

CURRICULUM VITAE

Carol Vivien Robinson DBE FRS FMedSci

Personal and Contact Details

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

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

Education and Appointments

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

2018	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

2020	Othmer Gold Medal from the Science History Institute
2019	Royal Medal A from the Royal Society
2019	Stein and Moore Award from the Protein Society
2019	Novozymes Prize from the Novo Nordisk Foundation
2018	Field and Franklin Award from the American Chemical Society
2017	Hans Krebs Medal from the FEBS
2016	Astra Zeneca Award from the Biochemical Society
2016	Torbern Bergmann Award from the Swedish Chemical Society
2015	Havinga Medal from the Havinga Foundation
2015	Women in Science Award from L'Oreal-UNESCO
2014	Kaj Linderstrøm-Lang Prize from the Carlsberg Research Center
2014	Thomson Medal Award from the International Mass Spectrometry Foundation
2013	Anatrace Award for Membrane Proteins from the Biophysical Society USA
2012	Distinguished Achievement in Proteomic Sciences from HUPO
2011	Interdisciplinary Prize from the Royal Society of Chemistry
2011	Woman of the Year Award from FEBS/EMBO
2011	Aston Medal from the British Mass Spectrometry Society
2010	Davy Medal from the Royal Society
2010	Prelog Medal from ETH, Zurich
2008	Anfinsen Award from the Protein Society
2004	Rosalind Franklin Award from the Royal Society
2003	Biemann Medal from the American Society for Mass Spectrometry
2002	Silver Medal from the Royal Society of Chemistry for Mass Spectrometry

Honorary Titles

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 Degree 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

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

Named Lectures (Cont'd)

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

Current Professional Activities

2020	Member, Advisory Panel, Rosalind Franklin Institute, Harwell
2020	HHMI Investigator Review Panel, Maryland, USA
2018	Director of the New Interdisciplinary Science Institute (KIND-ox)
2018	Member, International Advisory Board, <i>Angewandte Chemie</i>
2016	Member of the Selection Committee for the Dr Paul Janssen Award
2016	Member of the Selection Committee for the Infosys Prize
2016	Member, Board of Directors, The Bert L & N Kuggie Vallee Foundation
2015	Scientific Advisory Board Member, Dept. of Biochemistry, University of Oxford
2015	Editorial Board Member, <i>Structure</i>
2015	Advisory Board Member, The Royal National Children's SpringBoard Foundation, London
2012	Editorial Board Member, <i>Current Opinion in Structural Biology</i>

Previous Professional Activities

2016 - 2018	Member, Council of the Royal Society
2015 - 2018	Member, Board of Trustees, Rhodes House, Oxford
2015 - 2018	Chair of the L'Oreal Women in Science Programme
2015 - 2017	Member, Board of Trustees, Heinrich Wieland Prize, Boehringer Ingelheim Foundation
2014 - 2017	Chair, The Royal Society, Rosalind Franklin Award Committee
2014 - 2017	Member, The Royal Society, Dorothy Hodgkin Fellowship Selection Committee
2011 - 2014	Member, The Royal Society, Awards Nominations Committee
2012 - 2013	Panel Member, ERC Synergy Grant Selection and Evaluation Panel
2012 - 2013	Associate Head, Mathematical, Physical and Life Sciences Division, University of Oxford
2012 - 2013	Member, Government Blackett Review Panel for Biosecurity
2000 - 2013	Associate Editor, <i>Journal of the American Society for Mass Spectrometry</i>
2008 - 2009	Council Member, The Royal Society
2005 - 2007	Member, The Royal Society, Physical Sciences Awards Committee Member, The Royal Society, Dorothy Hodgkin Fellowship Selection Panel Member, The Royal Society, Rosalind Franklin Award Committee Member, The Royal Society, Medals and Awards Selection Panel
2007 - 2009	Assistant Head, Department of Chemistry, University of Cambridge
2003 - 2009	Member, Faculty Board of The Physical Sciences, University of Cambridge
2002 - 2014	Member, Editorial Board, <i>Journal of Molecular and Cellular Proteomics</i>
1998 - 2007	Associate Editor, <i>Protein Science</i>
1998 - 2002	Committee Member, BBSRC Biomolecular Sciences Panel

