241-11246.

139. C. V. Robinson, T. Rohacs and S. B. Hansen.
Tools for understanding nanoscale lipid regulation of ion channels.
***Trends Biochem Sci,*** 2019, 44(9): 795-806.
140. T. Vasanthakumar, S. A. Bueler, D. Wu, V. Beilsten-Edmands, C. V. Robinson and J. L. Rubinstein.
Structural comparison of the vacuolar and Golgi V-ATPases from Saccharomyces cerevisiae.
***Proc Natl Acad Sci USA,*** 2019, 116(15): 7272-7277.

141. J. R. Bolla, M. T. Agasid, S. Mehmood and C. V. Robinson.
Membrane protein-lipid interactions probed using mass spectrometry.
***Annu. Rev. Biochem***, 2019, 88: 20.1–20.27.

142. X. Miliara, T. Tatsuta, J-L. Berry, S. L. Rouse, K. Solak, D. S. Chorev, D. Wu, C. V. Robinson, S. Matthews and T. Langer.
Structural determinants of lipid specificity within Ups/PRELI lipid transfer proteins.
***Nat Commun,*** 2019, 10: 1130.

143. F. Fiorentino, J. R. Bolla, S. Mehmood and C. V. Robinson.
The different effects of substrates and nucleotides on the complex formation of ABC transporters.
***Structure,*** 2019, 27: 1-9.

144. C. V. Robinson.
Mass spectrometry: From plasma proteins to mitochondrial membranes.
***Proc Natl Acad Sci USA***, 2019, pii: 201820450.

145. W. Song, H. Y. Yen, C. V. Robinson and M. S. P. Sansom.
State-dependent lipid interactions with the A2a receptor revealed by MD Simulations using in vivo-mimetic membranes.
***Structure,*** 2019, 27(2): 392-403.

146. D. Wu, J. Li, W. B. Struwe and C. V. Robinson.
Probing: N -glycoprotein microheterogeneity by lectin affinity purification-mass spectrometry analysis.
***Chem Sci,*** 2019, 10(19): 5146-5155.

147. C. V. Robinson.
Capturing biology in flight.
***J Am Soc Mass Spectrom,*** 2019, 30(1): 4-6.

## 2018

148. W. Song, H. Y. Yen, C. V. Robinson and M. S. P. Sansom.
State-dependent lipid interactions with the A2a receptor revealed by MD Simulations using in vivo-mimetic membranes.
***Structure,*** 2018, pii: S0969-2126(18)30385-X.

149. D. S. Chorev, L. A. Baker, D. Wu, V. Beilsten-Edmands, S. L. Rouse, T. Zeev-Ben-Mordehai, C. Jiko, F. Samsudin, C. Gerle, S. Khalid, A. G. Stewart, S. J. Matthews, K. Grünewald and C. V. Robinson.
Protein assemblies ejected directly from native membranes yield complexes for mass spectrometry.
***Science***, 2018, 362(6416): 829-834.

150. J. B. Myers, B. G. Haddad, S. E. O'Neill, D. S. Chorev, C. C. Yoshioka, C. V. Robinson,

D. M. Zuckerman and S. L. Reichow.
Structure of native lens connexin-46/50 intercellular channels by CryoEM.
***Nature,*** 2018, 564: 372–377.

151. H. Gong, J. Li, A. Xu, Y. Tang, W. Ji, R. Gao, S. Wang, L. Yu, C. Tian, J. Li, H-Y. Yen, S. M. Lam, G. Shui, X. Yang, Y. Sun, X. Li, M. Jia, C. Yang, B. Jiang, Z. Lou, C. V. Robinson, L-L. Wong, L. W. Guddat, F. Sun, Q. Wang and Z. Rao.
Cryo-EM structure of a mycobacterial respiratory machine.
***Science,*** 2018, 362(6416): eaat8923.

152. Y. Y. Dong, H. Wang, A. C. W. Pike, S. A. Cochrane, S. Hamedzadeh, F. J. Wyszyński, S. R. Bushell, S. F. Royer, D. A. Widdick, A. Sajid, H. I. Boshoff, Y. Park, R. Lucas, W-M. Liu, S. S. Lee, T. Machida, L. Minall, S. Mehmood, K. Belaya, W-W. Liu, A. Chu, L. Shrestha, S. M. M. Mukhopadhyay,
C. Strain-Damerell, R. Chalk, N. A. Burgess-Brown, M. J. Bibb, C. E. Barry, C. V. Robinson, D. Beeson, B. G. Davis, and E. P. Carpenter.
Structures of DPAGT1 explain glycosylation disease mechanisms and advance TB antibiotic design.
***Cell,*** 2018, 175: 1045–1058.

153. T. Kecman, K. Kuś, D. H. Heo, K. Duckett, A. Birot, S. Liberatori, S. Mohammed, L. Geis-Asteggiante, C. V. Robinson and L. Vasiljeva.
Elongation/termination factor exchange mediated by PP1 phosphatase orchestrates transcription termination.
***Cell Rep,*** 2018, 25(1): 259-269.e5.

154. D. Wu, W. B. Struwe, D. J. Harvey, M. A. J. Ferguson and C. V. Robinson.
N-glycan microheterogeneity regulates interactions of plasma proteins.
***Proc Natl Acad Sci USA,*** 2018, 115(35): 8763-8768.

155. H-Y Yen, K. K. Hoi, I. Liko, G. Hedger, M. R. Horrell, W. Song, D. Wu, P. Heine, T. Warne, Y. Lee, B. Carpenter, A. Plückthun, C. G. Tate, M. S. P. Sansom and C. V. Robinson.
PtdIns(4,5)P2 stabilizes active states of GPCRs and enhances selectivity of G-protein coupling.
***Nature,*** 2018, 559: 423–427.

156. L. Kuhlen, P. Abrusci, S. Johnson, J. Gault, J. Deme, J. Caesar, T. Dietsche, M. T. Mebrhatu, T. Ganief, B. Macek, S. Wagner, C. V. Robinson and S. M. Lea.
Structure of the core of the type three secretion system export apparatus.
***Nat Struct Mol Biol,*** 2018, 25: 583–590.

157. I. Liko, M. T. Degiacomi, S. Lee, T. D. Newport, J. Gault, E. Reading, J. T. S. Hopper, N. G. Housden, P. White, M. Colledge, A. Sula, B. A. Wallace, C. Kleanthous, P. J. Stansfeld, H. Bayley, J. L. P. Benesch, T. M. Allison and C. V. Robinson.
Lipid binding attenuates channel closure of the outer membrane protein OmpF.
***Proc Natl Acad Sci USA***, 2018, 115(26): 6691-6696.

158. M. Romano, G. Fusco, H. G. Choudhury, S. Mehmood, C. V. Robinson, S. Zirah, J. D. Hegemann, E. Lescop, M. A. Marahiel, S. Rebuffat, A. de Simone and K. Beis.
Structural basis for natural product selection and export by bacterial ABC transporters.
***ACS Chem Biol,*** 2018, 13(6): 1598-1609.

159. K. Gupta, J. Li, I. Liko, J. Gault, C. Bechara, D. Wu, J. T. S. Hopper, K. Giles, J. L. P. Benesch and C. V. Robinson.
Identifying key membrane protein lipid interactions using mass spectrometry.
***Nat Protoc,*** 2018, 5: 1106-1120.

160. Y. Liu, G. D. Gupta, D. D. Barnabas, F. G. Agircan, S. Mehmood, D. Wu, E. Coyaud, C. M. Johnson, S. H. McLaughlin, A. Andreeva, S. M. V. Freund, C. V. Robinson, S. W. T. Cheung, B. Raught, L. Pelletier and M. van Breugel.
Direct binding of CEP85 to STIL ensures robust PLK4 activation and efficient centriole assembly.
***Nat Commun,*** 2018, 9(1): 1731.

161. J. R. O. Eaton, Y. Alenazi, K. Singh, G. Davies, L. Geis-Asteggiante, B. Kessler, C. V. Robinson, A. Kawamura and S. Bhattacharya.
The N-terminal domain of a tick evasin is critical for chemokine binding and neutralization and confers specific binding activity to other evasins.
***J Biol Chem,*** 2018, 293: 6134-6146.

162. M. Wojnowska, J. Gault, S. C. Yong, C. V. Robinson and B. C. Berks.
Precursor–receptor interactions in the twin arginine protein transport pathway probed with a new receptor complex preparation.
***Biochemistry,*** 2018, 57(10): 1663–1671.

163. E. Natan, T. Endoh, L. Haim-Vilmovsky, T. Flock, G. Chalancon, J. T. S. Hopper, B. Kintses, P. Horvath, L. Daruka, G. Fekete, C. Pál, B. Papp, E. Oszi, Z. Magyar, J. A. Marsh, A. H. Elcock, M. Babu, C. V. Robinson, N. Sugimoto & S. A. Teichmann.
Cotranslational protein assembly imposes evolutionary constraints on homomeric proteins.
***Nat Struct Mol Biol,*** 2018, 25: 279–288.

164. S. Zoll, H. Lane-Serff, S. Mehmood, J. Schneider, C. V. Robinson, M. Carrington and M. K. Higgins.
The structure of serum resistance-associated protein and its implications for human African trypanosomiasis.
***Nat Microbiol***, 2018, 3: 295–301.

165. J. R. Bolla, J. B. Sauer, D. Wu, S. Mehmood, T. M. Allison and C. V. Robinson.
Direct observation of the influence of cardiolipin and antibiotics on lipid II binding to MurJ.
***Nat Chem,*** 2018, 10: 363–371.

166. N. A. Yewdall, T. M. Allison, F. G. Pearce, C. V. Robinson and J. A. Gerrard.
Self-assembly of toroidal proteins explored using native mass spectrometry.
***Chem Sci,*** 2018, 9: 6099-6106.

## 2017

167. A. Casañal, K. Ananthanarayanan, C. H. Hill, A. D. Easter, P. Emsley, G. Degliesposti, Y. Gordiyenko, B. Santhanam, J. Wolf, K. Wiederhold, G. L. Dornan, M. Skehel, C. V. Robinson and L. Passmore.
Architecture of eukaryotic mRNA 3′-end processing machinery.
***Science,*** 2017, 358(6366): 1056-1059.

168. F. Schmitzberger, M. M. Richter, Y. Gordiyenko, C. V Robinson, M. Dadlez and S. Westermann.
Molecular basis for inner kinetochore configuration through RWD domain–peptide interactions.
***EMBO J,*** 2017, 36(23): 3458–3482.

169. K. Gupta, A. A. Watson, T. Baptista, E. Scheer, A. L. Chambers, C. Koehler, J. Zou. I. Obong-Ebong E. Kandiah, A. Temblador, A. Round, E. Forest, P. Man, C. Bieniossek, E. E. Laue, E. A. Lemke, J. Rappsilber, C. V. Robinson, D. Devys, L. Tora and I. Berger.

Architecture of TAF11/TAF13/TBP complex suggests novel regulation properties of general transcription factor TFIID.
***eLife,*** 2017, 6(pii): e30395.

170. S. Ambrose, N. G. Housden, K. Gupta, J. Fan, P. White, H-Y Yen, J. Marcoux, C. Kleanthous, J. T. S. Hopper and C. V. Robinson.
Native Desorption Electrospray Ionization Liberates Soluble and Membrane Protein Complexes from Surfaces.
***Angew Chem Int Ed***, 2017, 56(46): 14463-14468.

171. C. Schmidt and C. V. Robinson.
Editorial overview: Biophysical Methods: behind the scenes of the cryo-EM revolution.
***Curr Opin Struct Biol,*** 2017, 46: ix-xi.

172. L. Manzi, A. Barrow, J. Hopper, R. Kaminska, C. Kleanthous, C. V. Robinson, J.Moses and N. J. Oldham.
Carbene footprinting reveals binding interfaces of a multimeric membrane spanning protein.
***Angew Chem Int Ed,*** 2017, 56(47): 14873-14877.

173. S. L. Rouse, W. J. Hawthorne, J. L. Berry, D. S. Chorev, S. A. Ionescu, S. Lambert, F. Stylianou, W. Ewert, U. Mackie, R. M. L. Morgan, D. Otzen, F. A. Herbst, P. H. Nielsen, M. Dueholm, H. Bayley, C. V. Robinson, S. Hare and S. Matthews.
A new class of hybrid secretion system is employed in Pseudomonas amyloid biogenesis.
***Nat Commun,*** 2017, 8(1): 263.

174. H. Y. Yen, J. T. S. Hopper, I. Liko, T. M. Allison, Y. Zhu, D. Wang, M. Stegmann, S. Mohammed, B. Wu and C. V. Robinson.
Ligand binding to a G protein-coupled receptor captured in a mass spectrometer.
***Sci Adv,*** 2017, 3(6): e1701016.

175. M. Landreh, J. Costeira-Paulo, J. Gault, E. G. Marklund and C. V. Robinson.
The effects of detergent micelles on lipid binding to proteins in electrospray ionization mass spectrometry.
***Anal Chem,*** 2017, 89(14): 7425-7430.

176. N. Kronqvist, M. Sarr, A. Lindqvist, K. Nordling, M. Otikovs, L. Venturi, B. Pioselli, P. Purhonen, M. Landreh, H. Biverstål, Z. Toleikis, L. Sjöberg, C. V. Robinson, N. Pelizzi, H. Jörnvall, H. Hebert, K. Jaudzems, T. Curstedt, A. Rising and J. Johansson.
Efficient protein production inspired by how spiders make silk.
***Nat Commun,*** 2017, 8: 15504.

177. J. T. S. Hopper, S. Ambrose, O. C. Grant, S. A. Krumm, T. M. Allison, M. T. Degiacomi, M. D. Tully, L. K. Pritchard, G. Ozorowski, A. B. Ward, M. Crispin, K. J. Doores, R. J. Woods, J. L. P. Benesch, C. V. Robinson and W. B. Struwe.
The Tetrameric Plant Lectin BanLec Neutralizes HIV through Bidentate Binding to Specific Viral Glycans.
***Structure,*** 2017, 25(5): 773-782.

178. S. Raimondi, R. Porcari, P. P. Mangione, G. Verona, J. Marcoux, S. Giorgetti, G. W. Taylor, S. Ellmerich, M. Ballico, S. Zanini, E. Pardon, R. Al-Shawi, J. P. Simons, A. Corazza, F. Fogolari, M. Leri, M. Stefani, M. Bucciantini, J. D. Gillmore, P. N. Hawkins, M. Valli, M. Stoppini, C. V. Robinson, J. Steyaert, G. Esposito and V. Bellotti.
A specific nanobody prevents amyloidogenesis of D76N β2-microglobulin in vitro and modifies its tissue distribution in vivo.
***Sci Rep,*** 2017, 7: 46711.

179. A. L. Lai, E. M. Clerico, M. E. Blackburn, N. A. Patel, C. V. Robinson, P. P. Borbat, J. H. Freed and L. M. Gierasch.
Key features of an Hsp70 chaperone allosteric landscape revealed by ion mobility native mass spectrometry and double electron-electron resonance.
***J Biol Chem,*** 2017, 292: 8773-8785.

180. C. Schmidt, V. Beilsten-Edmands, S. Mohammed and C. V. Robinson.
Acetylation and phosphorylation control both local and global stability of the chloroplast F1 ATP synthase.
***Sci Rep,*** 2017, 7: 44068.

181. C. V. Robinson.
From molecular chaperones to membrane motors: through the lens of a mass spectrometrist.
***Biochem Soc Trans,*** 2017, 45(1): 251-260.

182. M. Landreh, M. Andersson, E. G. Marklund, Q. Jia, Q. Meng, J. Johansson, C. V. Robinson and A. Rising.
Mass spectrometry captures structural intermediates in protein fiber self-assembly.
***Chem Commun,*** 2017, 53(23): 3319-3322.

183. A. J. Glenwright, K. R. Pothula, S. P. Bhamidimarri, D. S. Chorev, A. Baslé, S. J. Firbank, H. Zheng, C. V. Robinson, M. Winterhalter, U. Kleinekathöfer, D. N. Bolam and B. van den Berg.
Structural basis for nutrient acquisition by dominant members of the human gut microbiota.
***Nature,*** 2017, 541: 407-411.

184. K. Gupta, J. A. Donlan, J. T. Hopper, P. Uzdavinys, M. Landreh, W. B. Struwe, D. Drew, A. J. Baldwin, P. J. Stansfeld and C. V. Robinson.
The role of interfacial lipids in stabilizing membrane protein oligomers.
***Nature,*** 2017, 541: 421-424.

185. M. Landreh, E. G. Marklund, P. Uzdavinys, M. T. Degiacomi, M. Coincon, J. Gault, K. Gupta, I. Liko, J. L. P. Benesch, D. Drew and C. V. Robinson.
Integrating mass spectrometry with MD simulations reveals the role of lipids in Na+/H+ antiporters.
***Nat Commun***, 2017, 8: 13993.

186. M. Andersson, Q. Jia, A. Abella, X. Y. Lee, M. Landreh, P. Purhonen, H. Hebert, M. Tenje, C. V. Robinson, Q. Meng, G. R. Plaza, J. Johansson and A. Rising.
Biomimetic spinning of artificial spider silk from a chimeric minispidroin.
***Nat Chem Biol***, 2017, 3: 262-264.

## 2016

187. O. J. P. Kyrieleis, P. B. McIntosh, S. R. Webb, L. J. Calder, J. Lloyd, N. A. Patel, S. R. Martin, C. V. Robinson, P. B. Rosenthal and S. J. Smerdon.
Three-Dimensional Architecture of the Human BRCA1-A Histone Deubiquitinase Core Complex.
***Cell Rep,*** 2016, 17: 3099-3106.

188. T. Dietsche, M. Tesfazgi Mebrhatu, M. J. Brunner, P. Abrusci, J. Yan, M. Franz-Wachtel, C. Scharfe, S. Zilkenat, I. Grin, J. E. Galan, O. Kohlbacher, S. Lea, B. Macek, T. C. Marlovits, C. V. Robinson, S. Wagner.

Structural and Functional Characterization of the Bacterial Type III Secretion Export Apparatus.
***PLoS Pathog,*** 2016, 12: e1006071.