Current Grants

2019 - 2024	Wellcome Trust Multi-user equipment grant (PI)	£ 808,928
2018 – 2021	Innovate UK A new platform for drug discovery on membrane protein targets.	£ 481,722
2016 - 2021	Medical Research Council Applications of mass spectrometry to membrane protein drug development.	£ 1,363,647
2016 - 2021	European Research Council Advanced Investigator Award Elucidating natural bilayer lipid environments.	€ 2,481,741
2015 - 2021	Wellcome Trust Senior Investigator Award The effects of drug and lipid binding on the structure and function of membrane proteins in health and disease.	£ 2,428,381

Patents

Drug Binding to Membrane Pumps:

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

European Patent GB-201110272-DO (Granted)

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

US Patent Application US9536718B2 (Granted).

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

Detection of membrane proteins from surfaces

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

GPCR Detergent:

Detection of folded GPCRS in complex with signalling proteins.

UK Application 1703033 (Unpublished – Filed).

Dendritic Detergents:

Synthesis and application of a new class of detergents for membrane protein MS

PCT Application 1814356 (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

Contributions to UK industry

In 1998 I proposed a mass spectrometry design to Micromass UK Ltd to enable the transmission and analysis of macromolecular complexes through a mass spectrometer. This has contributed to a worldwide increase in sales of Q-tof and Synapt mass spectrometers, many of them including the proposed modifications. In 2016 I founded, and became 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. In 2018 the company received Series A funding (£14 M) from Syncona and took a new direction exploiting its platform technology for membrane protein drug targets and has been re-launched as OMass Therapeutics Ltd with 18 employees.

Teaching and mentorship

I have supervised more than 50 PhD graduates (25 women) and more than 60 post-doctoral fellows (26 women). I take an active role in mentoring younger women through the tenure process and encouraging them to stay in science. My research group includes many scientists with children, many of whom have gone on to achieve high profile academic jobs elsewhere.

Public Awareness in Science – selected media interviews

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](https://www.radionz.co.nz/national/programmes/saturday/audio/2018635535/dame-carol-robinson-elemental-medicine), 8th March 2018: <https://www.radionz.co.nz/national/programmes/saturday/audio/2018635535/dame-carol-robinson-elemental-medicine>
- Auckland Museum, 20th March 2018: *‘What’s really inside your medicine cabinet?’*

2017

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

2015

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

2014

- Science Careers, 11th February 2014: Comment on ‘More action needed to retain women in Science’
http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2014_02_11/caredit.a1400036
- BBC Radio 4, The Life Scientific, 22nd July 2014: Interview with Jim Al-Khalili
<http://www.bbc.co.uk/programmes/b049yhcn>
- MRC Network Magazine, September 2014: Interview for ‘Working Lives’
<http://www.mrc.ac.uk/news-events/publications/network-autumn-2014/>
- Financial Times, 12th December 2014: *A chemist in her element* – interview for FT ‘House and Home’
<http://www.ft.com/cms/s/0/fdc185f6-7bb2-11e4-a695-00144feabdc0.html>

2013

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

Selected Women in Science Events

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

Invited Lectures over past five years

2020

- January** Oxford Chemistry Alumni Event, Royal Society of Chemistry, London, UK
February Kohn – IASH Workshop, Jerusalem, Israel

2019

- January** ASMS Sanibel Conference, Palm Beach, Florida, USA
February ANZMS Conference, Auckland, New Zealand
1st European Top-Down Proteomics Workshop, Paris, France
March Biophysical Society Annual Lecture, Baltimore, USA
CIFAR Meeting, Montreal, Canada
Celebration of Native Mass Spectrometry, Oxford, UK
May Cold Spring Harbour Conference, Suzhou, China
June ASMS Atlanta, Thermo Fisher user Meeting, USA
July Stein and Moore Lecture, The Protein Society, Seattle, USA
August Amyloid Disease Symposium, Stockholm, Sweden
Structural Biology Symposium, Zurich, Switzerland
September The MPIB Distinguished Visitor Lecture Series, Munich, Germany
iNano Lecture, Aarhus, Denmark
October Rayson Huang Visiting Lectureship, Hong Kong
November CIFAR Meeting, Toronto, Canada
Next Generation Physics Meeting, LMB, Cambridge
SBBS Seminar Series, Biozentrum, University of Basel, Switzerland
NovoNordisk, Copenhagen, Denmark
DSTL, Salisbury, UK
OUCB, University of Oxford, Oxford, UK
Oxford Women in Chemistry, University of Oxford, Oxford, UK

2018

- February** The Inaugural Annual David James Lecture, University of Cambridge, UK
The Mabel Fitzgerald Lecture, University of Oxford, UK
EMBL Wellcome Proteomics Conference, Cambridge, UK
Opening Lecture, Pharma Network, Italian Mass Spectrometry Society, Rome, Italy
- March** University of Canterbury, New Zealand
University of Auckland, New Zealand
- April** Astbury Conversation, University of Leeds, UK
Canadian Institute for Advanced Research, Toronto, Canada
The Cynthia Chan Lecture, University of California, Berkeley, USA
Columbia University, New York City, USA
- May** Ben Gurion University, Israel
Lee Seng Tee Distinguished Lecture, University of Cambridge, UK
- June** 66th ASMS Conference, San Diego, USA
Scripps Research Institute, California, USA
Dame Anne McLaren Lecture, University College London, UK
- July** Genentech, San Francisco, USA
Webster Lecture, Case Western Reserve University, Cleveland, USA
National Institutes of Health, Maryland, USA
- August** 7th EUChemMS Chemistry Conference, Liverpool, UK
22nd International Mass Spectrometry Conference, Florence, Italy
- September** Cambridge Institute for Medical Research (CIMR) 20th Anniversary Symposium, Cambridge, UK
- October** Opening Lecture, HUPO World Congress 2018, Orlando, USA
Joe L Franklin Memorial Lecture, RICE, Houston, USA
TAMU, Texas, USA
Louis-Jeantet Symposium, Geneva, Switzerland
2018 World Life Science Conference, Beijing, China

2017

February	22 nd Lorne Proteomics Symposium, Melbourne, Australia 42 nd Lorne Conference on Protein Structure & Function, Melbourne, Australia Frederick Soddy Lecture, Merton College, Oxford, UK
March	Laboratory Molecular Biology Seminar, Cambridge, UK Opening of CRICK Symposium, London, UK
April	ACS Meeting, Bernard Breslow Symposium, San Francisco, USA ACS Meeting, Field and Franklin Symposium, San Francisco, USA Amgen, Thousand Oaks, California, USA University of California San Francisco (UCSF), San Francisco, USA Exeter College, Oxford, UK St George's College, Surrey, UK
May	Royal Society of Chemistry, London, UK EMBO/FEBS Women in Science, Sicily, Italy University of Warwick, Coventry, UK
June	Purdue University, Indiana, USA
July	Baddiley Lecture, Newcastle University, UK Comenius Children's University, Bratislava, Slovakia The Protein Society, 31 st Annual Symposium, Montreal, Canada
August	Norwich Cambridge Student Symposium (NoCaSS), Norwich, UK
September	JMB Symposium in honour of Sir John Kendrew, University of Cambridge, UK Protein Folding, Evolution and Interactions Symposium, Cambridge, UK FEBS 2017, Jerusalem, Israel Knut and Alice Wallenberg Jubilee Symposium, Stockholm, Sweden GBM Fall Conference, Fritz Lipmann Lecture, Bochum, Germany Proteins and Organised Complexity Summer School, Spetsai, Greece
October	Membrane Protein Workshop, Academia Sinica, Taiwan LGC 175 th Science Conference Celebrations, London, UK
November	iHuman Forum, Shanghai Tech University, Shanghai Distinguished Masters Lecture, RSC, Shanghai
December	SMR/BMCS Meeting, Royal Marsden Conference Centre, London

2016

January	The Royal Institution Discourse, London, UK
February	Gordon Research Conference, Tuscany, Italy Chemistry Anniversary Lecture, University of York, UK
March	UCLA, California, USA Structural Biology Symposium, Texas, USA ACS Meeting, California, USA Malaghan Institute of Medical Research, Wellington, New Zealand
April	Oxford Alumni North America Event, Washington, USA
June	Novalix Symposium, Strasbourg, France Torbern Bergman Award Lecture, Umea, Sweden Vallee Foundation Summer Symposium, Rapallo, Italy Membrane Pore Meeting, London, UK
July	Max Quant Summer School, Oxford, UK German Chemical Society, Berlin, Germany
August	The Bonnie Wallace Celebratory Symposium, London, UK
September	The Harry G. Day Lecture, University of Indiana, USA Boehringer-Ingelheim, Ridgefield, USA Pfizer Research Institute, Groton, USA Rockefeller University, New York, USA Harvard Medical School, Boston, USA
November	The Astra Zeneca Medal Award Lecture, Biochemistry Society, London, UK Novartis, Basel, Switzerland
December	Native Mass Spectrometry Summit, Bremen, Germany