189. M. Ahn, C. L. Hagan, A. Bernardo-Gancedo, E. De Genst, F. N. Newby, J. Christodoulou, A. Dhulesia, M. Dumoulin, C. V. Robinson, C. M. Dobson and J.R. Kumita.
The Significance of the Location of Mutations for the Native-State Dynamics of Human Lysozyme.
***Biophys J,*** 2016, 111: 2358-2367.

190. S. Mehmood, J. Marcoux, J. Gault, A. Quigley, S. Michaelis, S. G. Young, E. P. Carpenter and C. V. Robinson.
Mass spectrometry captures off-target drug binding and provides mechanistic insights into the human metalloprotease ZMPSTE24.
***Nat Chem,*** 2016, 8: 1152-1158.

191. M. T. Marty, K. K. Hoi and C. V. Robinson.
Interfacing Membrane Mimetics with Mass Spectrometry.
***Acc Chem Res,*** 2016, 49: 2459-2467.

192. M. T. Mazhab-Jafari, A. Rohou, C. Schmidt, S. A. Bueler, S. Benlekbir, C. V. Robinson and J. L. Rubinstein.
Atomic model for the membrane-embedded VO motor of a eukaryotic V-ATPase.
***Nature,*** 2016, 539: 118-122.

193. S. Mehmood, V. Corradi, H. G. Choudhury, R. Hussain, P. Becker, D. Axford, S. Zirah, S. Rebuffat, D. P. Tieleman, C. V. Robinson and K. Beis.
Structural and Functional Basis for Lipid Synergy on the Activity of the Antibacterial Peptide ABC Transporter McjD.
***J Biol Chem,*** 2016, 291: 21656-21668.

194. I. Liko, T. M. Allison, J. T. Hopper and C. V. Robinson.
Mass spectrometry guided structural biology.
***Curr Opin Struct Biol,*** 2016, 40: 136-144.

195. F. L. Hsieh, L. Turner, J. R. Bolla, C. V. Robinson, T. Lavstsen and M. K. Higgins.
The structural basis for CD36 binding by the malaria parasite.
***Nat Commun,*** 2016, 7: 12837.

196. T. B. Parsons, W. B. Struwe, J. Gault, K. Yamamoto, T. A. Taylor, R. Raj, K. Wals, S. Mohammed, C. V. Robinson, J. L. Benesch and B. G. Davis.
Optimal synthetic glycosylation of a therapeutic antibody.
***Angew Chem Int Ed,*** 2016, 55: 2361-2367.

197. I. O. Ebong, V. Beilsten-Edmands, N. A. Patel, N. Morgner and C. V. Robinson.
The interchange of immunophilins leads to parallel pathways and different intermediates in the assembly of Hsp90 glucocorticoid receptor complexes.
***Cell Discov,*** 2016, 2: 16002.

198. V. A. Mikhailov, I. Liko, T. H. Mize, M. F. Bush, J. L. Benesch and C. V. Robinson.
Infrared laser activation of soluble and membrane protein assemblies in the gas phase.
***Anal Chem,*** 2016, 88: 7060-7067.

199. C. Aguilar-Gurrieri, A. Larabi, V. Vinayachandran, N. A. Patel, K. Yen, R. Reja, I. O. Ebong, G. Schoehn, C. V. Robinson, B. F. Pugh and D. Panne.
Structural evidence for Nap1-dependent H2A-H2B deposition and nucleosome assembly.

***EMBO J,*** 2016, 35: 1465-1482.

200. K. V. Rajasekar, K. Zdanowski, J. Yan, J. T. Hopper, M. L. Francis, C. Seepersad, C. Sharp, L. Pecqueur, J. M. Werner, C. V. Robinson, S. Mohammed, J. R. Potts and C. Kleanthous.
The anti-sigma factor RsrA responds to oxidative stress by reburying its hydrophobic core.
***Nat Commun,*** 2016, 7: 12194.

201. I. Liko, M. T. Degiacomi, S. Mohammed, S. Yoshikawa, C. Schmidt and C. V. Robinson.
Dimer interface of bovine cytochrome c oxidase is influenced by local posttranslational modifications and lipid binding.
***Proc Natl Acad Sci USA,*** 2016, 113(29): 8230-8235.

202. K. K. Hoi, C. V. Robinson and M. T. Marty.
Unraveling the composition and behavior of heterogeneous lipid nanodiscs by mass spectrometry.
***Anal Chem,*** 2016, 88(12): 6199-6204.

203. K. Bugge, E. Papaleo, G. W. Haxholm, J. T. Hopper, C. V. Robinson, J. G. Olsen, K. Lindorff-Larsen and B. B. Kragelund.
A combined computational and structural model of the full-length human prolactin receptor.
***Nat Commun,*** 2016, 7: 11578.

204. M. Landreh, M. T. Marty, J. Gault and C. V. Robinson.
A sliding selectivity scale for limpid binding to membrane proteins.
***Curr Opin Struct Biol,*** 2016, 39: 54-60.

205. T. M. Allison, M. Landreh, J. L. Benesch and C. V. Robinson.
Low charge and reduced mobility of membrane protein complexes has implications for calibration of collision cross section measurements.
***Anal Chem***, 2016, 88(11): 5879-5884.

206. I. Liko, J. T. Hopper, T. M. Allison, J. L. Benesch and C. V. Robinson.
Negative ions enhance survival of membrane protein complexes.
***J Am Soc Mass Spectrom,*** 2016, 27(6): 1099-1104

207. M. Podobnik, P. Savory, N. Rojko, M. Kisovec, N. Wood, R. Hambley, J. Pugh, E. J. Wallace, L. McNeill, M. Bruce, I. Liko, T. M. Allison, S. Mehmood, N. Yilmaz, T. Kobayashi, R. J. Gilbert, C. V. Robinson, L. Jayasinghe and G. Anderluh.
Crystal structure of an invertebrate cytolysin pore reveals unique properties and mechanism of assembly.
***Nat Commun,*** 2016, 7:11598.

208. V. A. Jackson, S. Mehmood, M. Chavent, P. Roversi, M. Carrasquero, D. Del Toro, G. Seyit-Bremer, F. M. Ranaivoson, D. Comoletti, M. S. Sansom, C. V. Robinson, R. Klein and E. Seiradake.
Super-complexes of adhesion GPCRs and neural guidance receptors.
***Nat Commun,*** 2016, 7:11184.

209. R. Hendus-Altenburger, E. Pedraz-Cuesta, C. W. Olesen, E. Papaleo, J. A. Schnell, J. T. Hopper, C. V. Robinson, S. F. Pedersen and B. B. Kragelund.
The human Na(+)/H(+) exchanger 1 is a membrane scaffold protein for extracellular signal-regulated kinase 2.
***BMC Biol,*** 2016, 14: 31.

210. J. Gault, J. A. Donlan, I. Liko, J. T. Hopper, K. Gupta, N. Housden, W. B. Struwe, M. T. Marty, T. Mize, C. Bechara, Y. Zhu, B. Wu, C. Kleanthous, M. Belov, E. Damoc, A. Makarov and C. V. Robinson
High-resolution mass spectrometry of small molecules bound to membrane proteins.
***Nat Methods,*** 2016, 13(4): 333-336.
211. M. T. Marty, K. K. Hoi, J. Gault and C. V. Robinson
Probing the lipid annular belt by gas-phase dissociation of membrane proteins in nanodiscs.
***Angew Chem Int Ed***, 2016, 55(2): 550-554.

212. G. Veggiani, T. Nakamura, M. D. Brenner, R. V. Gayet, J. Yan, C. V. Robinson and M. Howarth.
Programmable polyproteams built using twin peptide superglues.
***Proc Natl Acad Sci USA,*** 2016, 113(5): 1202-1207.

213. Q. Wu, A. Paul, D. Su, S. Mehmood, T. K. Foo, T. Ochi, E. L. Bunting, B. Xia, C. V. Robinson, B. Wang and T. Blundell.
Structure of BRCA1-BRCT/Abraxas complex reveals phosphorylation-dependent BRCT dimerization at DNA damage sites.
***Mol Cell,*** 2016, 61(3): 434-448.

214. E. Reading, J. Munoz-Muriedas, A. D. Roberts, G. J. Dear, C. V. Robinson and C Beaumont.
Elucidation of drug metabolite structural isomers using molecular modeling coupled with ion mobility mass spectrometry.
***Anal Chem,*** 2016, 88(4): 2273-2280.

215. T. B. Parsons, W. B. Struwe, J. Gault, K. Yamamoto, T. A. Taylor, R. Raj, K. Wals, S. Mohammed, C. V. Robinson, J. L. P. Benesch and B. G. Davis.
Optimal synthetic glycosylation of a therapeutic antibody.
***Angew Chem Int Ed,*** 2016, 55(7): 2361-2367.

216. M. A. McDowell, J. Marcoux, G. McVicker, S. Johnson, Y. H. Fong, R. Stevens, L. A. Bowman, M. T. Degiacomi, J. Yan, A. Wise, M. E. Friede, J. L. P. Benesch, J. E. Deane, C. M. Tang, C. V. Robinson and S. M. Lea.
Characterisation of Shigella spa33 and Thermotoga FliM/N reveals a new model for C-ring assembly in T3SS.
***Mol Microbiol,*** 2016, 99(4): 749-766.

217. C. Schmidt, V. Beilsten-Edmands and C. V. Robinson.
Insights into eukaryotic translation initiation from mass spectrometry of macromolecular protein assemblies.
***J Mol Biol,*** 2016, 428(2 Pt A): 344-356.

## 2015

218. C. Pliotas, A. C. Dahl, T. Rasmussen, K. R. Mahendran, T. K. Smith, P. Marius, J. Gault, T. Banda, A. Rasmussen, S. Miller, C. V. Robinson, H. Bayley, M. S. Sansom, I. R. Booth, and J. H. Naismith.
The role of lipids in mechanosensation.
***Nat Struct Mol Biol***, 2015, 22(12): 991-998.

219. P. P. Mangione, S. Deroo, S. Ellmerich, V. Bellotti, S. Kolstoe, S. P. Wood, C. V. Robinson, M. D. Smith, G. A. Tennent, R. J. Broadbridge, C. E. Council, J. R. Thurston, V. A. Steadman, A. K. Vong, C. J. Swain, M. B. Pepys and G. W. Taylor.
Bifunctional crosslinking ligands for transthyretin.
***Open Biology***, 2015, 5(9): 150105.

220. M. Landreh, I. Liko, P. Uzdavinys, M. Coincoin, J. T. Hopper, D. Drew and C. V. Robinson.
Controlling release, unfolding and dissociation of membrane protein complexes in the gas phase cooling.
***Chem Commun***, 2015, 51(85): 15582-15584.

221. V. A. Mikhailov, F. Stahlberg, A. K. Clarke and C. V. Robinson.
Dual stoichiometry and subunit organization in the ClpP1/P2 protease from the cyanobacterium synechococcus elongatus.
***J Struct Biol***, 2015, 192(3): 519-527.

222. S. E. Ahnert, J. A. Marsh, H. Hernández, C. V. Robinson and S. A. Teichmann.
Principles of assembly reveal a periodic table of protein complexes.
***Science***, 2015, 350(6266): aaa2245.

223. V. E. Fadouloglou, H. T. Lin, G. Tria, H. Hernández, C. V. Robinson, D. I. Svergun and B. F. Luisi.
Maturation of 6S regulatory RNA to a highly elongated structure.
***FEBS J***, 2015, 282(23): 4548-4564.

224. J. A. Wojdyla, E. Cutts, R. Kaminska, G. Papadakos, J. T. Hopper, P. J. Stansfeld, D. Staunton, C. V. Robinson and C. Kleanthous.
Structure and function of the Escherichia coli Tol-Pal stator protein TolR.
***J. Biol Chem***, 2015, 290(44): 26675-26687.

225. T. Allison, E. Reading, I. Liko, A. J. Baldwin, A. Laganoski and C. V. Robinson.
Quantifying the stabilizing effects of protein-ligand interactions in the gas phase.
***Nat Commun***, 2015, 6: 8551.

226. V. Beilsten-Edmands, Y. Gordiyenko, J. C . K. Kung, S. Mohammed, C. Schmidt and C. V. Robinson.
eIF2 interactions with initiator tRNA and eIF2B are regulated by post-translational modifications and conformational dynamics.
***Cell Discovery***, 2015, 1: 15020.

227. J. Marcoux, P. P. Mangione, R. Porcari, M. T. Degiacomi, G. Verona, G. W. Taylor, S. Giorgetti, S. Raimondi, S. Sanglier-Cianférani, J. L. P. Benesch, C. Cecconi, M. M. Naqvi, J. D. Gillmore, P. N. Hawkins, M. Stoppini, C. V. Robinson, M. B. Pepys and V. Bellotti.
A novel mechano-enzymatic cleavage mechanism underlies transthyretin amyloidogenesis.
***EMBO Mol Med***, 2015, 7(10): 1337-1349.

228. C. Schmidt, V. Beilsten-Edmands and C. V. Robinson.
The joining of the Hsp90 and Hsp70 chaperone cycles yields transient interactions and stable intermediates: insights from mass spectrometry.
***Oncotarget***, 2015, 6(21): 18276-18281.

229. L. Lercher, R. Raj, N. A. Patel, J. Price, S. Mohammed, C. V. Robinson, C. J. Schofield and B. G. Davis.
Generation of a synthetic GlcNAcylated nucleosome reveals regulation of stability by H2A-Thr101 GlcNAcylation.
***Nat Commun***, 2015, 6: 7978.

230. P. E. Chappell, L. I. Garner, J. Yan, C. Metcalfe, D. Hatherley, S. Johnson, C. V. Robinson, S. M. Lea and M. H. Brown.
Structures of CD6 and its ligand CD166 give insight into their interaction.
***Structure***, 2015, 23(8): 1426-1436.

231. K. B. Rogala, N. J. Dynes, G. N. Hatzopoulos, J. Yan, S. K. Pong, C. V. Robinson, C. M. Deane,

P. Gönczy and I. Vakonakis.
The Caenorhabditis elegans protein SAS-5 forms large oligomeric assemblies critical for centriole formation.
***eLife***, 2015, 4: e07410.

232. E. Reading, T. A. Walton, I. Liko, M. T. Marty, A. Laganowsky, D. C. Rees and C. V. Robinson.
The effect of detergent, temperature and lipid on the oligomeric state of MscL constructs: Insights from mass spectrometry.
***Chem Biol***, 2015, 22(5): 593-603.

233. M. A. Halili, P. Bachu, F. Lindahl, C. Bechara, B. Mohanty, R. C. Reid, M. J. Scanlon, C. V. Robinson, D. P. Fairlie and J. L. Martin.
Small molecule inhibitors of disulphide bond formation by the bacterial DsbA-DsbB dual enzyme system.
***ACS Chem Biol***, 2015, 10(4): 957-964.

234. C. Bechara and C. V. Robinson
Different modes of lipid binding to membrane proteins probed by mass spectrometry
***J Am Chem Soc*** , 2015, 137(16): 5240-5247

235. E. G. Marklund, M. T. Degiacomi, C. V. Robinson, A. J. Baldwin and J. L. P. Benesch.
Collision cross sections for structural proteomics.
***Structure***, 2015, 23(4): 791-799.

236. E. Reading, I. Liko, T. M. Allison, J. L. P. Benesch, A. Laganowsky and C. V Robinson.
The role of the detergent micelle in preserving the structure of membrane proteins in the gas phase.
***Angew Chem Int Ed***, 2015, 54(15): 4577-4581.

237. L. Urnavicius, K. Zhang, A. G. Diamant, C. Motz, M. A. Schlager, M. Yu, N. A. Patel, C. V. Robinson and A. P. Carter.
The structure of the dynactin complex and its interaction with dynein.
***Science,*** 2015, 347(6229): 1441-1446.

238. M. T. Marty, A. J. Baldwin, E. G. Marklund, G. K. Hochberg, J. L. P. Benesch and C. V. Robinson.
Bayesian deconvolution of mass and ion mobility spectra: from binary interactions to polydisperse ensembles.
***Anal Chem***, 2015, 87(8): 4370-4376.

239. C. Bechara, A. Nöll, N. Morgner, M. T. Degiacomi, R. Tampé and C. V. Robinson.
A subset of annular lipids is linked to the flippase activity of an ABC transporter.
***Nat Chem***, 2015, 7(3): 255-262.

240. M. Landreh and C. V. Robinson.
A new window into the molecular physiology of membrane proteins.
***J Physiol***, 2015, 593(2): 355-362.

241. N. Morgner, C. Schmidt, V. Beilsten-Edmands, I. O. Ebong, N. A. Patel, E. M. Clerico, E. Kirschke, S. Daturpalli, S. E. Jackson, D. Agard and C. V. Robinson.
Hsp70 forms antiparallel dimers stabilized by post-translational modifications to position clients for transfer to Hsp90.
***Cell Rep,*** 2015, 11(5): 759-769.

242. S. Mehmood, T. M. Allison and C. V. Robinson.
Mass spectrometry of protein complexes: From origins to applications.

***Annu Rev Phys Chem,*** 2015, 66: 453-474.

243. T. Ochi, A. N. Blackford, J. Coates, S. Jhujh, S. Mehmood, N. Tamura, J. Travers, Q. Wu, V. M. Draviam, C. V. Robinson, T. L. Blundell and S. P. Jackson.
DNA repair. PAXX, a paralog of XRCC4 and XLF, interacts with Ku to promote DNA double-strand break repair.
***Science***, 2015, 347(6218): 185-188.

244. S. Trowitzsch, C. Viola, E. Scheer, S. Conic, V. Chavant, M. Fournier, G. Papai, I. O. Ebong, C. Schaffitzel, J. Zou, M. Haffke, J. Rappsilber, C. V. Robinson, P. Schultz, L. Tora and I. Berger.
Cytoplasmic TAF2-TAF8-TAF10 complex provides evidence for nuclear holo-TFIID assembly from preformed submodules.
***Nat Commun,*** 2015, 6: 6011.

245. A. Politis, C. Schmidt, E. Tjioe, A. M. Sandercock, K. Lasker, Y. Gordiyenko, D. Russel, A. Sali and C. V. Robinson.
Topological models of heteromeric protein assemblies from mass spectrometry: Application to the yeas eIF3:eIF5 complex.
***Chem Biol***, 2015, 22(1): 117-128.

246. L. Wawiórka, D. Krokowski, Y. Gordienko, D. Krowarsch, C. V. Robinson, I. Adam, N. Grankowski and M. Tchórzewski.
In vivo formation of Plasmodium falciparum ribosomal stalk – a unique mode of assembly without stable heterodimeric intermediates.
***Biochimica et Biophysica Acta***, 2015, 1850(1): 150-158.

247. L. A. Nematollahi, A. Garza-Garcia, C. Bechara, D. Esposito, N. Morgner, C. V. Robinson and P. C. Driscoll.
Flexible stoichiometry and asymmetry of the PIDDosome core complex by heteronuclear NMR spectroscopy and mass spectrometry.
***J Mol Biol***, 2015, 427(4): 737-752.

## 2014

248. Y. T. Lau, E. Reading, G. L. Hura, K. L. Tsai, A. Laganowsky, F. J. Asturias, J. A. Trainer, C. V. Robinson and T. O. Yates.
Structure of a designed protein cage that self-assembles into a highly porous cube.
***Nat Chem,*** 2014, 6(12), 1065-1071.

249. S. Mehmood, J. Marcoux, J. T. Hopper, T. M. Allison, I. Liko, A. J. Borysik and C. V. Robinson.
Charge reduction stabilizes intact membrane protein complexes for mass spectrometry.
***J Am Chem Soc***, 2014, 136(49), 17010-17012.

250. J. T. Hopper and C. V. Robinson.
Mass spectrometry quantifies protein interactions – from molecular chaperones to membrane porins.
***Angew Chem Int Ed***, 2014, 53(51): 14002-14015.

251. M. Zhou and C. V. Robinson.
Flexible membrane proteins: functional dynamics captured by mass spectrometry.
***Curr Opin Struct Biol,*** 2014, 28: 122-130.

252. C. Schmidt and C. V. Robinson.
A comparative cross-linking strategy to probe conformational changes in protein complexes.
***Nat Protoc***, 2014, 9(9): 2224-2236.

253. M. Fairhead, G. Veggiani, M. Lever, J. Yan, D. Mesner, C. V. Robinson, O. Duschek, P. A. van der Merwe and M. Howarth.
SpyAvidin hubs enable precise and ultrastable orthogonal nanoassembly.
***J Am Chem Soc***, 2014, 136(35): 12355-12363.

254. V. A. Mikhailov, T. H. Mize, J. L. Benesch and C. V. Robinson.
Mass-selective soft-landing of protein assemblies with controlled landing energies.
***Anal Chem***, 2014, 86(16): 8321-8328.

255. A. Laganowsky, E. Reading, T. M. Allison, M. B. Ulmschneider, M. T. Degiacomi, A. J. Baldwin and C. V. Robinson.
Membrane proteins bind lipids selectively to modulate their structure and function.
***Nature***, 2014, 510(7503): 172-175.

256. Y. Gordiyenko, C. Schmidt, M. D. Jennings, D. Matak-Vinkovic, G. D. Pavitt and C. V. Robinson.
eIF2B is a decameric guanine nucleotide exchange factor with a γ2ε2 tetrameric core.
***Nat Commun,*** 2014, 5: 3902.

257. M. B. van Eldijk, B. J. Pieters, V. A. Mikhailov, C. V. Robinson, J. C. M. van Hest and J. Mecinovic.
Catenane versus ring: do both asemblies of CS2 hydrolase exhibit the same stability and catalytic activity?
***Chem Sci***, 2014, 5(7): 2879-2884.

258. D. Hewitt, E. Marklund, D. J. Scott, C. V. Robinson and A. J. Borysik.
A hydrodynamic comparison of solution and gas phase proteins and their complexes.
***J Phys Chem B***, 2014, 118(29): 8489-8495.

259. J. Wolf, E. Valkov, M. D Allen, B. Meineke, Y. Gordiyenko, S. H. McLaughlin, T. M. Olsen, C. V. Robinson, M. Bycroft, M. Stewart and L. A. Passmore.
Structural basis for Pan3 binding to Pan2 and its function in mRNA recruitment and deadenylation.
***EMBO J,*** 2014, 33(14): 1514-1526.

260. J. Marcoux, A. Politis, D. Rinehart, D. P. Marshall, M. I. Wallace, L. K. Tamm and C. V. Robinson.
Mass spectrometry defines the C-terminal dimerisation domain and enables modeling of the structure of full-length OmpA.
***Structure,*** 2014, 22(5): 781-790.

261. M. Zhou, A. Politis, R. B. Davies, I. Liko, K.–J. Wu, A. Stewart, D. Stock and C. V. Robinson.
Ion mobility mass spectrometry of a rotary ATPase reveals ATP-induced reduction in conformational flexibility.
***Nat Chem,*** 2014, 6(3): 208-215.

262. N. C. Wortham, M. Martinez, Y. Gordiyenko, C. V. Robinson and C. G. Proud.
Analysis of the subunit organization of the eIF2 complex reveals new insights into its structure and regulation.
***FASEB J,*** 2014, 28(5): 2225-37.

263. I. Mathavan, S. Zirah, S. Mehmood, H. G. Choudhury, C. Goulard, Y. Li, C. V. Robinson, S. Rebuffat and K. Beis.

Structural basis for hijacking siderophore receptors by antimicrobial lasso peptides.
***Nat Chem Biol,*** 2014, 10(5): 340-342.

264. G. K. Hochberg, H. Ecroyd, C. Liu, D. Cox, D. Cascio, M. R. Sawaya, M. P. Collier, J. Stroud, J. A. Carver, A. J. Baldwin, C. V. Robinson, D. S. Eisenberg, J. L. Benesch and A. Laganowsky.
The structured core domain of alpha B-crystallin can prevent amyloid fibrillation and associated toxicity.
***Proc Natl Acad Sci USA,*** 2014, 111(16): 1562-1570.

265. E. Torreira, A. R. Seabra, H. Marriott, M. Zhou, O. Llorca, C. V. Robinson, H. G. Carvalho, C. Fernández-Tornero and P. J. Pereira.
The structures of cytosolic and plastid-located glutamine synthetases from *Medicago truncatula* reveal a common and dynamic architecture.
***Acta Crystallogr,*** 2014, 70(4): 981-993.

266. A. Politis, F. Stengel, Z. Hall, H. Hernández, A. Leitner, T. Walzthoeni, C. V. Robinson and R. Aebersold.
A mass spectrometry-based hybrid method for structural modelling of protein complexes.
***Nat Methods,*** 2014, 11(4): 403-406.

267. C. A. Ewens, S. Panico, P. Kloppsteck, C. McKeown, I. O. Ebong, C. V. Robinson, X. Zhang and P. S. Freemont.
The p97-FAF1 protein complex reveals a common mode of p97 adaptor binding.
***J Biol Chem,*** 2014, 289(17): 12077-12084.

268. A. Politis, C. Schmidt, E. Tjioe, A Sali and C. V. Robinson.
Determining the 3D topologies of heteromeric protein assemblies by a mass-spectrometry based hybrid approach.
***Biophys J***, 2014, 106: 466a.

269. P. P. Mangione, R. Procari, J. D. Gillmore, G. W. Taylor, G. A. Tennent, P. N. Hawkins, S. P. Wood, M. B. Pepys, V. Bellotti, M. Porcari, S. Giorgetti, L. Marchese, S. Raymondi, M. Stoppini, P. Pucci, M. Monti, L. C. Serpell, W. Chen, A. Relini, J. Marcoux, C. V. Robinson and I. R. Clatworthy.
Proteolytic cleavage of Ser52Pro variant transthyretin triggers its amyloid fibrillogenesis.
***Proc Natl Acad Sci USA***, 2014, 111(4): 1539-1544.

270. N. Zhang, E. Lawton, M. Buck, Y. Gordiyenko, C. V. Robinson and N. Joly.
Subunit dynamics and nucleotide-dependent asymmetry of an AAA transcription complex.
***J Mol Biol***, 2014, 426(1): 71-83.

271. C. Schmidt and C. V. Robinson.
Dynamic protein ligand interactions – insights from mass spectrometry.
***FEBS J***, 2014, 281(8): 1950-1964.

## 2013

272. M. R. Puno, N. A. Patel, S. G. Møller, C. V. Robinson, P. C. E. Moody and M. Odell.
Structure of Cu(I)-bound DJ-1 reveals a biscysteinate metal binding site at the homodimer interface: Insights into mutational inactivation of DJ-1 in Parkinsonism.
***J Am Chem Soc***, 2013, 135(43): 15974-15977.

273. J. T. Hopper, Y. T. Yu, D. Li, A. Raymond, M. Bostock, I. Liko, V. Mikhailov, A. Laganowsky, J. L. Benesch, M. Caffrey, D. Nietlispach and C. V. Robinson.
Detergent-free mass spectrometry of membrane protein complexes.
***Nat Methods***, 2013, 10(12): 1206-1208.

274. C. Rouillon, M. Zhou, J. Zhang, A. Politis, V. Beilsten-Edmands, G. Cannone, S. Graham, C. V. Robinson, L. Spagnolo and M. F. White.
Structure of the CRISPR interface complex CSM reveals key similarities with cascade.
***Mol Cell***, 2013, 52(1): 124-134.

275. C. Behrens, B. Binotti, C. Schmidt, C. V. Robinson, J. J. Chua and K. Kühnel.
Crystal structure of the human short coiled coil protein and insights into SCOC-FEZ1 complex formation.
***PLoS One***, 2013, 8(10): e76355.

276. R. Parkhouse, I. O. Ebong, C. V. Robinson and T. P. Monie.
The N-terminal region of the human autophagy protein ATG16L1 contains a domain that folds into a helical structure consistent with formation of a coiled-coil.
***PLoS One***, 2013, 8(9): e76237.

277. J. Marcoux and C. V. Robinson.
Twenty years of gas phase structural biology.
***Structure***, 2013, 21(9): 1541-1550.

278. S. L. Rouse, J. Marcoux, C. V. Robinson and M. S. Sansom.
Dodecyl maltoside protects membrane proteins *in vacuo*.
***Biophys J***, 2013, 105(3): 648-656.

279. E. de Genst, P. H. Chan, E. Pardon, S. T. Hsu, J. R. Kumita, J. Christodoulou, L. Menzer, D. Y. Chirgadze, C. V. Robinson, S. Muyldermans, A. Matagne, L. Wyns, C. M. Dobson and M. Dumoulin.
A nanobody binding to non-amyloidogenic regions of the protein human lysozyme enhances partial unfolding but inhibits amyloid fibril formation.
***J Phys Chem B,*** 2013, 117(42): 13245-13258.

280. C. J. Millard, P. J. Watson, I. Celardo, Y. Gordiyenko, S. M Cowley, C. V. Robinson, L. Fairall and J. W. R. Schwabe.
Class 1 HDACs share a common mechanism of regulation by inositol phosphates.
***Mol Cell***, 2013, 1(51): 57-67.

281. M. B. van Eldijk, I. van Leewen, V. A. Mikhailov, L. Neijenhuis, H. R. Harhangi, J. C. van Hest, M. S. Jetten, H. J. op den Camp, C. V. Robinson and J. Mecinovic.
Evidence that the catenane form of CS2 hydrolase is not an artefact.
***Chem Commun***, 2013, 49(71): 7770-7772.

282. Z. Hall, H. Hernández, J. A Marsh, S. A Teichmann and C. V. Robinson.
The role of salt bridges, charge density and subunit flexibility in determining disassembly routes of protein complexes.
***Structure***, 2013, 21(8): 1325-1337.

283. N. G. Housden, J. T. Hopper, N. Lukoyanova, D. Rodriguez-Larrea, J. A. Wojdyla, A. Klein, R. Kaminska, H. Bayley, H. R. Saibil, C. V. Robinson and C. Kleanthous.
Intrinsically disordered protein threads through the bacterial outer-membrane porin OmpF.
***Science,*** 2013, 340(6140): 1570-1574.

284. C. Schmidt, M. Zhou, H. Marriott, N. Morgner, A. Politis and C. V. Robinson.
Comparative cross-linking and mass spectrometry of an intact F-type ATPase suggest a role for phosphorylation.
***Nat Commun***, 2013, 4: 1985.

285. J. Marcoux, S. C. Wang, A. Politis, E. Reading, J. Ma, P. C. Biggin, M. Zhou, H. Tao, Q. Zhang, G. Chang, N. Morgner and C. V. Robinson.
Mass spectrometry reveals synergistic effects of nucleotides, lipids and drugs binding to a multidrug resistance efflux pump.
***Proc Natl Acad Sci USA***, 2013, 24(110): 9704-9709.

286. A. Politis, A. Y Park, Z. Hall, B. T. Ruotolo and C. V. Robinson.
Integrative modelling coupled with ion mobility mass spectrometry reveals structural features of the clamp loader in complex with single-stranded DNA binding protein.
***J Mol Biol***, 2013, 425(23): 4790-4801.

287. A. J. Borysik, D. J. Hewitt and C. V. Robinson.
Detergent release prolongs the lifetime of native-like membrane protein conformations in the gas phase.
***J Am Chem Soc***, 2013, 135(16): 6078-6083.

288. J. A. Marsh, H. Hernández, Z. Hall, S. E. Ahnert, T.Perica, C. V. Robinson and S. A. Teichmann.
Protein complexes are under evolutionary selection to assemble via ordered pathways.
***Cell***, 2013, 153(2): 461-470.

289. A. Laganowsky, E. Reading, J. T. Hopper and C. V. Robinson.
Mass spectrometry of intact membrane protein complexes.
***Nat Protoc***, 2013, 8(4): 639-651.

290. S. C. Lee, B. C. Bennett, W. X. Hong, Y. Fu, K. A. Baker, J. Marcoux, C. V. Robinson, A. B. Ward, J. R. Halpert, R. C. Stevens, C. D. Stout, M. J. Yeager and Q. Zhang.
Steroid-based facial amphiphiles for stabilization and crystallization of membrane proteins.
***Proc Natl Acad Sci USA,*** 2013, 110(13): E1203-E1211.

291. D. Rozbesky, Z. Sovova, J. Marcoux, P. Man, R. Ettrich, C. V. Robinson and P. Novak.
Structural model of lymphocyte receptor NKR-P1C revealed by mass spectrometry and molecular modeling.
***Anal Chem***, 2013, 85(3): 1597-1604.

292. J. A. Marsh, H. Hernández, Z. Hall, S. E. Ahnert, T. Perica, C. V. Robinson and S. A. Teichmann.
Structural and evolutionary dynamics facilitate ordered protein complex assembly.
***Biophys J***, 2013, 104: 391A.

293. K. Pagel, E. Natan, Z. Hall, A. R. Fersht and C. V. Robinson.
Intrinsically disordered p53 and its complexes populate compact conformations in the gas phase.
***Angew Chem Int Ed***, 2013, 52(1): 361-365.

294. F. A. Aprile, A. Dhulesia, F. Stengel, C. Roodveldt, J. L. Benesch, P. Tortora, C. V. Robinson, X. Salvatella, C. M. Dobson and N. Cremades.
Hsp70 oligomerization is mediated by an interaction between the interdomain linker and the substrate-binding domain.
***PLoS One***, 2013, 8(6): e67961.

295. N. P. Barrera, M. Zhou and C. V. Robinson.
The role of lipids in defining membrane protein interactions: insights from mass spectrometry.
***Trends Cell Biol***, 2013 23(1): 1–8.

## 2012

296. S. E. Rollauer, M. J. Tarry, J. E. Graham, M. Jaaskelainen, F. Jager, S. Johnson, M. Krehenbrink, S. M. Liu, M. J. Lukey, J. Marcoux, M. A. McDowell, F. Rodriguez, P. Roversi, P. J Stansfeld, C. V. Robinson, M. S. P. Sansom, T. Palmer, M. Hogbom, B. C. Berks and S. M. Lea.
Structure of the Tat C core of the twin-arginine protein transport system.
***Nature***, 2012, 492(7428): 210-214.

297. M. J. Webb, S. Deroo, C. V. Robinson and N. Bampos.
Host-guest interactions in acid-porphyrin complexes.
***Chem Commun***, 2012, 48(75): 9358-9360.

298. F. Stengel, R. Aebersold and C. V. Robinson.
Joining forces: Integrating proteomics and cross-linking with the mass spectrometry of intact complexes.
***Mol Cell Proteomics***, 2012, 11(3): R111.014027.

299. R. Salbo, M. F. Bush, H. Naver, I. Campuzano, C. V. Robinson, I. Pettersson, T. J. D.Jorgensen and K. F. Haselmann.
Traveling-wave ion mobility mass spectrometry of protein complexes: accurate calibrated collision cross-sections of human insulin oligomers.
***Rapid Commun Mass Spectrom***, 2012, 26(10): 1181-1193.

300. C. V. Robinson.
Finding the right balance - a personal journey from individual proteins to membrane-embedded motors based on a lecture delivered at the 36th FEBS Congress in Torino, Italy, June 2011.
***FEBS J***, 2012, 279(5): 663-677.

301. O. W. Nadeau, L. A Lane, D. Xu, J. Sage, T. S. Priddy, A. Artigues, M. T. Villar, Q. Yang, C. V. Robinson, Y. Zhang and G. M. Carlson.
Structure and location of the regulatory beta subunits in the (alpha beta gamma delta)(4) phosphorylase kinase complex.
***J Biol Chem***, 2012, 287(44): 36651-36661.

302. N. Morgner and C. V. Robinson.
Linking structural change with functional regulation - insights from mass spectrometry.
***Curr Opin Struct Biol***, 2012: 22(1): 44-51.

303. N. Morgner and C. V. Robinson.
Massign: An assignment strategy for maximizing information from the mass spectra of heterogeneous protein assemblies.
***Anal Chem***, 2012, 84(6): 2939-2948.

304. N. Morgner, F. Montenegro, N. P. Barrera and C. V. Robinson.
Mass spectrometry-from peripheral proteins to membrane motors.
***J Mol Biol***, 2012, 423(1): 1-13.

305. L. A. Lane, O. W. Nadeau, G. M. Carlson and C. V. Robinson.
Mass spectrometry reveals differences in stability and subunit interactions between activated and nonactivated conformers of the (alpha beta gamma delta)(4) phosphorylase kinase complex.
***Mol Cell Proteomics,*** 2012, 11(12): 1768-1776.