PUBLICATIONS

2020

1. 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, *in press*.
2. 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.
3. 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.
4. 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.
5. 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.
6. C. V. Robinson.
Christopher Dobson, 1949-2019: Mentor, Friend, Scientist Extraordinaire.
Annu Rev Biochem, 2020, *in press*.
7. 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.
8. J. Gault, I. 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.
9. 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, *in press*.

10. 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, *in press*.
11. 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.
12. 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.
13. 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, 2019, S0092-8674(19): 31332-31337.
14. 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: 1–7.

2019

15. 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.
16. 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.
17. 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.
18. J. Gault and C. V. Robinson.
Cracking Complexes To Build Models of Protein Assemblies.
ACS Cent Sci, 2019, 58: 310-1311.
19. 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.
20. 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.
21. 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.

22. 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. 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.
29. C. V. Robinson.
Mass spectrometry: From plasma proteins to mitochondrial membranes.
Proc Natl Acad Sci USA, 2019, pii: 201820450.
30. 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.
31. 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.
32. C. V. Robinson.
Capturing biology in flight.
J Am Soc Mass Spectrom, 2019, 30(1): 4-6.

2018

33. 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.
34. 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. Grünwald and C. V. Robinson.
Protein assemblies ejected directly from native membranes yield complexes for mass spectrometry.
Science, 2018, 362(6416): 829-834.
35. 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.
36. 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.
37. Y. Y. Dong, H. Wang, A. C. W. Pike, S. A. Cochrane, S. Hamedzadeh, F. J. Wyszynski, 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.
38. T. Kecman, K. Kuś, D. H. Heo, K. Duckett, A. Birot, S. Liberatori, S. Mohammed, L. Geis-Asteggiate, 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.
39. 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.
40. 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.
41. 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.

42. 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.
43. 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.
44. 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.
45. 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.
46. J. R. O. Eaton, Y. Alenazi, K. Singh, G. Davies, L. Geis-Asteggianti, 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.
47. 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.
48. E. Natan, T. Endoh, L. Haim-Vilmovsky, T. Flock, G. Chalancon, J. T. S. Hopper, B. Kintsjes, 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.
49. 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.
50. 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.
51. 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

52. 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.
53. 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.
54. 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.
55. 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 Engl, 2017, 56(46): 14463-14468.
56. 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.
57. 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 Engl, 2017, 56(47): 14873-14877.
58. 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.
59. 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.
60. 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.

61. N. Kronqvist, M. Sarr, A. Lindqvist, K. Nordling, M. Otkovs, 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.
62. 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.
63. 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 β 2-microglobulin in vitro and modifies its tissue distribution in vivo.
Sci Rep, 2017, 7: 46711.
64. 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.
65. 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.
66. C. V. Robinson.
From molecular chaperones to membrane motors: through the lens of a mass spectrometrists.
Biochem Soc Trans, 2017, 45(1): 251-260.
67. 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.
68. 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.
69. K. Gupta, J. A. Donlan, J. T. Hopper, P. Uzdavinyas, 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.

70. 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.
71. 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

72. 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.
73. 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.
74. 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.
75. 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.
76. M. T. Marty, K. K. Hoi and C. V. Robinson.
Interfacing Membrane Mimetics with Mass Spectrometry.
Acc Chem Res, 2016, 49: 2459-2467.
77. 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.
78. 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.
79. 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.

80. 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.
81. 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 Engl, 2016, 55: 2361-2367.
82. 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.
83. 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.
84. 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.
85. 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.
86. 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.
87. 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.
88. 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.
89. M. Landreh, M. T. Marty, J. Gault and C. V. Robinson.
A sliding selectivity scale for lipid binding to membrane proteins.
Curr Opin Struct Biol, 2016, 39: 54-60.
90. 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.
91. 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

92. 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.
93. 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.
94. 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.
95. 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.
96. 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.
97. G. Veggiani, T. Nakamura, M. D. Brenner, R. V. Gayet, J. Yan, C. V. Robinson and M. Howarth.
Programmable polyproteins built using twin peptide superglues.
Proc Natl Acad Sci USA, 2016, 113(5): 1202-1207.
98. 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.
99. 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.
100. 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 Engl, 2016, 55(7): 2361-2367.
101. 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.