306. A. I. Lamond, M. Uhlen, S. Horning, A. Makarov, C. V. Robinson, L. Serrano, F. U. Hartl, W. Baumeister, A. K. Werenskiold, J. S. Andersen, O. Vorm, M. Linial, R. Aebersold and M. Mann.
Advancing cell biology through proteomics in space and time (PROSPECTS).
***Mol Cell Proteomics,*** 2012, 11(3): O112.017731.

307. Z. Hall and C. V. Robinson.
Do charge state signatures guarantee protein conformations?
***J Am Soc Mass Spectrom,*** 2012, 23(7): 1161-1168.

308. Z. Hall, A. Politis and C. V. Robinson.
Structural modeling of heteromeric protein complexes from disassembly pathways and ion mobility-mass spectrometry.
***Structure,*** 2012, 20(9): 1596-1609.

309. Z. Hall, A. Politis, M. F. Bush, L. J. Smith and C. V. Robinson.
Charge-state dependent compaction and dissociation of protein complexes: Insights from ion mobility and molecular dynamics.
***J Am Chem Soc,*** 2012, 134(7): 3429-3438.

310. W. Ge, A. Wolf, T. S. Feng, C. H. Ho, R. Sekirnik, A. Zayer, N. Granatino, M. E. Cockman, C. Loenarz, N. D. Loik, A. P. Hardy, T. D. W. Claridge, R. B. Hamed, R. Chowdhury, L. Z. Gong, C. V. Robinson, D. C. Trudgian, M. Jiang, M. M. Mackeen, J. S. McCullagh, Y. Gordiyenko, A. Thalhammer, A. Yamamoto, M. Yang, P. Liu-Yi, Z. H. Zhang, M. Schmidt-Zachmann, B. M. Kessler, P. J. Ratcliffe, G. M. Preston, M. L. Coleman and C. J. Schofield.
Oxygenase-catalyzed ribosome hydroxylation occurs in prokaryotes and humans.
***Nat Chem Biol,*** 2012, 8(12): 960-962.

311. J. Freeke, M. F. Bush, C. V. Robinson and B. T. Ruotolo.
Gas-phase protein assemblies: Unfolding landscapes and preserving native-like structures using noncovalent adducts.
***Chem Phys Lett,*** 2012, 524: 1-9.

312. M. Q. Fan, T. Rao, E. Zacco, M. T. Ahmed, A. Shukla, A. Ojha, J Freeke, C. V. Robinson, J. L.P. Benesch and P. A. Lund.
The unusual mycobacterial chaperonins: evidence for in vivo oligomerization and specialization of function.
***Mol Microbiol,*** 2012, 85(5): 934-944.

313. S. Deroo, S. J. Hyung, J. Marcoux, Y. Gordiyenko, R. K. Koripella, S. Sanyal and C. V. Robinson.
Mechanism and rates of exchange of L7/L12 between ribosomes and the effects of binding EF-G.
***ACS Chem Biol,*** 2012, 7(6): 1120-1127.

314. I. Campuzano, M. F. Bush, C. V. Robinson, C. Beaumont, K. Richardson, H. Kim and H. I. Kim.
Structural characterization of drug-like compounds by ion mobility mass spectrometry: comparison of theoretical and experimentally derived nitrogen collision cross sections.
***Anal Chem,*** 2012, 84(2): 1026-1033.

315. C. R. Buttner, M. Chechik, M. Ortiz-Lombardia, C. Smits, I. O. Ebong, V. Chechik, G. Jeschke, E. Dykeman, S. Benini, C. V. Robinson, J. C. Alonso and A. A. Antson.
Structural basis for DNA recognition and loading into a viral packaging motor.
***Proc Natl Acad Sci USA,*** 2012, 209(3): 811-816.

316. M. F. Bush, I. Campuzano and C. V. Robinson.
Ion mobility mass spectrometry of peptide ions: Effects of drift gas and calibration strategies.
***Anal Chem,*** 2012, 84(16): 7124-7130.

317. G. D. Brand, R. Salbo, T. J. D. Jorgensen, C. Bloch, E. B. Erba, C. V. Robinson, I. Tanjoni, A. M. Moura-da-Silva, P. Roepstorff, G. B. Domont, J. Perales, R. H. Valenteh and A. G. C. Neves-Ferreirah.
The interaction of the antitoxin DM43 with a snake venom metalloproteinase analyzed by mass spectrometry and surface plasmon resonance.
***J Mass Spectrom,*** 2012, 47(5): 567-573.

318. A. J. Borysik and C. V. Robinson.
The 'sticky business' of cleaning gas-phase membrane proteins: a detergent oriented perspective.
***Phys Chem Chem Phys,*** 2012, 14(42): 14439-14449.

319. A. J. Borysik and C. V. Robinson.
Formation and dissociation processes of gas-phase detergent micelles.
***Langmuir,*** 2012, 28(18): 7160-7167.

## 2011

320. M. Zhou, N. Morgner, N. P. Barrera, A. Politis, S. C. Isaacson, D. Matak-Vinkovic, T. Murata, R.A. Bernal, D. Stock and C. V. Robinson.
Mass spectrometry of intact V-type ATPases reveals bound lipids and the effects of nucleotide binding.
***Science,*** 2011, 334(6054): 380-385.

321. Q. Wu, T. Ochi, D. Matak-Vinkovic, C. V. Robinson, D. Y. Chirgadze and T. L. Blundell.
Non-homologous end-joining partners in a helical dance: structural studies of XLF-XRCC4 interactions.
***Biochem Soc Trans,*** 2011, 39: 1387-1392.

322. M. van Breugel, M. Hirono, A. Andreeva, H. Yanagisawa, S. Yamaguchi, Y. Nakazawa, N. Morgner, M. Petrovich, I. O. Ebong, C. V. Robinson, C. M. Johnson, D. Veprintsev and B. Zuber.
Structures of SAS-6 suggest its organization in centrioles.
***Science,*** 2011, 331(6021): 1196-1199.

323. Y. Tian, D. K. Simanshu, M. Ascano, R. Diaz-Avalos, A. Y. Park, S. A. Juranek, W. J. Rice, Q. Yin, C. V. Robinson, T. Tuschl and D. J. Patel.
Multimeric assembly and biochemical characterization of the Trax-translin endonuclease complex.
***Nat Struct Mol Biol,*** 2011, 18(6): 658-664.

324. M. Sharon and C. V. Robinson.
A quantitative perspective on hydrophobic interactions in the gas-phase.
***Curr Proteomics,*** 2011, 8(1): 47-58.

325. M. Sharon and C. V. Robinson
Peeling back the layers of complexity.
***Curr Opin Struct Biol,*** 2011, 21(5): 619-621.

326. A. Schreiber, F. Stengel. Z. G. Zhang, R. I. Enchev, E. H. Kong, E. P. Morris, C. V. Robinson, P. C. da Fonseca and D. Barford.
Structural basis for the subunit assembly of the anaphase-promoting complex.
***Nature,*** 2011, 470(7333): 227-232.

327. L. Sanchez, S. Madurga, T. Pukala, M. Vilaseca, C. Lopez-Iglesias, C. V. Robinson, E. Giralt and N. Carulla.
A beta 40 and A beta 42 amyloid fibrils exhibit distinct molecular recycling properties.
***J Am Chem Soc,*** 2011, 133(17): 6505-6508.

328. E. Sakata, F. Stengel, K. Fukunaga, M. Zhou, Y. Saeki, F. Forster, W. Baumeister, K. Tanaka and C. V. Robinson.
The catalytic activity of Ubp6 enhances maturation of the proteasomal regulatory particle.
***Mol Cell,*** 2011, 42(5): 637-649.

329. C. V. Robinson.
John Fenn (1917-2010) OBITUARY.
***Nature,*** 2011, 469(7330): 300.

330. C. V. Robinson.
Dudley Williams, May 25, 1937 - November 3, 2010 OBITUARY.
***J Am Soc Mass Spectrom,*** 2011, 22(4): 791-792.

331. C. V. Robinson.
In pursuit of female chemists.
***Nature,*** 2011, 476(7360): 273-275.

332. A. Y. Park and C. V. Robinson.
Protein-nucleic acid complexes and the role of mass spectrometry in their structure determination.
***Crit Rev Biochem Mol Biol,*** 2011, 46(2): 152-164.

333. M. Noda, S. Uchiyama, A. R. McKay, A. Morimoto, S. Misawa, A. Yoshida, H. Shimahara, H. Takinowaki, S. Nakamura, Y. Kobayashi, S. Matsunaga, T. Ohkubo, C. V. Robinson and K. Fukui.
Assembly states of the nucleosome assembly protein 1 (NAP-1) revealed by sedimentation velocity and non-denaturing MS.
***Biochem J***, 2011, 436: 101-112.

334. E. Natan, C. Baloglu, K. Pagel, S. M. V. Freund, N. Morgner, C. V. Robinson, A. R. Fersht and A. C. Joerger.
Interaction of the p53 DNA-binding domain with its N-terminal extension modulates the stability of the p53 tetramer.
***J Mol Biol,*** 2011, 409(3): 358-368.

335. I. G. Munoz, H. Yebenes, M. Zhou, P. Mesa, M. Serna, A. Y. Park, E. Bragado-Nilsson, A. Beloso de, G. Carcer, M. Malumbres, C. V. Robinson, J. M. Valpuesta and G. Montoya.
Crystal structure of the open conformation of the mammalian chaperonin CCT in complex with tubulin.
***Nat Struct Mol Biol,*** 2011, 18(1): 14-19.

336. L. A. Lane, C. Fernandez-Tornero, M. Zhou, N. Morgner, D. Ptchelkine, U. Steuerwald, A. Politis, D. Lindner, J. Gvozdenovic, A. C. Gavin, C. W. Muller and C. V. Robinson.
Mass spectrometry reveals stable modules in holo- and apo- RNA Polymerases I and III.
***Structure,*** 2011, 19(1): 90-100.

337. T. K. Janganan, L. Zhang, V. N. Bavro, D. Matak-Vinkovic, N. P. Barrera, M. F. Burton, P. G. Steel, C. V. Robinson, M. I Borges-Walmsley and A. R. Walmsley.
Opening of the outer membrane protein channel in tripartite efflux pumps is induced by interaction with the membrane fusion partner.
***J Biol Chem,*** 2011, 286(7): 5484-5493.

338. T. K. Janganan, V. N. Bavro, L. Zhang, D. Matak-Vinkovic, N. P. Barrera, C. Venien-Bryan, C. V. Robinson, M. I. Borges-Walmsley and A. R. Walmsley
Evidence for the assembly of a bacterial tripartite multidrug pump with a stoichiometry of 3:6:3.
***J Biol Chem,*** 2011, 286(30): 26900-26912.

339. C. J. Hogan, B. T. Ruotolo, C. V. Robinson and J. F. de la Mora.
Tandem differential mobility analysis-mass spectrometry reveals partial gas-phase collapse of the GroEL complex.
***J Phys Chem B,*** 2011, 115(13): 3614-3621.

340. M. G. Gold, F. Stengel, P. J. Nygren, C. R. Weisbrod, J. E. Bruce, C. V. Robinson, D. Barford and J. D. Scott.
Architecture and dynamics of an A-kinase anchoring protein 79 (AKAP79) signaling complex.
***Proc Natl Acad Sci USA,*** 2011, 108(16): 6426-6431.

341. I. O. Ebong, N. Morgner, M. Zhou, M. A. Saraiva, S. Daturpalli, S. E. Jackson and C. V. Robinson.
Heterogeneity and dynamics in the assembly of the Heat Shock Protein 90 chaperone complexes.
***Proc Natl Acad Sci USA,*** 2011, 108(44): 17939-17944.

342. V. M. Bolanos-Garcia, T. Lischetti, D. Matak-Vinkovic, E. Cota, P. J. Simpson, D. Y. Chirgadze, D. R. Spring, C. V. Robinson, J. Nilsson and T. L. Blundell.
Structure of a Blinkin-BUBR1 complex reveals an interaction crucial for kinetochore-mitotic checkpoint regulation via an unanticipated binding site.
***Structure,*** 2011, 19(11): 1691-1700.

343. D. Belorgey, J. A. Irving, U. I. Ekeowa, J. Freeke, B. D. Roussel, E. Miranda, J. Perez, C. V. Robinson, S. J. Marciniak, D. C. Crowther, C. H. Michel and D. A. Lomas.
Characterisation of serpin polymers *in vitro* and *in vivo*.
***Methods,*** 2011, 53(3): 255-266.

344. N. P. Barrera and C. V. Robinson.
Advances in the mass spectrometry of membrane proteins: From individual proteins to intact complexes.
***Annu Rev Biochem,*** 2011, 80: 247-271.

345. A. J. Baldwin, H. Lioe, C. V. Robinson, L. E. Kay and J. L. P. Benesch.
Alpha B-crystallin polydispersity is a consequence of unbiased quaternary dynamics.
***J Mol Biol,*** 2011, 413(2): 297-309.

346. E. Arbely, E. Natan, T. Brandt, M. D. Allen, D. B. Veprintsev, C. V. Robinson, J. W. Chin, A. C. Joerger and A. R. Fersht.
Acetylation of lysine 120 of p53 endows DNA-binding specificity at effective physiological salt concentration.
***Proc Natl Acad Sci USA,*** 2011, 108(20): 8251-8256.

## 2010

347. M. Zhou and C. V. Robinson.
When proteomics meets structural biology.
***Trends Biochem Sci,*** 2010, 35(9): 522-529.

348. S. C. Wang, A. Politis, N. Di Bartolo, V. N. Bavro, S. J. Tucker, P. J. Booth, N. P. Barrera and C. V. Robinson.
Ion mobility mass spectrometry of two tetrameric membrane protein complexes reveals compact structures and differences in stability and packing.
***J Am Chem Soc,*** 2010, 132(44): 15468-15470.

349. S. C. Wang, Y. J. Li, C. V. Robinson and D. B. Zamble.
Potassium is critical for the Ni(II)-responsive DNA-binding activity of Escherichia coli NikR.
***J Am Chem Soc,*** 2010, 132(5): 1506-1507.

350. L. W. Wang, J. K. Yang, V. Kabaleeswaran, A. J. Rice, A. C. Cruz, A. Y. Park, Q. A. Yin, E. Damko, S. B. Jang, S. Raunser, C. V. Robinson, R. M. Siegel, T. Walz and H. Wu.
The Fas-FADD death domain complex structure reveals the basis of DISC assembly and disease mutations.
***Nat Struct Mol Biol,*** 2010, 17(11): 1324-1329.

351. F. Stengel, A. J. Baldwin, A. J. Painter, N. Jaya, E. Basha, L. E. Kay, E. Vierling, C. V. Robinson and J. L. P. Benesch.
Quaternary dynamics and plasticity underlie small heat shock protein chaperone function.
***Proc Natl Acad Sci USA,*** 2010, 107(5): 2007-2012.

352. U. Rauwald, F. Biedermann, S. Deroo, C. V. Robinson and O. A. Scherman.
Correlating solution binding and ESI-MS stabilities by incorporating solvation effects in a confined cucurbit [8] uril system.
***J Phys Chem B,*** 2010, 114(26): 8606-8615.

353. A. Politis, A. Y. Park, S. J. Hyung, D. Barsky, B. T. Ruotolo and C. V. Robinson.
Integrating ion mobility mass spectrometry with molecular modelling to determine the architecture of multiprotein complexes.
***PLoS One,*** 2010, 5(8): e12080.

354. A. Y. Park, S. Jergic, A. Politis, B. T. Ruotolo, D. Hirshberg, L. L. Jessop, J. L. Beck, D. Barsky, M. O'Donnell, N. E. Dixon and C. V. Robinson.
A single subunit directs the assembly of the Escherichia coli DNA sliding clamp loader.
***Structure,*** 2010, 18(3): 285-292.

355. K. Pagel, S. J. Hyung, B. T. Ruotolo and C. V. Robinson.
Alternate dissociation pathways identified in charge-reduced protein complex ions.
***Anal Chem,*** 2010, 82(12): 5363-5372.

356. S. Nurmohamed, A. R. McKay, C. V. Robinson and B. F. Luisi.
Molecular recognition between Escherichia coli enolase and ribonuclease E.
***Acta Crystallogr D,*** 2010, 66: 1036-1040.

357. P. P. Mangione, V. Bellotti, S. Deroo, G. W. Taylor, M. G. McCammon, C. V. Robinson, G. A. Tennent, M. D. Smith, A. J. Morrison, A. J. A. Cobb, A. Coyne, S. V. Ley, S. W. Wood and M. B. Pepys.
Novel palindromic ligands cementing the native quaternary structure of transthyretin.
***Amyloid,*** 2010, 17: 49-49.

358. A. Laganowsky, J. L. P. Benesch, M. Landau, L. L. Ding, M. R. Sawaya, D. Cascio, Q. L. Huang, C. V. Robinson, J. Horwitz and D. Eisenberg.
Crystal structures of truncated alphaA and alphaB crystallins reveal structural mechanisms of polydispersity important for eye lens function.
***Protein Sci,*** 2010, 19(5): 1031-1043.

359. S. E. Kolstoe, P. P. Mangione, V. Bellotti, G. W. Taylor, G. A. Tennent, S. Deroo, A. J. Morrison, A. J. A. Cobb, A. Coyne, M. G. McCammon, T. D. Warner, J. Mitchell, R. Gill, M. D. Smith, S. V. Ley, C. V. Robinson, S. P. Wood and M. B. Pepys.
Trapping of palindromic ligands within native transthyretin prevents amyloid formation.
***Proc Natl Acad Sci USA,*** 2010, 107(47): 20483-20488.

360. P. Kafasla, N. Morgner, C. V. Robinson and R. J. Jackson.
Polypyrimidine tract-binding protein stimulates the poliovirus IRES by modulating eIF4G binding.
***EMBO J,*** 2010, 29(21): 3710-3722.

361. C. Y Janda, J. Li, C. Oubridge, H. Hernández, C. V. Robinson and K. Nagai.
Recognition of a signal peptide by the signal recognition particle.
***Nature,*** 2010, 465: 507-510.

362. S. J. Hyung, S. Deroo and C. V. Robinson.
Retinol and retinol-binding protein stabilize transthyretin via formation of retinol transport complex.
***ACS Chem Biol,*** 2010, 5(12): 1137-1146.

363. C. L. Hagan, R. J. K. Johnson, A. Dhulesia, M. Dumoulin, J. Dumont, E. De Genst, J. Christodoulou, C. V. Robinson, C. M. Dobson and J. R. Kumita.
A non-natural variant of human lysozyme (I59T) mimics the in vitro behaviour of the I56T variant that is responsible for a form of familial amyloidosis.
***Protein Eng Des Sel,*** 2010, 23(7): 499-506.

364. P. Grela, D. Krokowski, Y. Gordiyenko, D. Krowarsch, C. V. Robinson, J. Otlewski, N. Grankowski and M. Tchorzewski.
Biophysical properties of the eukaryotic ribosomal stalk.
***Biochemistry,*** 2010, 49(5): 924-933.

365. M. W. Gorna, Z. Pietras, Y. C. Tsai, A. J. Callaghan, H. Hernández, C. V. Robinson and B. F. Luisi.
The regulatory protein RraA modulates RNA-binding and helicase activities of the E. coli RNA degradosome.
***RNA,*** 2010, 16(3): 553-562.

366. Y. Gordiyenko, H. Videler, M. Zhou, A. R. Mckay, P. Fucini, E. Biegel, V. Muller and C .V. Robinson
Mass spectrometry defines the stoichiometry of ribosomal stalk complexes across the phylogenetic Tree.
***Mol Cell Proteomics,*** 2010, 9(8): 1774-1783.

367. J. Freeke, C. V. Robinson and B. T. Ruotolo
Residual counter ions can stabilise a large protein complex in the gas phase.
***Int J Mass Spectrom,*** 2010, 298(1-3): 91-98.

368. D. Esposito, A. Sankar, N. Morgner, C. V. Robinson, K. Rittinger and P. C. Driscoll.
Solution NMR investigation of the CD95/FADD homotypic death domain complex suggests lack of engagement of the CD95 C terminus.
***Structure,*** 2010, 18(10): 1378-1390.

369. E. B. Erba, B. T. Ruotolo, D. Barsky and C. V. Robinson.
Ion mobility-mass spectrometry reveals the influence of subunit packing and charge on the dissociation of multiprotein complexes.
***Anal Chem,*** 2010, 82(23): 9702-9710.

370. U. I. Ekeowa, J. Freeke, E. Miranda, B. Gooptu, M. F. Bush, J. Perez, J. Teckman, C. V. Robinson and D. A. Lomas.
Defining the mechanism of polymerization in the serpinopathies.
***Proc Natl Acad Sci USA,*** 2010, 107(40): 17146-17151.

371. N. Carulla, M. Zhou, E. Giralt, C. V. Robinson and C. M. Dobson.
Structure and intermolecular dynamics of aggregates populated during amyloid fibril formation studied by hydrogen/deuterium exchange.
***Acc Chem Res,*** 2010, 43 (8): 1072-1079.

372. M. F. Bush, Z. Hall, K. Giles, J. Hoyes, C. V. Robinson and B. T. Ruotolo.
Collision cross sections of proteins and their complexes: A calibration framework and database for gas-phase structural biology.
***Anal Chem,*** 2010, 82(22): 9557-9565.

373. J. L. P. Benesch, B. T. Ruotolo, D. A. Simmons, N. P. Barrera, N. Morgner, L. C. Wang, R. Helen and C. V. Robinson.
Separating and visualising protein assemblies by means of preparative mass spectrometry and microscopy.
***J Struct Biol,*** 2010, 172(2): 161-168.

374. J. L. P. Benesch, J. A. Aquilina, A. J. Baldwin, A. Rekas, F. Stengel, R. A. Lindner, E. Basha, G. L. Devlin, J. Horwitz, E. Vierling, J. A. Carver and C. V. Robinson.
The quaternary organization and dynamics of the molecular chaperone HSP26 are thermally regulated.
***Chem Biol,*** 2010, 17(9): 1008-1017.

## 2009

375. S. Velamakanni, C. H. F. Lau, D. A. P. Gutmann, H. Venter, N. P. Barrera, M. A. Seeger, B. Woebking, D. Matak-Vinkovic, L. Balakrishnan, Y. Yao, C. Y. U. Edmond, R. A. Shilling, C. V. Robinson, P. Thorn and H. W. van Veen.
A multidrug ABC transporter with a taste for salt.
***PLoS One***, 2009, 4(7): e6137.

376. M. Sharon, H. B. Mao, E. B. Erba, E. Stephens, N. Zheng and C. V. Robinson.
Symmetrical modularity of the COP9 signalosome complex suggests its multifunctionality.
***Structure,*** 2009, 17(1): 31-40.

377. S. Sainsbury, L. A. Lane, J. S. Ren, R. J. Gilbert, N. J. Saunders, C. V. Robinson, D. I. Stuart and R. J. Owens.
The structure of CrgA from Neisseria meningitiis reveals a new octameric assembly state for LysR transcriptional regulators.
***Nucleic Acids Res,*** 2009, 37(14): 4545-4558.

378. T. L. Pukala, B. T. Ruotolo, M. Zhou, A. Politis, R. Stefanescu, J. A. Leary and C. V. Robinson.
Subunit architecture of multiprotein assemblies determined using restraints from gas-phase measurements.
***Structure,*** 2009, 17(9), 1235-1243.

379. R. Perez-Fernandez, M. Pittelkow, A. M. Belenguer, L. A. Lane, C. V. Robinson and J. K. M. Sanders
Two-phase dynamic combinatorial discovery of a spermine transporter.
***Chem Commun,*** 2009, (25): 3708-3710.

380. M. Oda, S. Uchiyama, M. Noda, Y. Nishi, M. Koga, K. Mayanagi, C. V. Robinson, K. Fukui, Y. Kobayashi, K. Morikawa and T. Azuma.
Effects of antibody affinity and antigen valence on molecular forms of immune complexes.
***Mol Immunol,*** 2009, 47(2-3): 357-364.

381. E. Natan, D. Hirschberg, N. Morgner, C. V. Robinson and A. R. Fersht.
Ultraslow oligomerization equilibria of p53 and its implications.
***Proc Natl Acad Sci USA,*** 2009, 106(34): 14327-14332.

382. P. G. Motshwene, M. C. Moncrieffe, J. G. Grossmann, C. Kao, M. Ayaluru, A. M. Sandercock, C. V. Robinson, E. Latz and N. J. Gay.
An oligomeric signaling platform formed by the toll-like receptor signal transducers MyD88 and IRAK-4.
***J Biol Chem,*** 2009, 284(37): 25404-25411.

383. H. T. Lin, V. N. Bavro, N. P. Barrera, H. M. Frankish, S. Velamakanni, H. W. van Veen, C. V. Robinson, M. I. Borges-Walmsley and A. R. Walmsley.
MacB ABC transporter is a dimer whose ATPase activity and macrolide-binding capacity are regulated by the membrane fusion protein MacA.
***J Biol Chem,*** 2009, 284(2): 1145-1154.

384. J. A. Leary, M. R. Schenauer, R. Stefanescu, A. Andaya, B. T. Ruotolo, C. V. Robinson, K. Thalassinos, J. H. Scrivens, M. Sokabe and J. W. B. Hershey.
Methodology for measuring conformation of solvent-disrupted protein subunits using T-WAVE ion mobility MS: An investigation into eukaryotic initiation factors.
***J Am Soc Mass Spectrom,*** 2009, 20(9): 1699-1706.

385. L. A. Lane, B. T. Ruotolo, C. V. Robinson, G. Favrin and J. L. P. Benesch.
A Monte Carlo approach for assessing the specificity of protein oligomers observed in nano-electrospray mass spectra.
***Int J Mass Spectrom,*** 2009, 283(1-3): 169-177.

386. K. Kurimoto, K. Kuwasako, A. M. Sandercock, S. Unzai, C. V. Robinson, Y. Muto and S. Yokoyama.
AU-rich RNA-binding induces changes in the quaternary structure of AUH.
***Proteins*** 2009, 75(2): 360-372.

387. S. E. Olstoe, B. H. Ridha, V. Bellotti, N. Wang, C. V. Robinson, S. J. Crutch, G. Keir, R. Kukkastenvehmas, J. R. Gallimore, W. L. Hutchinson, P. N. Hawkins, S. P. Wood, M. N. Rossor and M. B. Pepys.
Molecular dissection of Alzheimer's disease neuropathology by depletion of serum amyloid P component.
***Proc Natl Acad Sci USA,*** 2009, 106(18): 7619-7623.

388. P. Kafasla, N. Morgner, T. A. A. Poyry, S. Curry, C. V. Robinson and R. J. Jackson.
Polypyrimidine tract binding protein stabilizes the encephalomyocarditis virus IRES structure via binding multiple sites in a unique orientation.
***Mol Cell,*** 2009, 34(5): 556-568.

389. A. C. Joerger, S. Rajagopalan, E. Natan, D. B. Veprintsev, C. V. Robinson and A. R. Fersht.
Structural evolution of p53, p63 and p73: Implication for heterotetramer formation.
***Proc Natl Acad Sci USA,*** 2009, 106(42): 17705-17710.

390. S. J. Hyung, C. V. Robinson and B. T. Ruotolo.
Gas-phase unfolding and disassembly reveals stability differences in ligand-bound multiprotein complexes.
***Chem Biol,*** 2009, 16(4): 382-390.

391. H. Hernández, O. V. Makarova, E. M. Makarov, N. Morgner, Y. Muto, D. P. Krummel and C. V. Robinson.
Isoforms of U1-70k control subunit dynamics in the human spliceosomal U1 snRNP.
***PLoS One,*** 2009, 4(9): e7202.

392. L. M. Fidalgo, G. Whyte, B. T. Ruotolo, J. L. P. Benesch, F. Stengel, C. Abell, C. V. Robinson and W. T. S. Huck.
Coupling microdroplet microreactors with mass spectrometry: Reading the contents of single droplets online.
***Angew Chem Int Ed,*** 2009, 48(20): 3665-3668.

393. S. Deroo, U. Rauwald, C. V. Robinson and O. A. Scherman.
Discrete multi-component complexes with cucurbit[8]uril in the gas-phase.
***Chem Commun,*** 2009, (6): 644-646.

394. J. den Engelsman, S. Boros, P. Y. W. Dankers, B. Kamps, W. T. V. Egberts, C. S. Bode, L. A. Lane, J. A. Aquilina, J. L. P. Benesch, C. V. Robinson, W. W. de Jong and W.C. Boelens.
The small heat-shock proteins HSPB2 and HSPB3 form well-defined heterooligomers in a unique 3 to 1 subunit ratio.
***J Mol Biol,*** 2009, 393(5): 1022-1032.

395. A. J. Cork, S. Jergic, S. Hammerschmidt, B. Kobe, V. Pancholi, J. L. P. Benesch, C. V. Robinson, N. E. Dixon, J. A. Aquilina and M. J., Walker.
Defining the structural basis of human plasminogen binding by streptococcal surface enolase.
***J Biol Chem,*** 2009, 284(25): 17129-17137.

396. N. Carulla, M. Zhou, M. Arimon, M. Gairi, E. Giralt, C. V. Robinson and C. M. Dobson.
Experimental characterization of disordered and ordered aggregates populated during the process of amyloid fibril formation.
***Proc Natl Acad Sci USA,*** 2009, 106(19): 7828-7833.

397. V. M. Bolanos-Garcia, T. Kiyomitsu, S. D'Arcy, D. Y. Chirgadze, J. G. Grossmann, D. Matak-Vinkovic, A. R. Venkitaraman, M. Yanagida, C. V. Robinson and T. L. Blundell.
The crystal structure of the N-terminal region of BUB1 provides insight into the mechanism of BUB1 recruitment to kinetochores.
***Structure,*** 2009, 17(1): 105-116.

398. M. J. Bick, V. Lamour, K. R. Rajashankar, Y. Gordiyenko, C. V. Robinson and S. A. Darst.
How to switch off a histidine kinase: Crystal structure of Geobacillus stearothermophilus KinB with the inhibitor Sda.
***J Mol Biol,*** 2009, 386(1): 163-177.

399. S. L. Bernstein, N. F. Dupuis, N. D. Lazo, T. Wyttenbach, M. M. Condron, G .Bitan, D. B. Teplow, J. E. Shea, B. T. Ruotolo, C. V. Robinson and M. T. Bowers.
Amyloid-beta protein oligomerization and the importance of tetramers and dodecamers in the aetiology of Alzheimer's disease.
***Nat Chem,*** 2009, 1(4): 326-331.

400. J. L. P. Benesch, B. T. Ruotolo, F. Sobott, J. Wildgoose, A. Gilbert, R. Bateman and C. V. Robinson.
Quadrupole-time-of-flight mass spectrometer modified for higher-energy dissociation reduces protein assemblies to peptide fragments.
***Anal Chem,*** 2009, 81(3): 1270-1274.

401. J. L. P. Benesch and C. V. Robinson.
Biological chemistry dehydrated but unharmed.
***Nature,*** 2009, 462(7273): 576-577.

402. N. P. Barrera, S. C. Isaacson, M. Zhou, V. N. Bavro, A. Welch, T. A. Schaedler, M. A. Seeger, R. N. Miguel, V. M. Korkhov, H. W. van Veen, H. Venter, A. R. Walmsley, C. G. Tate and C. V. Robinson.
Mass spectrometry of membrane transporters reveals subunit stoichiometry and interactions.
***Nat Methods,*** 2009, 6(8): 585-587.

403. F. I. Andersson, A. Tryggvesson, M. Sharon, A. V. Diemand, M. Classen, C. Best, R. Schmidt, J. Schelin, T. M. Stanne, B. Bukau, C. V. Robinson, S. Witt, A. Mogk and A. K. Clarke.
Structure and function of a novel type of ATP-dependent Clp protease.
***J Biol Chem,*** 2009, 284(20): 13519-13532.

## 2008

404. M. Zhou, A. M. Sandercock, C. S. Fraser, G. Ridlova, E. Stephens, M. R. Schenauer, T. Yokoi-Fong, D. Barsky, J. A. Leary, J. W. Hershey, J. A. Doudna and C. V. Robinson.
Mass spectrometry reveals modularity and a complete subunit interaction map of the eukaryotic translation factor eIF3.
***Proc Natl Acad Sci USA,*** 2008, 105(47): 18139-18144.

405. J. A. R. Worrall, F. S. Howe, A. R. McKay, C. V. Robinson and B. F. Luisi.
Allosteric activation of the ATPase activity of the Escherichia coli RhIB RNA helicase.
***J Biol Chem,*** 2008, 283(9): 5567-5576.

406. T. Taverner, H. Hernández, M. Sharon, B. T. Ruotolo, D. Matak-Vinkovic, D. Devos, R. B. Russell and C. V. Robinson.
Subunit architecture of intact protein complexes from mass spectrometry and homology modeling.
***Acc Chem Res,*** 2008, 41(5): 617-627.

407. B. T. Ruotolo, J. L. P. Benesch, A. M. Sandercock, S. J. Hyung and C. V. Robinson.
Ion mobility-mass spectrometry analysis of large protein complexes.
***Nat Protoc,*** 2008, 3(7): 1139-1152.

408. F. G. Pearce, R. C. J. Dobson, A. Weber, L. A. Lane, M. G. McCammon, M. A. Squire, M. A. Perugini, G. B. Jameson, C. V. Robinson and J. A. Gerrard.
Mutating the tight-dimer interface of dihydrodipicolinate synthase disrupts the enzyme quaternary structure: Toward a monomeric enzyme.
***Biochemistry,*** 2008, 47(46): 12108-12117.

409. A. J. Painter, N. Jaya, E. Basha, E. Vierling, C. V. Robinson and J. L. P. Benesch.
Real-time monitoring of protein complexes reveals their quaternary organization and dynamics.
***Chem Biol,*** 2008, 15(3): 246-253.

410. I. J. MacRae, E. Ma, M. Zhou, C. V. Robinson and J. A. Doudna.
*In vitro* reconstitution of the human RISC-loading complex.
***Proc Natl Acad Sci USA,*** 2008, 105(2): 512-517.

411. E. D. Levy, E. B. Erba, C. V. Robinson and S. A. Teichmann.
Assembly reflects evolution of protein complexes.
***Nature,*** 2008, 453(7199): 1262-1266.

412. P. Grela, J. Sawa-Makarska, Y. Gordiyenko and C. V. Robinson, N. Grankowski, and M. Tchorzewski
Structural properties of the human acidic ribosomal p proteins forming the P1-P2 heterocomplex.
***J Biochem,*** 2008, 143(2), 169-177.

413. Y. Gordiyenko and C. V. Robinson.
The emerging role of MS in structure elucidation of protein-nucleic acid complexes.
***Biochem Soc Trans,*** 2008, 36: 723-731.

414. Y. Gordiyenko, S. Deroo, M. Zhou, H. Videler and C. V. Robinson.
Acetylation of L12 increases interactions in the Escherichia coli ribosomal stalk complex.
***J Mol Biol,*** 2008, 380(2): 404-414.

415. M. Gangloff, A. Murali, J. Xiong, C. J. Arnot, A. N. Weber, A. M. Sandercock, C. V. Robinson, R. Sarisky, A. Holzenburg, C. Kao and N. J. Gay.
Structural insight into the mechanism of activation of the Toll receptor by the dimeric ligand Spatzle.
***J Biol Chem,*** 2008, 283(21): 14629-14635.

416. O. Esteban, R. A. Bernal, M. Donohoe, H. Videler, M. Sharon, C. V. Robinson and D. Stock.
Stoichiometry and localization of the stator subunits E and G in *Thermus thermophilus* H+-ATPase/synthase.
***J Biol Chem,*** 2008, 283(5): 2595-2603.

417. G. J. E. Davidson, L. A. Lane, P. R. Raithby, J. E. Warren, C. V. Robinson and J. K. M. Sanders.
Coordination polymers based on aluminum(III) porphyrins.
***Inorg Chem,*** 2008, 47(19): 8721-8726.

418. P. H. Chan, E. Pardon, L. Menzer, E. De Genst, J. R. Kumita, J. Christodoulou, D. Saerens, A. Brans, F. Bouillenne, D. B. Archer, C. V. Robinson, S. Muyldermans, A. Matagne, C. Redfield, L. Wyns,
C. M. Dobson and M. Dumoulin.
Engineering a camelid antibody fragment that binds to the active site of human lysozyme and inhibits its conversion into amyloid fibrils.
***Biochemistry,*** 2008, 47(42): 11041-11054.