102. 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

103. 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.
104. 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.
105. M. Landreh, I. Liko, P. Uzdavinyas, 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.
106. 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.
107. 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.
108. 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.
109. 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.
110. 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.
111. 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.

112. J. Marcoux, P. P. Mangione, R. Porcari, M. T. Degiacomi, G. Verona, G. W. Taylor, S. Giorgetti, S. Raimondi, S. Sanglier-Cianfèrari, 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.
113. 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.
114. 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.
115. 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.
116. 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.
117. 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 MsL constructs: Insights from mass spectrometry.
Chem Biol, 2015, 22(5): 593-603.
118. 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.
119. 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
120. 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.
121. 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.

122. 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.
123. 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.
124. 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.
125. M. Landreh and C. V. Robinson.
A new window into the molecular physiology of membrane proteins.
J Physiol, 2015, 593(2): 355-362.
126. 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.
127. 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.
128. 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.
129. 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.
130. 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 yeast eIF3:eIF5 complex.
Chem Biol, 2015, 22(1): 117-128.
131. 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.

132. 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

133. 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.
134. 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.
135. 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.
136. M. Zhou and C. V. Robinson.
Flexible membrane proteins: functional dynamics captured by mass spectrometry.
Curr Opin Struct Biol, 2014, 28: 122-130.
137. 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.
138. 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.
139. 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.
140. 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.
141. 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 $\gamma\epsilon 2$ tetrameric core.
Nat Commun, 2014, 5: 3902.
142. M. B. van Eldijk, B. J. Pieters, V. A. Mikhailov, C. V. Robinson, J. C. M. van Hest and J. Mecnovic.
Catenane versus ring: do both assemblies of CS2 hydrolase exhibit the same stability and catalytic activity?
Chem Sci, 2014, 5(7): 2879-2884.

143. 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.
144. 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.
145. 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.
146. 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.
147. 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.
148. 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.
149. 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.
150. 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.
151. 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.
152. 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.

153. 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.
154. 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. Procari, 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.
155. 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.
156. C. Schmidt and C. V. Robinson.
Dynamic protein ligand interactions – insights from mass spectrometry.
FEBS J, 2014, 281(8): 1950-1964.

2013

157. 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.
158. 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.
159. 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.
160. 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.
161. 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.
162. J. Marcoux and C. V. Robinson.
Twenty years of gas phase structural biology.
Structure, 2013, 21(9): 1541-1550.
163. 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.

164. 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.
165. 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.
166. 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.
167. 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.
168. N. G. Housden, J. T. Hopper, N. Lukyanova, 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.
169. 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.
170. 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.
171. 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.
172. 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.
173. 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.
174. 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.

175. 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.
176. 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.
177. 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.
178. 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 Engl, 2013, 52(1): 361-365.
179. 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.
180. 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

181. 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.
182. 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.
183. 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.
184. 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.

185. 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.
186. 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.
187. 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.
188. 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.
189. 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.
190. 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.
191. 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.
192. Z. Hall and C. V. Robinson.
Do charge state signatures guarantee protein conformations?
J Am Soc Mass Spectrom, 2012, 23(7): 1161-1168.
193. 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.
194. 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.
195. 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.

196. 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.
197. 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.
198. 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.
199. 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.
200. 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.
201. 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.
202. 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.
203. 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.
204. A. J. Borysik and C. V. Robinson.
Formation and dissociation processes of gas-phase detergent micelles.
Langmuir, 2012, 28(18): 7160-7167.

2011

205. 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.
206. 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.
207. 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.
208. 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.
209. M. Sharon and C. V. Robinson.
A quantitative perspective on hydrophobic interactions in the gas-phase.
Curr Proteomics, 2011, 8(1): 47-58.
210. M. Sharon and C. V. Robinson
Peeling back the layers of complexity.
Curr Opin Struct Biol, 2011, 21(5): 619-621.
211. 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.
212. 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.
213. 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.
214. C. V. Robinson.
John Fenn (1917-2010) OBITUARY.
Nature, 2011, 469(7330): 300.
215. C. V. Robinson.
Dudley Williams, May 25, 1937 - November 3, 2010 OBITUARY.
J Am Soc Mass Spectrom, 2011, 22(4): 791-792.