419. J. L. P. Benesch, M. Ayoub, C. V. Robinson and J. A. Aquilina.
Small heat shock protein activity is regulated by variable oligomeric substructure.
***J Biol Chem,*** 2008, 283(42): 28513-28517.

420. N. P. Barrera, N. Di Bartolo, P. J. Booth and C. V. Robinson.
Micelles protect membrane complexes from solution to vacuum.
***Science,*** 2008, 321(5886): 243-246.

## 2007

421. X. Tan, L. I. A. Calderon-Villalobos, M. Sharon, C. X. Zheng, C. V. Robinson M. Estelle and N. Zheng.
Mechanism of auxin perception by the TIR1 ubiquitin ligase.
***Nature,*** 2007, 446(7136): 640-645.

422. M. Sharon, S. Witt, E. Glasmacher, W. Baumeister and C. V. Robinson.
Mass spectrometry reveals the missing links in the assembly pathway of the bacterial 20 S proteasome.
***J Biol Chem,*** 2007, 282(25): 18448-18457.

423. M. Sharon and C. V. Robinson.
The role of mass spectrometry in structure elucidation of dynamic protein complexes.
***Annu Rev Biochem,*** 2007, 76: 167-193.

424. M. Sharon, L. L. Ilag and C. V. Robinson.
Evidence for micellar structure in the gas phase.
***J Am Chem Soc,*** 2007, 129(28): 8740-8746.

425. B. T. Ruotolo, S. J. Hyung, P. M. Robinson, K. Giles, R. H. Bateman and C. V. Robinson.
Ion mobility-mass spectrometry reveals long-lived,unfolded intermediates in the dissociation of protein complexes.
***Angew Chem Int Ed,*** 2007, 46(42): 8001-8004.

426. C. V. Robinson, A. Sali and W. Baumeister.
The molecular sociology of the cell.
***Nature,*** 2007, 450(7172): 973-982.

427. O. Qazi, B. Bolgiano, D. Crane, D. I. Svergun, P. V. Konarev, Z. P. Yao, C. V. Robinson, K. A. Brown and N. Fairweather.
The H-C fragment of tetanus toxin forms stable, concentration-dependent dimers via an intermolecular disulphide bond.
***J Mol Biol,*** 2007, 365(1): 123-134.

428. V. E. Pye, F. Beuron, C. A. Keetch, C. McKeown, C. V. Robinson, H. H. Meyer, X. D. Zhang and P. S. Freemont.
Structural insights into the p97-Ufd1-NpI4 complex.
***Proc Natl Acad Sci USA,*** 2007, 104(2): 467-472.

429. J. J. Phillips, Z. P. Yao, W. Zhang, S. McLaughlin, E. D. Laue, C. V. Robinson and S. E. Jackson.
Conformational dynamics of the molecular chaperone Hsp90 in complexes with a co-chaperone and anticancer drugs.
***J Mol Biol,*** 2007, 372(5): 1189-1203.

430. Y. Maki, T. Hashimoto, M. Zhou, T. Naganuma, J. Ohta, T. Nomura, C. V. Robinson and T. Uchiumi.
Three binding sites for stalk protein dimers are generally present in ribosomes from archaeal organisms.
***J Biol Chem,*** 2007, 282(45): 32827-32833.

431. A. K. MacKenzie, N. J. Kershaw, H. Hernández, C. V. Robinson, C. J. Schofield and I. Andersson.
Clavulanic acid dehydrogenase: Structural and biochemical analysis of the final step in the biosynthesis of the beta-lactamase inhibitor clavulanic acid.
***Biochemistry,*** 2007, 46(6): 1523-1533.

432. J. R. Kumita, S. Poon, G. L. Caddy, C. L. Hagan, M. Dumoulin, J. J. Yerbury, E. M. Stewart, C. V. Robinson, M. R. Wilson and C. M. Dobson.
The extracellular chaperone clusterin potently inhibits human lysozyme amyloid formation by interacting with prefibrillar species.
***J Mol Biol,*** 2007, 369(1): 157-167.

433. D. Krokowski, M. Tchorzewski, A. Boguszewska, A. R. Mckay, S. L. Maslen, C. V. Robinson and N. Grankowski.
Elevated copy number of L-A virus in yeast mutant strains defective in ribosomal stalk.
***Biochem Biophys Res Commun,*** 2007, 355(2): 575-580.

434. H. Hernández and C. V. Robinson.
Determining the stoichiometry and interactions of macromolecular assemblies from mass spectrometry.
***Nat Protoc,*** 2007, 2(3): 715-726.

435. D. Frenkiel-Krispin, S. G. Wolf, S. Albeck, T. Unger, Y. Peleg, J. Jacobovitch, Y. Michael, S. Daube, M. Sharon, C. V. Robinson, D. I. Svergun, D. Fass, T. Tzfira and M. Elbaum.
Plant transformation by Agrobacterium tumefaciens - Modulation of single-stranded DNA-VirE2 complex assembly by VirE1.
***J Biol Chem,*** 2007, 282(6): 3458-3464.

436. H. Ecroyd, S. Meehan, J. Horwitz, J. A. Aquilina, J. L. P. Benesch, C. V. Robinson, C. E. Macphee and J. A. Carver.
Mimicking phosphorylation of alpha B-crystallin affects its chaperone activity.
***Biochem J,*** 2007, 401: 129-141.

437. E. Damoc, C. S. Fraser, M. Zhou, H. Videler, G. L. Mayeur, J. W. B. Hershey, J. A. Doudna, C. V. Robinson and J. A. Leary.
Structural characterization of the human eukaryotic initiation factor 3 protein complex by mass spectrometry.
***Mol Cell Proteomics,*** 2007, 6(7): 1135-1146.

438. J. Boskovic, J. Coloma, T. Aparicio, M. Zhou, C. V. Robinson, J. Mendez and G. Montoya.
Molecular architecture of the human GINS complex.
***EMBO Rep,*** 2007, 8(7): 678-684.

439. J. L. P. Benesch, B. T. Ruotolo, D. A. Simmons and C. V. Robinson.
Protein complexes in the gas phase: Technology for structural genomics and proteomics.
***Chem Rev,*** 2007, 107(8): 3544-3567.

440. E. Ahrman, W. Lambert, J. A. Aquilina, C. V. Robinson and C. S. Emanuelsson.
Chemical cross-linking of the chloroplast localized small heat-shock protein, Hsp21 and the model substrate citrate synthase.
***Protein Sci,*** 2007, 16(7): 1464-1478.

## 2006

441. Z. P. Yao, M. Zhou, S. E. Kelly, M. A. Seeliger, C. V. Robinson and L. S. Itzhaki.
Activation of ubiquitin ligase SCFSkp2 by Cks1: Insights from hydrogen exchange mass spectrometry.
***J Mol Biol,*** 2006, 363(3): 673-686.

442. X. W. Yang, W. H. Lee, F. Sobott, E. Papagrigoriou, C. V. Robinson, J. G. Grossmann, M. Sundstrom, D. A. Doyle and J. M. Elkins.
Structural basis for protein-protein interactions in the 14-3-3 protein family.
***Proc Natl Acad Sci USA,*** 2006, 103(46): 17237-17242.

443. S. Witt, Y. D. Kwon, M. Sharon, K. Felderer, M. Beuttler, C. V. Robinson, W. Baumeister and B. K. Jap.
Proteasome assembly triggers a switch required for active-site maturation.
***Structure,*** 2006, 14(7): 1179-1188.

444. C. K. Vaughan, U. Gohlke, F. Sobott, V. M. Good, M. M. Ali, C. Prodromou, C. V. Robinson, H. R. Saibil and L. H. Pearl.
Structure of an Hsp90-Cdc37-Cdk4 complex.
***Mol Cell,*** 2006, 23(5): 697-707.

445. E. van Duijn, D. A. Simmons, R. H. H. van den Heuvel, P. J. Bakkesvan, H. Heerikhuizen, R. M. A. Heeren, C. V. Robinson, S. M. van der Vies and A. J. R. Heck.
Tandem mass spectrometry of intact GroEL-substrate complexes reveals substrate-specific conformational changes in the trans ring.
***J Am Chem Soc,*** 2006, 128(14): 4694-4702.

446. M. Sharon, S. Witt, K. Felderer, B. Rockel, W. Baumeister and C. V. Robinson.
20S proteasomes have the potential to keep substrates in store for continual degradation.
***J Biol Chem,*** 2006, 281(14): 9569-9575.

447. M. Sharon, T. Taverner, X. I. Ambroggio, R. J. Deshaies and C. V. Robinson.
Structural organization of the 19S proteasome lid: Insights from MS of intact complexes.
***PLoS Biol,*** 2006, 4(8): 1314-1323.

448. B. T. Ruotolo and C. V. Robinson.
Aspects of native proteins are retained in vacuum.
***Curr Opin Chem Biol,*** 2006, 10(5): 402-408.

449. M. B. Pepys, G. M. Hirschfield, G. A. Tennent, J. R. Gallimore, M. C. Kahan, V. Bellotti, P. N. Hawkins, R. M. Myers, M. D. Smith, A. Polara, A. J. A. Cobb, S. V. Ley, J. A. Aquilina, C. V. Robinson, I. Sharif, G. A. Gray, C. A. Sabin, M. C. Jenvey, S. E. Kolstoe, D. Thompson and S. P. Wood.
Targeting C-reactive protein for the treatment of cardiovascular disease.
***Nature,*** 2006, 440(7088): 1217-1221.

450. M. Oda, S. Uchiyama, C. V. Robinson, K. Fukui, Y. Kobayashi and T. Azuma.
Regional and segmental flexibility of antibodies in interaction with antigens of different size.
***FEBS J,*** 2006, 273(7): 1476-1487.

451. N. Medalia, M. Sharon, R. Martinez-Arias, O. Mihalache, C. V. Robinson, O. Medalia and P. Zwickl.
Functional and structural characterization of the Methanosarcina mazei proteasome and PAN complexes.
***J Struct Biol,*** 2006, 156(1): 84-92.

452. S. H. McLaughlin, F. Sobott, Z. P. Yaol, W. Zhang, P. R. Nielsen, J. G. Grossmann, E. D. Laue, C. V. Robinson and S.E Jackson.
The co-chaperone p23 arrests the Hsp90 ATPase cycle to trap client proteins.
***J Mol Biol,*** 2006, 356(3): 746-758.

453. A. R. Mckay, B. T. Ruotolo, L. L. Ilag and C. V. Robinson.
Mass measurements of increased accuracy resolve heterogeneous populations of intact ribosomes.
***J Am Chem Soc,*** 2006, 128(35): 11433-11442.

454. S. Li, A. M. Sandercock, P. Conduit, C. V. Robinson, R. L. Williams and J. V. Kilmartin.
Structural role of Sfi1p-centrin filaments in budding yeast spindle pole body duplication.
***J Cell Biol,*** 2006, 173(6): 867-877.

455. J. R. Kumita, R. J. K. Johnson, M. J. C. Alcocer, M. Dumoulin, F. Holmqvist, M. G. McCammon, C. V. Robinson, D. B. Archer and C. M. Dobson.
Impact of the native-state stability of human lysozyme variants on protein secretion by Pichia pastoris.
***FEBS J,*** 2006, 273(4): 711-720.

456. G. Kapatai, A. Large, J. L. P. Benesch, C. V. Robinson, J. L. Carrascosa, J. M. Valpuesta, P. Gowrinathan and P. A. Lund.
All three chaperonin genes in the archaeon Haloferax volcanii are individually dispensable.
***Mol Microbiol,*** 2006, 61(6): 1583-1597.

457. H. Hernández, A. Dziembowski, T. Taverner, B. Seraphin and C. V. Robinson.
Subunit architecture of multimeric complexes isolated directly from cells.
***EMBO Rep,*** 2006, 7(6): 605-610.

458. A. E. Harrington, S. A. Morris-Triggs, B. T. Ruotolo, C. V. Robinson, S. Ohnuma and M. Hyvonen.
Structural basis for the inhibition of activin signalling by follistatin.
***EMBO J,*** 2006, 25(5): 1035-1045.

459. N. J. Harmer, C. J. Robinson, L. E. Adam, L. L. Ilag, C. V. Robinson, J. T. Gallagher and T. L. Blundell.
Multimers of the fibroblast growth factor (FGF)-FGF receptor-saccharide complex are formed on long oligomers of heparin.
***Biochem J,*** 2006, 393: 741-748.

460. G. L. Devlin, T. P. J. Knowles, A. Squires, M. G. McCammon, S. L. Gras, M. R. Nilsson, C. V. Robinson, C. M. Dobson and C. E. MacPhee.
The component polypeptide chains of bovine insulin nucleate or inhibit aggregation of the parent protein in a conformation-dependent manner.
***J Mol Biol,*** 2006, 360(2): 497-509.

461. G. L. Caddy and C. V. Robinson.
Insights into amyloid fibril formation from mass spectrometry.
***Protein Peptide Lett,*** 2006, 13(3): 255-260.

462. J. L. P. Benesch, J. A. Aquilina, B. T. Ruotolo, F. Sobott and C. V. Robinson.
Tandem mass spectrometry reveals the quaternary organization of macromolecular assemblies.
***Chem Biol,*** 2006, 13(6): 597-605.

463. J. L. P. Benesch and C. V. Robinson.
Mass spectrometry of macromolecular assemblies: preservation and dissociation.
***Curr Opin Struc Biol,*** 2006, 16(2): 245-251.

## 2005

464. Z. P. Yao, P. Tito and C. V. Robinson.
Site-specific hydrogen exchange of proteins: Insights into the structures of amyloidogenic intermediates.
***Method Enzymol,*** 2005, 402: 389-402.

465. H. Videler, L. L. Ilag, A. R. C. McKay, C. L. Hanson and C. V. Robinson.
Mass spectrometry of intact ribosomes.
***FEBS Lett,*** 2005, 579(4): 943-947.

466. T. M. Treweek, A. Rekas, R. A. Lindner, M. J. Walker, J. A. Aquilina, C. V. Robinson, J. Horwitz, M. D. Perng, R. A. Quinlan and J. A. Carver.
R120G alpha B-crystallin promotes the unfolding of reduced alpha-lactalbumin and is inherently unstable.
***FEBS J,*** 2005, 272(3): 711-724.

467. F. Stenberg, P. Chovanec, S. L. Maslen, C. V. Robinson, L. L. Ilag, G. von Heijne and D.O. Daley.
Protein complexes of the Escherichia coli cell envelope.
***J Biol Chem,*** 2005, 280(41): 34409-34419.

468. F. Sobott, M. G. McCammon, H. Hernández and C. V. Robinson.
The flight of macromolecular complexes in a mass spectrometer.
***Philos Trans Roy Soc A Math Phys Eng Sci,*** 2005, 363(1827): 379-389.

469. B. T. Ruotolo, K. Giles, I. Campuzano, A. M. Sandercock, R. H. Bateman and C. V. Robinson.
Evidence for macromolecular protein rings in the absence of bulk water.
***Science,*** 2005, 310(5754): 1658-1661.

470. C. V. Robinson.
Watching and weighting - chaperone complexes in action.
***Nat Methods,*** 2005, 2(5): 331-332.

471. M. Rappas, J. Schumacher, F. Beuron, H. Niwa, P. Bordes, S. Wigneshweraraj, C. A. Keetch, C. V. Robinson, M. Buck and X. D. Zhang.
Structural insights into the activity of enhancer-binding proteins.
***Science,*** 2005, 307(5717): 1972-1975.

472. T. P. Monie, H. Hernandez, C. V. Robinson, P. Simpson, S. Matthews and S. Curry.
The polypyrimidine tract binding protein is a monomer.
***RNA,*** 2005, 11(12): 1803-1808.

473. M. G. McCammon and C. V. Robinson.
Focus for John Yates III, 2004 ASMS Biemann Medal awardee.
***J Am Soc Mass Spectrom,*** 2005, 16(8): 1205-1206.

474. M. G. McCammon and C. V. Robinson.
Me, My Cell and I: The role of the collision cell in the tandem mass spectrometry of macromolecules.
***Biotechniques,*** 2005, 39(4): 447-451.

475. C. K. Kennaway, J. L. P. Benesch, U. Gohlke, L. C. Wang, C. V. Robinson, E. V. Orlova, H. R. Saibil and N. H. Keep.
Dodecameric structure of the small heat shock protein Acr1 from Mycobacterium tuberculosis.
***J Biol Chem,*** 2005, 280(39): 33419-33425.

476. C. A. Keetch, E. H. C. Bromley, M. G. McCammon, N. Wang, J. Christodoulou and C. V. Robinson.
L55P transthyretin accelerates subunit exchange and leads to rapid formation of hybrid tetramers.
***J Biol Chem,*** 2005, 280(50): 41667-41674.

477. R. J. K. Johnson, J. Christodoulou, M. Dumoulin, G. L. Caddy, M. J. C. Alcocer, G. J. Murtagh, J. R. Kumita, G. Larsson, C. V. Robinson, D. B. Archer, B. Luisi and C. M. Dobson.
Rationalising lysozyme amyloidosis: Insights from the structure and solution dynamics of T70N lysozyme.
***J Mol Biol,*** 2005, 352(4): 823-836.

478. L. L. Ilag, H. Videler, A. R. McKay, F. Sobott, P. Fucini, K. H. Nierhaus and C. V. Robinson.
Heptameric (L12)(6)/L10 rather than canonical pentameric complexes are found by tandem MS of intact ribosomes from thermophilic bacteria.
***Proc Natl Acad Sci USA,*** 2005, 102(23): 8192-8197.

479. A. E. Harrington, M. Lyon, J. A. Deakin, B. Ruotolo, C. V. Robinson and M. Hyvonen.
Interactions of follistatin with heparin and heparin analogues.
***FEBS J,*** 2005, 272: 269-269.

480. M. Dumoulin, D. Canet, A. M. Last, E. Pardon, D. B. Archer, S. Muyldermans, L. Wyns, A. Matagne, C. V. Robinson, C . Redfield and C. M. Dobson.
Reduced global copperativity is a common feature underlying the amyloidogenicity of pathogenic lysozyme mutations.
***J Mol Biol,*** 2005, 346(3): 773-788.

481. N. Carulla, G. L. Caddy, D. R. Hall, J. Zurdo, M. Gairi, M. Feliz, E. Giralt, C. V. Robinson and C. M. Dobson.
Molecular recycling within amyloid fibrils.
***Nature,*** 2005, 436(7050): 554-558.

482. A. J. Callaghan, Y. Redko, L. M. Murphy, J. G. Grossmann, D. Yates, E. Garman, L. L. Ilag, C. V. Robinson, M. F. Symmons, K. J. McDowall and B. F. Luisi.
"Zn-Link": A metal-sharing interface that organizes the quaternary structure and catalytic site of the endoribonuclease, RNase E.
***Biochemistry,*** 2005, 44(12): 4667-4675.

483. J. P. Aurikko, B. T. Ruotolo, J. G. Grossmann, M. C. Moncrieffe, E. Stephens, V. M. Leppanen, C. V. Robinson, M. Saarma, R. A. Bradshaw and T. L. Blundell.
Characterization of symmetric complexes of nerve growth factor and the ectodomain of the pan-neurotrophin receptor, p75(NTR).
***J Biol Chem,*** 2005, 280(39): 33453-33460.

484. J. A. Aquilina, J. L. P. Benesch, L. L. Ding, O. Yaron, J. Horwitz and C. V. Robinson.
Subunit exchange of polydisperse proteins - Mass spectrometry reveals consequences of alpha A-crystallin truncation.
***J Biol Chem,*** 2005, 280(15): 14485-14491.

## 2004

485. W. Zhang, M. Hirshberg, S. H. McLaughlin, G. A. Lazar, J. G. Grossmann, P. R. Nielsen, F. Sobott, C. V. Robinson, S. E. Jackson and E. D. Laue.
Biochemical and structural studies of the interaction of Cdc37 with Hsp90.
***J Mol Biol,*** 2004, 340(4): 891-907.

486. Z. Yao, M. A. Seeliger, L. S. Itzhaki and C. V. Robinson.
Investigation of protein interations between Cks1 and Skp2 using hydrogen exchange nano-electrospray mass spectrometry.
***Protein Sci,*** 2004: 13: 86-86.

487. L. F. Westblade, L. L. Ilag, A. K. Powell, A. Kolb, C. V. Robinson and S. J. W. Busby.
Studies of the Escherichia coli Rsd-sigma(70) complex.
***J Mol Biol,*** 2004, 335(3): 685-692.

488. F. Sobott and C. V. Robinson.
Characterising electrosprayed biomolecules using tandem-MS - the noncovalent GroEL chaperonin assembly.
***Int J Mass Spectrom,*** 2004, 236(1-3): 25-32.

489. A. Rekas, C. G. Adda, J. A. Aquilina, K. J. Barnham, M. Sunde, D. Galatis, N. A. Williamson, C. L. Masters, R. F. Anders, C. V. Robinson, R. Cappai and J. A. Carver.
Interaction of the molecular chaperone alpha B-crystallin with alpha-synuclein: Effects on amyloid fibril formation and chaperone activity.
***J Mol Biol,*** 2004, 340(5): 1167-1183.

490. Y. Muto, D. P. Krummel, C. Oubridge, H. Hernández, C. V. Robinson, D. Neuhaus and K. Nagai.
The structure and biochemical properties of the human spliceosomal protein U1C.
***J Mol Biol,*** 2004, 341(1): 185-198.

491. M. G. McCammon and C. V. Robinson.
Structural change in response to ligand binding.
***Curr Opin Chem Biol,*** 2004, 8(1): 60-65.

492. M. G. McCammon, H. Hernández, F. Sobott and C. V. Robinson.
Tandem mass spectrometry defines the stoichiometry and quaternary structural arrangement of tryptophan molecules in the multiprotein complex TRAP.
***J Am Chem Soc,*** 2004, 126(19): 5950-5951.

493. N. Lentze, J. A. Aquilina, M. Lindbauer, C. V. Robinson and F. Narberhaus.
Temperature and concentration-controlled dynamics of rhizobial small heat shock proteins.
***Eur J Biochem,*** 2004, 271(12): 2494-2503.

494. M. R. H. Krebs, L. A. Morozova-Roche, K. Daniel, C. V. Robinson and C. M. Dobson.
Observation of sequence specificity in the seeding of protein amyloid fibrils.
***Protein Sci,*** 2004, 13(7): 1933-1938.

495. G. Kappe, J. A. Aquilina, L. Wunderink, B. Kamps, C. V. Robinson, T. Garate, W. C. Boelens and W. de Jong.
Tsp36, a tapeworm small heat-shock protein with a duplicated alpha-crystallin domain, forms dimers and tetramers with good chaperone-like activity.
***Proteins,*** 2004, 57(1): 109-117.

496. L. L. Ilag, L. F. Westblade, C. Deshayes, A. Kolb, S. J. W. Busby and C. V. Robinson.
Mass spectrometry of Escherichia coli RNA polymerase: Interactions of the core enzyme with sigma(70) and Rsd protein.
***Structure,*** 2004, 12(2): 269-275.

497. L. L. Ilag, I. Ubarretxena-Belandia, C. G. Tate and C. V. Robinson.
Drug binding revealed by tandem mass spectrometry of a protein-micelle complex.
***J Am Chem Soc,*** 2004, 126(44): 14362-14363.

498. N. J. Harmer, L. L. Ilag, B. Mulloy, L. Pellegrini, C. V. Robinson and T. I. Blundell.
Towards a resolution of the stoichiometry of the fibroblast growth factor (FGF)-FGIF receptor - Heparin complex.
***J Mol Biol,*** 2004, 339(4): 821-834.

499. C. L. Hanson, H. Videler, C. Santos, J. P. G. Ballesta and C. V. Robinson.
Mass spectrometry of ribosomes from Saccharomyces cerevisiae - Implications for assembly of the stalk complex.
***J Biol Chem,*** 2004, 279(41): 42750-42757.

500. C. L. Hanson and C. V. Robinson.
Protein-nucleic acid interactions and the expanding role of mass spectrometry.
***J Biol Chem,*** 2004, 279(24): 24907-24910.

501. R. J. C. Gilbert, P. Fucini, S. Connell, S. D. Fuller, K. H. Nierhaus, C. V. Robinson, C. M. Dobson and D. I. Stuart.
Three-dimensional structures of translating ribosomes by cryo-EM.
***Mol Cell,*** 2004, 14(1): 57-66.

502. J. Christodoulou, G. Larsson, P. Fucini, S. R. Connell, T. A. Pertinhez, C. L. Hanson, C. Redfield, K. H. Nierhaus, C. V. Robinson, J. Schleucher and C. M. Dobson.
Heteronuclear NMR investigations of dynamic regions of intact Escherichia coli ribosomes.
***Proc Natl Acad Sci USA,*** 2004, 101(30): 10949-10954.

503. A. J. Callaghan, J. P. Aurikko, L. L. IIag, J. G. Grossmann, V. Chandran, K. Kuhnel, L. Poljak, A. J. Carpousis, C. V. Robinson, M. F. Symmons and B. F. Luisi.
Studies of the RNA degradosome-organizing domain of the Escherichia coli ribonuclease RNase E.
***J Mol Biol,*** 2004, 340(5): 965-979.

504. J. A. Aquilina, J. L. P. Benesch, L. L. Ding, O. Yaron, J. Horwitz and C. V. Robinson.
Phosphorylation of alpha B-crystallin alters chaperone function through loss of dimeric substructure.
***J Biol Chem,*** 2004, 279(27): 28675-28680.

## 2003

505. F. Sobott, M. G. McCammon and C. V. Robinson.
Gas-phase dissociation pathways of a tetrameric protein complex.
***Int J Mass Spectrom***, 2003, 230(2-3): 193-200.

506. C. V. Robinson and M. L. Gross.
Focus on proteomics in honor of Ruedi Aebersold, 2002 Biemann awardee.
***J Am Soc Mass Spectrom,*** 2003, 14(7): 683-684.

507. C. A. Keetch, H. Hernández, A. Sterling, M. Baumert, M. H. Allen and C. V. Robinson.
Use of a microchip device coupled with mass spectrometry for ligand screening of a multi-protein target.
***Anal Chem,*** 2003, 75(18): 4937-4941.

508. C. L. Hanson, L. L. Ilag, J. Malo, D. M. Hatters, G. J. Howlett and C. V. Robinson.
Phospholipid complexation and association with apolipoprotein C-II: Insights from mass spectrometry.
***Biophys J,*** 2003, 85(6): 3802-3812.

509. C. L. Hanson, P. Fucini, L. L. Ilag, K. H. Nierhaus and C. V. Robinson.
Dissociation of intact Escherichia coli ribosomes in a mass spectrometer - Evidence for conformational change in a ribosome elongation factor g complex.
***J Biol Chem,*** 2003, 278(2): 1259-1267.

510. M. Dumoulin, A. M. Last, A. Desmyter, K. Decanniere, D. Canet, G. Larsson, A. Spencer, D. B. Archer, J. Sasse, S. Muyldermans, L. Wyns, C. Redfield, A. Matagne, C. V. Robinson and C. M. Dobson.
A camelid antibody fragment inhibits the formation of amyloid fibrils by human lysozyme.
***Nature,*** 2003, 424(6950): 783-788.

511. A. J. Callaghan, J. G. Grossmann, Y. U. Redko, L. L. Ilag, M. C. Moncrieffe, M. F. Symmons, C. V. Robinson, K. J. McDowall and B. F. Luisi.
Quaternary structure and catalytic activity of the Escherichia coli ribonuclease E amino-terminal catalytic domain.
***Biochemistry,*** 2003, 42(47): 13848-13855.

512. J. L. P. Benesch, F. Sobott and C. V. Robinson.
Thermal dissociation of multimeric protein complexes by using nanoelectrospray mass spectrometry.
***Anal Chem,*** 2003, 75(10): 2208-2214.

513. J. A. Aquilina and C. V. Robinson.
Investigating interactions of the pentraxins serum amyloid P component and C-reactive protein by mass spectrometry.
***Biochem J,*** 2003, 375: 323-328.

514. J. A. Aquilina, J. L. P. Benesch, O. A. Bateman, C. Slingsby and C. V. Robinson.
Polydispersity of a mammalian chaperone: Mass spectrometry reveals the population of oligomers in alpha B-crystallin.
***Proc Natl Acad Sci USA,*** 2003, 100(19): 10611-10616.

## 2002

515. F. Sobott and C. V. Robinson.
Protein complexes gain momentum.
***Curr Opin Struc Biol,*** 2002, 12(6): 729-734.

516. F. Sobott, H. Hernández, M. G. McCammon, M. A. Tito and C. V. Robinson.
A tandem mass spectrometer for improved transmission and analysis of large macromolecular assemblies.
***Anal Chem,*** 2002, 74(6): 1402-1407.

517. F. Sobott, J. L. P. Benesch, E. Vierling and C. V. Robinson.
Subunit exchange of multimeric protein complexes - Real-time monitoring of subunit exchange between small heat shock proteins by using electrospray mass spectrometry.
***J Biol Chem,*** 2002, 277(41): 38921-38929.

518. C. V. Robinson.
Protein complexes take flight.
***Nat Struct Biol,*** 2002, 9(7): 505-506.

519. C. V. Robinson.
Focus on industrial proteomics: Dedicated to the late Dr. Robert S. Bordoli.
***J Am Soc Mass Spectrom,*** 2002, 13(7): 759-759.

520. M. G. McCammon, D. J. Scott, C. A. Keetch, L. H. Greene, H. E. Purkey, H. M. Petrassi, J. W. Kelly and C. V. Robinson.
Screening transthyretin amyloid fibril inhibitors: Characterization of novel multiprotein, multiligand complexes by mass spectrometry.
***Structure,*** 2002, 10(6): 851-863.

521. L. Y. Low, H. Hernández, C. V. Robinson, R. O'Brien, J. G. Grossmann, J. E. Ladbury and B. Luisi.
Metal-dependent folding and stability of nuclear hormone receptor DNA-binding domains.
***J Mol Biol,*** 2002, 319(1): 87-106.

522. N. J. Kershaw, H. J. McNaughton, K. S. Hewitson, H. Hernández, J. Griffin, C. Hughes, P. Greaves, B. Barton, C. V. Robinson and C. J. Schofield.
ORF6 from the clavulanic acid gene cluster of Streptomyces clavuligerus has ornithine acetyltransferase activity.
***Eur J Biochem,*** 2002, 269(8): 2052-2059.

523. J. L. Jimenez, E. J. Nettleton, M. Bouchard, C. V. Robinson, C. M. Dobson and H. R. Saibil.
The protofilament structure of insulin amyloid fibrils.
***Proc Natl Acad Sci USA,*** 2002, 99(14): 9196-9201.

524. J. M. Elkins, I. J. Clifton, H. Hernández, L. X. Doan, C. V. Robinson, C. J. Schofield and K. S. Hewitson.
Oligomeric structure of proclavaminic acid amidino hydrolase: evolution of a hydrolytic enzyme in clavulanic acid biosynthesis.
***Biochem J,*** 2002, 366: 423-434.

525. D. Canet, A. M. Last, P. Tito, M. Sunde, A. Spencer, D. B. Archer, C. Redfield, C. V. Robinson and C. M. Dobson.
Local cooperativity in the unfolding of an amyloidogenic variant of human lysozyme.
***Nat Struct Biol,*** 2002, 9(4): 308-315.

## 2001

526. M. A. Tito, J. Miller, N. Walker, K. F. Griffin, E. D. Williamson, D. Despeyroux-Hill, R.W. Titball and C. V. Robinson.
Probing molecular interactions in intact antibody: Antigen complexes, an electrospray time-of-flight mass spectrometry approach.
***Biophys J,*** 2001, 81(6): 3503-3509.

527. M. A. Tito, J. Miller, K. F. Griffin, E. D. Williamson, R. W. Titball and C. V. Robinson.
Macromolecular organization of the Yersinia pestis capsular F1 antigen: Insights from time-of-flight mass spectrometry.
***Protein Sci,*** 2001, 10(11): 2408-2413.

528. C. V. Robinson and D. Cowburn.
From individual proteins to whole cells - Editorial overview.
***Curr Opin Chem Biol,*** 2001, 5(5): 565-566.

529. A. M. Lawrie, P. Tito, H. Hernández, N. R. Brown, C. V. Robinson, J. A. Endicott, M. E. M. Noble and L. N. Johnson.
Xenopus phospho-CDK7/cyclin H expressed in baculoviral-infected insect cells.
***Protein Expr Purif,*** 2001, 23(2): 252-260.

530. A. M. Last, B. A. Schulman, C. V. Robinson and C. Redfield.
Probing subtle differences in the hydrogen exchange behaviour of variants of the human alpha-lactalbumin molten globule using mass spectrometry.
***J Mol Biol,*** 2001, 311(4): 909-919.

531. H. Hernández and C. V. Robinson.
Dynamic protein complexes: Insights from mass spectrometry.
***J Biol Chem,*** 2001, 276(50): 46685-46688.

532. H. Hernández, K. S. Hewitson, P. Roach, N. M. Shaw, J. E. Baldwin and C. V. Robinson.
Observation of the iron-sulfur cluster in Escherichia coli biotin synthase by nanoflow electrospray mass spectrometry.
***Anal Chem,*** 2001, 73(17): 4154-4161.

533. D. R. Booth, V. Bellotti, P. Mangione, S. Booth, M. Sunde, L. C. Serpell, C. V. Robinson, M. B. Pepys and P. N. Hawkins.
Is lysozyme variant Thr70Asn amyloidogenic?
***Amyloid****,* 2001, 8: 149-149.

## 2000

534. P. A. Wright, A. A. Rostom, C. V. Robinson and C. J. Schofield.
Mass spectrometry reveals elastase inhibitors from the reactive centre loop of alpha(1)-antitrypsin.
***Bioorg Med Chem Lett,*** 2000, 10(11): 1219-1221.

535. P. Tito, E. J. Nettleton and C. V. Robinson.
Dissecting the hydrogen exchange properties of insulin under amyloid fibril forming conditions: A site-specific investigation by mass spectrometry.
***J Mol Biol,*** 2000, 303(2): 267-278.

536. M. A. Tito, K. Tars, K. Valegard, J. Hajdu and C. V. Robinson.
Electrospray time-of-flight mass spectrometry of the intact MS2 virus capsid.
***J Am Chem Soc,*** 2000, 122(14): 3550-3551.

537. A. A. Rostom, J. R. H. Tame, J. E. Ladbury and C. V. Robinson.
Specificity and interactions of the protein OppA: Partitioning solvent binding effects using mass spectrometry.
***J Mol Biol,*** 2000, 296 (1): 269-279.

538. A. A. Rostom, P. Fucini, D. R. Benjamin, R. Juenemann, K. H. Nierhaus, F. U. Hartl, C. M. Dobson and C. V. Robinson.
Detection and selective dissociation of intact ribosomes in a mass spectrometer.
***Proc Natl Acad Sci USA,*** 2000, 97(10): 5185-5190.

539. C. V. Robinson.
The disassembly of macromolecular complexes using mass spectrometry.
***FASEB J,*** 2000, 14(8): A1511-A1511.

540. E. J. Nettleton, P. Tito, M. Sunde, M. Bouchard, C. M. Dobson and C. V. Robinson.
Characterization of the oligomeric states of insulin in self-assembly and amyloid fibril formation by mass spectrometry.
***Biophys J,*** 2000, 79(2): 1053-1065.

541. A. Matagne, M. Jamin, E. W. Chung, C. V. Robinson, S. E. Radford and C. M. Dobson.
Thermal unfolding of an intermediate is associated with non-arrhenius kinetics in the folding of hen lysozyme.
***J Mol Biol,*** 2000, 297(1): 193-210.

542. M. R. H. Krebs, D. K. Wilkins, E. W. Chung, M. C. Pitkeathly, A. K. Chamberlain, J. Zurdo, C. V. Robinson and C. M. Dobson.
Formation and seeding of amyloid fibrils from wild-type hen lysozyme and a peptide fragment from the beta-domain.
***J Mol Biol,*** 2000, 300(3): 541-549.

543. M. A. Freitas, C. L. Hendrickson, A. G. Marshall, A. A. Rostom and C. V. Robinson.
Competitive binding to the oligopeptide binding protein, OppA: In-trap cleanup in a Fourier transform ion cyclotron resonance mass spectrometer.
***J Am Soc Mass Spectrom,*** 2000, 11(11): 1023-1026.