216. C. V. Robinson.
In pursuit of female chemists.
Nature, 2011, 476(7360): 273-275.
217. 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.
218. 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.
219. 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.
220. I. G. Munoz, H. Yebenes, M. Zhou, P. Mesa, M. Serna, A. Y. Park, E. Bragado-Nilsson, A. Belosode, 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.
221. 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.
222. 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.
223. 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.
224. 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.
225. 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.

226. 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.
227. 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.
228. 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.
229. 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.
230. 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.
231. 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

232. M. Zhou and C. V. Robinson. When proteomics meets structural biology. ***Trends Biochem Sci***, 2010, 35(9): 522-529.
233. 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.
234. 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.
235. 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.

236. 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.
237. 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.
238. 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.
239. 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.
240. 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.
241. 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.
242. 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.
243. 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.
244. 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.
245. 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.
246. 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.

247. 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.
248. 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.
249. 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.
250. 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.
251. 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.
252. 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.
253. 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.
254. 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.
255. U. I. Ekeowa, J. Freeke, E. Miranda, B. Goptu, 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.
256. 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.
257. 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.

258. 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.
259. 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

260. 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.
261. 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.
262. 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 meningitidis* reveals a new octameric assembly state for LysR transcriptional regulators.
Nucleic Acids Res, 2009, 37(14): 4545-4558.
263. 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.
264. 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.
265. 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.
266. 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.
267. 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.

268. 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.
269. J. A. Leary, M. R. Schenauer, R. Stefanescu, A. Andaya, B. T. Ruotolo, C. V. Robinson, K. Thalassinou, 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.
270. 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.
271. 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.
272. S. E. Olstoe, B. H. Ridha, V. Bellotti, N. Wang, C. V. Robinson, S. J. Crutch, G. Keir, R. Kukkastenvahmas, 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.
273. 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.
274. 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.
275. 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.
276. 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.
277. 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 Engl, 2009, 48(20): 3665-3668.

278. 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.
279. 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.
280. 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.
281. 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.
282. 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.
283. 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.
284. S. L. Bernstein, N. F. Dupuis, N. D. Lazo, T. Wytenbach, M. M. Condrón, 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.
285. 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.
286. J. L. P. Benesch and C. V. Robinson.
Biological chemistry dehydrated but unharmed.
Nature, 2009, 462(7273): 576-577.
287. 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.

288. 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

289. 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.
290. 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.
291. 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.
292. 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.
293. 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.
294. 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.
295. 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.
296. 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.
297. 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.
298. 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.

299. 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.
300. 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 Spätzle.
J Biol Chem, 2008, 283(21): 14629-14635.
301. 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.
302. 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.
303. 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.
304. 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.
305. 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

306. 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.
307. 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.
308. 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.
309. 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.

310. 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 Engl, 2007, 46(42): 8001-8004.
311. C. V. Robinson, A. Sali and W. Baumeister.
The molecular sociology of the cell.
Nature, 2007, 450(7172): 973-982.
312. 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.
313. 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.
314. 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.
315. 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.
316. 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.
317. 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.
318. 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.
319. H. Hernández and C. V. Robinson.
Determining the stoichiometry and interactions of macromolecular assemblies from mass spectrometry.
Nat Protoc, 2007, 2(3): 715-726.

320. 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.
321. 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.
322. 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.
323. 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.
324. 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.
325. 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

326. 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.
327. 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.
328. 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.
329. 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.

330. 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.
331. 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.
332. 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.
333. B. T. Ruotolo and C. V. Robinson.
Aspects of native proteins are retained in vacuum.
Curr Opin Chem Biol, 2006, 10(5): 402-408.
334. 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.
335. 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.
336. 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.
337. 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.
338. 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.
339. 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.
340. 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.

341. 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.
342. 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.
343. 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.
344. 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.
345. 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.
346. G. L. Caddy and C. V. Robinson.
Insights into amyloid fibril formation from mass spectrometry.
Protein Peptide Lett, 2006, 13(3): 255-260.
347. 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.
348. 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

349. 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.
350. 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.
351. 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.