544. M. Fandrich, M. A. Tito, M. R. Leroux, A. A. Rostom, F. U. Hartl, C. M. Dobson and C. V. Robinson.
Observation of the noncovalent assembly and disassembly pathways of the chaperone complex MtGimC by mass spectrometry.
***Proc Natl Acad Sci USA,*** 2000, 97(26): 14151-14155.

545. G. Esposito, R. Michelutti, G. Verdone, P. Viglino, H. Hernández, C. V. Robinson, A. Amoresano, F. Dal Piaz, M. Monti, P. Pucci, P. Mangione, M. Stoppini, G. Merlini, G. Ferri and V. Bellotti.
Removal of the N-terminal hexapeptide from human beta 2-microglobulin facilitates protein aggregation and fibril formation.
***Protein Sci,*** 2000, 9(5): 831-845.

546. D. Canet, A. M. Last, P. Tito, M. Sunde, A. Spencer, C. Redfield, C. V. Robinson and C. M. Dobson.
The solution dynamics of amyloidogenic Asp67 His variant of human lysozyme: Insights from hydrogen exchange.
***Biophys J,*** 2000, 78(1): 4A.

547. M. Bouchard, J. Zurdo, E. J. Nettleton, C. M. Dobson and C. V. Robinson.
Formation of insulin amyloid fibrils followed by FTIR simultaneously with CD and electron microscopy.
***Protein Sci,*** 2000, 9(10): 1960-1967.

548. M. Bouchard, J. Zurdo, J. L. Jimenez, E. J. Nettleton, H. R. Saibil, C. V. Robinson and C. M. Dobson.
Biophysical analysis of the insulin amyloid assembly process.
***Biophys J,*** 2000, 78(1): 13a.

549. M. Bouchard, D. R. Benjamin, P. Tito, C. V. Robinson and C. M. Dobson.
Solvent effects on the conformation of the transmembrane peptide gramicidin A: Insights from electrospray ionization mass spectrometry.
***Biophys J,*** 2000, 78(2): 1010-1017.

## 1999

550. H. Vis, C. M. Dobson and C. V. Robinson.
Selective association of protein molecules followed by mass spectrometry.
***Protein Sci,*** 1999, 8(6): 1368-1370.

551. P. van den Berg, E. W. Chung, C. V. Robinson, P. L. Mateo and C. M. Dobson.
The oxidative refolding of hen lysozyme and its catalysis by protein disulfide isomerase.
***EMBO J,*** 1999, 18(17): 4794-4803.

552. B. van den Berg, E. W. Chung, C. V. Robinson and C. M. Dobson.
Characterisation of the dominant oxidative folding intermediate of hen lysozyme.
***J Mol Biol,*** 1999, 290(3): 781-796.

553. M. Sunde, A. D. Miranker, D. Canet, C. V. Robinson and C. M. Dobson.
Conformational dynamics and protein unfolding in lysozyme amyloidosis.
***Biophys J,*** 1999, 76(1): A170-A170.

554. A. A. Rostom and C. V. Robinson.
Detection of the intact GroEL chaperonin assembly by mass spectrometry.
***J Am Chem Soc,*** 1999, 121(19): 4718-4719.

555. E. J. Nettleton and C. V. Robinson.
Probing conformations of amyloidogenic proteins by hydrogen exchange and mass spectrometry.
***Methods Enzymol,*** 1999, 309: 633-646.

556. A. M. Last and C. V. Robinson.
Protein folding and interactions revealed by mass spectrometry.
***Curr Opin Chem Biol,*** 1999, 3(5): 564-570.

557. S. K. Kulkarni, A. E. Ashcroft, M. Carey, D. Masselos, C. V. Robinson and S. E. Radford.
A near-native state on the slow refolding pathway of hen lysozyme.
***Protein Sci,*** 1999, 8(1): 35-44.

558. E. T. A. S. Jaikaran, C. V. Robinson, P. Tito, P. E. Fraser and A. Clark.
Insulin and islet amyloid polypeptide (IAPP) 'amylin' form stable molecular complexes which could modify amyloid fibril formation in type 2 diabetes.
***Amyloid and Amyloidosis,*** 1999, 533-535.

559. V. Forge, R. T. Wijesinha, J. Balbach, K. Brew, C. V. Robinson, C. Redfield and C. M. Dobson.
Rapid collapse and slow structural reorganisation during the refolding of bovine alpha-lactalbumin.
***J Mol Biol,*** 1999, 288(4): 673-688.

560. J. E. Coyle, F. L. Texter, A. E. Ashcroft, D. Masselos, C. V. Robinson and S. E. Radford.
GroEL accelerates the refolding of hen lysozyme without changing its folding mechanism.
***Nat Struct Biol,*** 1999, 6(7): 683-690.

561. A. Clark, E. T. A. S. Jaikaran, P. Tito, C. V. Robinson and P. E. Fraser.
Insulin and islet amyloid polypeptide 'amylin' form stable molecular complexes in vitro affecting fibril formation.
***Diabetologia,*** 1999, 42: A145.

562. A. A. Rostrom and C. V. Robinson.
Disassembly of intact multiprotein complexes in the gas phase.
***Curr Opin Struct Biol.*** 1999, 9(1): 135-141.

563. E. W. Chung, D. A. Henriques, D. Renzoni, C. J. Morton, T. D. Mulhern, M. C. Pitkeathly, J. E. Ladbury and C. V. Robinson.
Probing the nature of interactions in SH2 binding interfaces - Evidence from electrospray ionization mass spectrometry.
***Protein Sci,*** 1999, 8(10): 1962-1970.

564. D. Canet, M. Sunde, A. M. Last, A. Miranker, A. Spencer, C. V. Robinson and C. M. Dobson.
Mechanistic studies of the folding of human lysozyme and the origin of amyloidogenic behavior in its disease-related variants.
***Biochemistry,*** 1999, 38(20): 6419-6427.

565. M. Bouchard, P. Tito, D. R. Benjamin, C. V. Robinson and C. M. Dobson.
Mapping the structural characteristics of an ion channel in lipid bilayers: An H/D exchange MS/MS study of gramicidin A.
***FASEB J,*** 1999, 13(7): A1569.

## 1998

566. H. Vis, U. Heinemann, C. M. Dobson and C. V. Robinson.
Detection of a monomeric intermediate associated with dimerization of protein HU by mass spectrometry.
***J Am Chem Soc,*** 1998, 120(25): 6427-6428.

567. A. A. Rostom, M. Sunde, S. J. Richardson, G. Schreiber, S. Jarvis, R. Bateman, C. M. Dobson and C. V. Robinson.
Dissection of multi-protein complexes using mass spectrometry: Subunit interactions in transthyretin and retinol-binding protein complexes.
***Proteins Suppl 2,*** 1998, 3-11.

568. C. V. Robinson, M. Gross and S. E. Radford.
Probing conformations of GroEL-bound substrate proteins by mass spectrometry.
***Methods Enzymol,*** 1998, 290: 296-313.

569. E. J. Nettleton, M. Sunde, Z. H. Lai, J. W. Kelly, C. M. Dobson and C. V. Robinson.
Protein subunit interactions and structural integrity of amyloidogenic transthyretins: Evidence from electrospray mass spectrometry.
***J Mol Biol,*** 1998, 281(3): 553-564.

570. A. Matagne, E. W. Chung, L. J. Ball, S. E. Radford, C. V. Robinson and C. M. Dobson.
The origin of the alpha-domain intermediate in the folding of hen lysozyme.
***J Mol Biol,*** 1998, 277(5): 997-1005.

571. E. Chung, D. Henriques, D. Renzoni, M. Zvelebil, J. M. Bradshaw, G. Waksman, C. V. Robinson and J. E. Ladbury.
Mass spectrometric and thermodynamic studies reveal the role of water molecules in complexes formed between SH2 domains and tyrosyl phosphopeptides.
***Structure,*** 1998, 6(9): 1141-1151.

572. M. Bouchard, C. V. Robinson and C. M. Dobson.
Influence of solvents on gramicidin a conformational interconversion.
***Biophys J,*** 1998, 74(2): A279-A279.

573. D. R. Benjamin, C. V. Robinson, J. P. Hendrick, F. U. Hartl and C. M. Dobson.
Mass spectrometry of ribosomes and ribosomal subunits.
***Proc Natl Acad Sci USA,*** 1998, 95(13): 7391-7395.

## 1997

574. R. C. Wilmouth, I. J. Clifton, C. V. Robinson, P. L. Roach, R. T. Aplin, N. J. Westwood, J. Hajdu and C. J. Schofield.
Structure of a specific acyl-enzyme complex formed between beta-casomorphin-7 and porcine pancreatic elastase.
***Nat Struct Biol,*** 1997, 4(6): 456-462.

575. F. L. Texter, J. E. Coyle, S. K. Kulkarni, C. V. Robinson and S. E. Radford.
Abolition of the fast track of lysozyme folding at neutral pH.
***FASEB J,*** 1997, 11(9): A907.

576. J. E. Coyle, J. Jaeger, M. Gross, C. V. Robinson and S. E. Radford.
Structural and mechanistic consequences of polypeptide binding by GroEL.
***Fold Des,*** 1997, 2(6): R93-R104.

577. E. W. Chung, E. J. Nettleton, C. J. Morgan, M. Gross, A. Miranker, S. E. Radford, C. M. Dobson and C. V. Robinson.
Hydrogen exchange properties of proteins in native and denatured states monitored by mass spectrometry and NMR.
***Protein Sci,*** 1997, 6(6): 1316-1324.

578. D. R. Booth, M. Sunde, V. Bellotti, C. V. Robinson, W. L. Hutchinson, P. E. Fraser, P. N. Hawkins, C. M. Dobson, S. E. Radford, C. C. F. Blake and M. B. Pepys.
Instability, unfolding and aggregation of human lysozyme variants underlying amyloid fibrillogenesis.
***Nature,*** 1997, 385(6619): 787-793.

## 1996

579. C. V. Robinson, E. W. Chung, B. B. Kragelund, J. Knudsen, R. T. Aplin, F. M Poulsen and C. M. Dobson.
Probing the nature of noncovalent interactions by mass spectrometry. A study of protein-CoA ligand binding and assembly.
***J Am Chem Soc,*** 1996, 118(36): 8646-8653.

580. M. B. Pepys, G. A. Tennent, D. R. Booth, V. Bellotti, L. B. Lovat, S. Y. Tan, M. R. Persey, W. L. Hutchinson, S. E. Booth, S. Madhoo, P. N. Hawkins, A. K. Soutar, R. Van Zyl-Smit, J. M. Campistol, P. E. Fraser, S. E. Radford, C. V. Robinson, M. Sunde, L. C. Serpell and C. C. F. Blake.
Molecular mechanisms of fibrillogenesis and the protective role of amyloid P component: Two possible avenues for therapy.
***Ciba Foundation Symposia,*** 1996, 199: 73-89.

581. A. Miranker, C. V. Robinson, S. E. Radford and C. M Dobson.
Investigation of protein folding by mass spectrometry.
***FASEB J,*** 1996, 10(1): 93-101.

582. A. Miranker, G. H. Kruppa, C. V. Robinson, R. T. Aplin and C. M. Dobson.
Isotope-labeling strategy for the assignment of protein fragments generated for mass spectrometry.
***J Am Chem Soc,*** 1996, 118(31): 7402-7403.

583. M. Gross, C. V. Robinson, M. Mayhew, F. U. Hartl and S. E. Radford.
Significant hydrogen exchange protection in GroEL-bound DHFR is maintained during iterative rounds of substrate cycling.
***Protein Sci,*** 1996, 5(12): 2506-2513.

## 1995

584. C. V. Robinson and S. E. Radford.
Weighing the evidence for structure - Electrospray-ionization mass spectrometry of proteins.
***Structure,*** 1995, 3(9): 861-865.

585. B. Kragelund, C. V. Robinson, J. Knudsen, C. M. Dobson and F. M. Poulsen.
Folding of a 4-helix bundle: studies of acyl-coenzyme A binding protein.
***Biochemistry,*** 1995, 34(21): 7217-7224.

586. S. D. Hooke, S. J. Eyles, A. Miranker, S. E. Radford, C. V. Robinson and C. M. Dobson.
Cooperative elements in protein-folding monitored by electrospray-ionization mass spectrometry.
***J Am Chem Soc,*** 1995, 117(28): 7548-7549.

587. C. Chan, A. C. Willis, C. V. Robinson, R. T. Aplin, S. E. Radford and S. J. Ferguson.
The complete amino acid sequence confirms the presence of Pseudoazurin in Thiosphaera-pantotropha.
***Biochem J,*** 1995, 308: 585-590.

## 1994

588. C. V. Robinson, M. Gross, S. J. Eyles J. J. Ewbank, M. Mayhew, F. U. Hartl, C. M. Dobson and S. E. Radford.
Conformation of GroEL-bound alpha-lactalbumin probed by mass spectrometry.
***Nature,*** 1994, 372(6507): 646-651.

589. P. L. Roach, J. E. Baldwin, R. T Aplin, C. V. Robinson and C. J. Schofield.
Peptide mapping of the active site of Bacillus cereus beta lactamase-I by the use of high-pressure liquid chromatography coupled to electrospray-ionization mass spectrometry.
***J Chem Soc Chem Commun,*** 1994: (7): 849-850.

590. J. Payne, P. W. Skett, R. T. Aplin, C. V. Robinson and D. J. C. Knowles.
Beta-lactamase ragged ends detected by electrospray mass spectrometry correlates poorly with multiple banding on isoelectric focusing.
***Biol Mass Spectrom,*** 1994, 23(3): 159-164.

591. Y. C. Leung, C. V. Robinson, R. T. Aplin and S. G. Waley.
Site-directed mutagenesis of beta-lactamase-I - Role of Glu-166.
***Biochem J,*** 1994, 299: 671-678.

592. S. J. Eyles, S. E. Radford, C. V. Robinson and C. M. Dobson.
Kinetic consequences of the removal of a disulfide bridge on the folding of hen lysozyme.
***Biochemistry,*** 1994, 33(44): 13038-13048.

593. R. T. Aplin, C. V. Robinson, C. J. Schofield and N. J. Westwood.
Does the observation of noncovalent complexes between biomolecules by electrospray-ionization mass spectrometry necessarily reflect specific solution interactions?
***J Chem Soc Chem Commun,*** 1994, (20): 2415-2417.

594. R. T. Aplin, Y. C. Leung, S. E. Radford, C. V. Robinson and S. G. Waley.
Beta-lactamases - Probing the mechanism of action by electrospray-ionization mass spectrometry
***Techniques in Protein Chemistry V,*** 1994, 39-47.

## 1993

595. A. Miranker, C. V. Robinson, S. E. Radford R. T. Aplin and C. M. Dobson.
Detection of transient protein-folding populations by mass spectrometry.
***Science,*** 1993, 262(5135): 896-900.

596. R. T. Aplin, C. V. Robinson, C. J. Schofield and N. J. Westwood.
An investigation into the mechanism of elastase inhibition by cephalosporins using electrospray-ionization mass spectrometry.
***Tetrahedron,*** 1993, (47): 10903-10912.

597. R. T. Aplin, C. V. Robinson, C. J. Schofield and S. G. Waley.
Use of electrospray mass spectrometry to investigate the inhibition of beta-lactamases by 6-halogenopenicillanic acids.
***J Chem Soc Chem Commun,*** 1993, (2): 121-123.

598. R. T. Aplin, J. E. Baldwin, P. L. Roach, C. V. Robinson and C. J. Schofield.
Investigations into the posttranslational modification and mechanism of isopenicillin N-Acyl-Coa Acyltransferase using electrospray mass spectrometry.
***Biochem,*** 1993, 294: 357-363.

## 1992

599. N. Roberts, D. A. Mackenzie, D. J. Jeenes, D. B. Archer, S. E. Radford, C. V. Robinson, R. T. Aplin and C. M. Dobson.
Production of N-15-labeled hen egg-white lysozyme using Aspergillus-niger.
***Biotechnol Lett,*** 1992, 14(10): 897-902.

600. R. T. Aplin, C. V. Robinson, C. J. Schofield and N. J. Westwood.
Studies on the inhibition of porcine pancreatic elastase using electrospray mass spectrometry.
***J Chem Soc Chem Commun,*** 1992, (22): 1650-1652.

# (C. V. Bradley)

## 1983

601. R. Bedford, C. V. Bradley, S. Gardner, B. R. T. Keene and A. Pettmann.
Stevens rearrangements in dihydrophenanthridinium compounds.
***Tetrahedron Lett,*** 1983, 24: 1553-1554.

602. M. C. Dumasia, E. Houghton, C. V. Bradley and D. H. Williams.
Studies related to the metabolism of anabolic steroids in the horse - The metabolism of 1-dehydrotestosterone and the use of fast atom bombardment mass-spectrometry in the identification of steroid conjugates.
***Biomed Mass Spectrom,*** 1983, 10: 434-440.

## 1982

603. M. B. Bazzaz, C. V. Bradley and R. G. Brereton.
4-vinyl-4desethyl chlorophyll A: Characterisation of a new naturally occurring chlorophyll using fast atom bombardment, field desorption and in beam electron mass spectrometry.
***Tetrahedron Lett,*** 1982, 23: 1211-1214.

604. C. V. Bradley, D. H. Williams and M. R. Hanley.
Peptide sequencing using the combination of Edman degradation, carboxypeptidase digestion and fast atom bombardment mass spectrometry.
***Biochem Biophys Res Commun***, 1982, 104: 1223-1230.

## 1981

605. D. H. Williams, C. V. Bradley, S. Santikarn and G.Bojesen.
Fast atom bombardment mass spectrometry.
***Biochem J,*** 1981, 201: 105-117.

606. D. H. Williams, C. V. Bradley, G. Bojesen, S. Santikarn and L. C. E. Taylor.
Fast atom bombardment mass spectrometry: A powerful technique for the study of polar molecules. ***J Am Chem Soc,*** 1981, 103: 5700.

607. C. V. Bradley, I. Howe and J. H. Beynon.
Sequence analysis of underivatized peptides by negative ion chemical ionization and collision induced dissociation.
***Biomed Mass Spectrom,*** 1981, 8: 85-89.

## 1980

608. C. V. Bradley, I. Howe and J. H. Beynon.
Analysis of underivatised peptide mixtures by collision induced dissociation of negative ions.
***J Chem Soc Chem Commun,*** 1980, 562-564.