352. 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.
353. 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.
354. 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.
355. C. V. Robinson.
Watching and weighting - chaperone complexes in action.
Nat Methods, 2005, 2(5): 331-332.
356. 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.
357. 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.
358. 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.
359. 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.
360. 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.
361. 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.
362. 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.
363. 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.

364. 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.
365. 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 cooperativity is a common feature underlying the amyloidogenicity of pathogenic
lysozyme mutations.
J Mol Biol, 2005, 346(3): 773-788.
366. 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.
367. 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.
368. 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.
369. 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

370. 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.
371. Z. Yao, M. A. Seeliger, L. S. Itzhaki and C. V. Robinson.
Investigation of protein interactions between Cks1 and Skp2 using hydrogen exchange nano-
electrospray mass spectrometry.
Protein Sci, 2004: 13: 86-86.
372. 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.
373. 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.

374. 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.
375. 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.
376. M. G. McCammon and C. V. Robinson.
Structural change in response to ligand binding.
Curr Opin Chem Biol, 2004, 8(1): 60-65.
377. 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.
378. 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.
379. 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.
380. 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.
381. 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.
382. 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.
383. 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.
384. 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.
385. 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.

386. 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.
387. 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.
388. A. J. Callaghan, J. P. Aurikko, L. L. Ilag, 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.
389. 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

390. 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.
391. 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.
392. 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.
393. 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.
394. 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.
395. 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.

396. 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.
397. 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.
398. 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.
399. 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

400. F. Sobott and C. V. Robinson.
Protein complexes gain momentum.
Curr Opin Struct Biol, 2002, 12(6): 729-734.
401. 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.
402. 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.
403. C. V. Robinson.
Protein complexes take flight.
Nat Struct Biol, 2002, 9(7): 505-506.
404. 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.
405. 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.
406. 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.

407. 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.
408. 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.
409. 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.
410. 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

411. 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.
412. 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.
413. C. V. Robinson and D. Cowburn.
From individual proteins to whole cells - Editorial overview.
Curr Opin Chem Biol, 2001, 5(5): 565-566.
414. 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.
415. 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.
416. H. Hernández and C. V. Robinson.
Dynamic protein complexes: Insights from mass spectrometry.
J Biol Chem, 2001, 276(50): 46685-46688.

417. 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.
418. 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

419. 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.
420. 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.
421. M. A. Tito, K. Tars, K. Vøllestad, 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.
422. 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.
423. 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.
424. C. V. Robinson.
The disassembly of macromolecular complexes using mass spectrometry.
FASEB J, 2000, 14(8): A1511-A1511.
425. 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.
426. 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.
427. 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.

428. 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.
429. 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.
430. 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.
431. 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.
432. 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.
433. 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.
434. 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

435. 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.
436. 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.
437. 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.
438. 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.

439. 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.
440. E. J. Nettleton and C. V. Robinson.
Probing conformations of amyloidogenic proteins by hydrogen exchange and mass spectrometry.
Methods Enzymol, 1999, 309: 633-646.
441. A. M. Last and C. V. Robinson.
Protein folding and interactions revealed by mass spectrometry.
Curr Opin Chem Biol, 1999, 3(5): 564-570.
442. 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.
443. 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.
444. 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.
445. 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.
446. 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.
447. 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.
448. 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.
449. 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.
450. 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

451. 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.
452. 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.
453. 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.
454. 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.
455. 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.
456. 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.
457. M. Bouchard, C. V. Robinson and C. M. Dobson.
Influence of solvents on gramicidin a conformational interconversion.
Biophys J, 1998, 74(2): A279-A279.
458. 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

459. 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.
460. 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.

461. 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.
462. 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.
463. 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

464. 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.
465. 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.
466. 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.
467. 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.
468. 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

469. C. V. Robinson and S. E. Radford.
Weighing the evidence for structure - Electrospray-ionization mass spectrometry of proteins.
Structure, 1995, 3(9): 861-865.
470. 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.

471. 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.
472. 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

473. 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.
474. 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.
475. 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.
476. 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.
477. 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.
478. 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.
479. 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

480. 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.
481. 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.

482. 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.

483. 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

484. 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.

485. 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

486. 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.

487. 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

488. 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.

489. 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

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

491. 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.
492. 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

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