

**Name:** Thomas William Muir

**Date of Birth:** 6/21/67

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**Education and Appointments:**

INSTITUTE AND LOCATION	DEGREE/POSITION	YEAR CONFERRED	FIELD OF STUDY
University of Edinburgh, UK	B.Sc. (Hons) 1st Class	1989	Chemistry
University of Edinburgh, UK	Ph.D	1993	Organic Chemistry
Scripps Research Institute	Postdoctoral	1993	Bio-Organic Chemistry
Scripps Research Institute	Senior Research Associate	1995	Bio-Organic Chemistry
The Rockefeller University	Assistant Professor Head of Laboratory	1996	Bio-Organic Chemistry
The Rockefeller University	Associate Professor Head of Laboratory	2000	Bio-Organic Chemistry
The Rockefeller University	Professor and Head of Laboratory	2002	Bio-Organic Chemistry
The Rockefeller University	Richard E. Salomon Family Professor	2005	Bio-Organic Chemistry
The Rockefeller University	Director; Pels Center for Chemistry, Biochemistry and Structural Biology	2005	Bio-Organic Chemistry
Princeton University	Van Zandt Williams, Jr. Class of '65 Professor of Chemistry	2010	Bio-Organic Chemistry
Princeton University	Chairman, Department of Chemistry	2015-2020	Bio-Organic Chemistry
Princeton University	Affiliate of the Lewis- Sigler Institute for Integrated Genomics	2015	Bio-Organic Chemistry

**Awards and Honors**

Faculty of Science undergraduate scholarship (University of Edinburgh).

Mackay-Smith undergraduate prize (University of Edinburgh).  
Stephenson undergraduate prize (University of Edinburgh).  
Faculty of Science postgraduate scholarship (University of Edinburgh).  
Williamson postgraduate prize (University of Edinburgh).  
Gordon postgraduate fellowship (University of Edinburgh).  
Amgen postdoctoral fellowship (The Scripps Research Institute).  
1998 Pew Scholar in the Biomedical Sciences  
1999 Burroughs-Wellcome Fund New Investigator Award  
2000 Alfred P. Sloan Research Fellow  
2001 Irma T. Hirschl/Monique Weill-Caulier Trust Research Fellow  
2002 Leonidas Zervas Award from The European Peptide Society  
2005 Irving Sigal Young Investigator Award from The Protein Society  
2005 Richard E. Salomon Family Professor (Rockefeller University)  
2007 Kavli Fellow, U.S. National Academy of Sciences  
2007 Elected Fellow of the American Association for the Advancement of Science  
2008 Vincent du Vigneaud Award in Peptide Chemistry, American Peptide Society  
2008 Distinguished Teaching Award, The Rockefeller University  
2008 Winner of the New York Academy of Sciences Blavatnik Award for Young Scientists and Engineers  
2012 Jeremy Knowles Award from the Royal Society of Chemistry  
2012 Elected Fellow of the Royal Society of Chemistry  
2012 NIGMS MERIT Award  
2013 Arthur C. Cope Scholar Award from the American Chemical Society  
2013 Elected Corresponding Fellow of the Royal Society of Edinburgh  
2016 Breslow Award in Biomimetic Chemistry from the American Chemical Society  
2017 E.T. Kaiser Award in Protein Chemistry from the Protein Society  
2020 Elected to the American Academy of Arts and Sciences  
2021 Ira Remsen Award, American Chemical Society, Maryland Section  
2021 Elected Fellow of the Royal Society

### **Professional Affiliations/Service**

Member of the American Chemical Society  
Member of the American Association of the Advancement of Science  
Member, The Harvey Society  
Editorial Board, Current Peptide and Protein Science

Editorial Board, Journal of Peptide Science  
 Member Bioorganic & Natural Product Chemistry Study Section (NIH) (2003-2005)  
 Member Synthetic and Biological Chemistry B Study Section (NIH) (2005-2006)  
 Editorial Board, ChemBiochem  
 Member, Review Panel, Damon Runyon Cancer Foundation 2004-2007  
 co-Chair (with Jeff Kelly), 19<sup>th</sup> American Peptide Symposium, San Diego June 2005  
 Member Awards Committee, The Protein Society, 2007  
 Member of External Review Committee for UCSF Graduate Program in Chemistry March 2008  
 Member of External Review Committee for Gene Transcription Unit, EMBL Heidelberg May 2008  
 Member Awards Committee, American Peptide Society, 2008-  
 Council Member, American Peptide Society, 2009-2015  
 Ad-hoc member Synthetic and Biological Chemistry B Study Section (NIH) (2009)  
 Member of Review Panel for Swiss National Science Foundation Center Grants (2009-present)  
 Member of Scientific Advisory Committee – European Molecular Biology Laboratory (2010-2016)  
 Member of Review Panel – NIH Directors Pioneer Award (2010-2012)  
 Associate Editor, Chemical Science (2012-2015)  
 Member of Scientific Advisory Committee – Institute of Biochemical Research, Barcelona (2012-present)  
 Ad-hoc member NIH NIGMS Advisory Council (2014)  
 Member of Scientific Advisory Board – Pew Biomedical Fellows Program (2014-present)  
 Member of Chemistry Advisory Board – Sloan Fellows Program (2015-present)  
 Member of Award Selection Committee – Camille Henry Dreyfus Foundation (2020-present)  
 Member of Scientific Advisory Committee – Rosalind Franklin Institute, Oxford (2019-present)  
 Member of Scientific Advisory Committee – Institute for Molecular Biosciences, Brisbane (2020-present)  
 Member of Quinquennial Review Panel for MRC-LMB, Cambridge, UK (2016, 2021)

### **Consulting/SAB Activities**

Consultant – Biomeasure/Ipsen Pharmaceuticals (2006-2010)  
 Consultant – Amgen (2011-2015)  
 Member of the Scientific Advisory Board – Ascent Pharmaceuticals (2008-2012)  
 Member of the Scientific Advisory Board – Redwood Biosciences (2010-2019)  
 Co-Founder and Member of the Scientific Advisory Board – ProteoDesign/SpliceBio (2014-present)  
 Consultant – Merck Research Labs, 2015-present

### **U.S. Patents**

Structural Models for the Cytoplasmic Domains of Transmembrane Proteins.  
 # 08/260,514.

Synthesis of Proteins by Native Chemical Ligation.  
 US6184344 B1, issued Feb 6<sup>th</sup> 2001  
 WO 96/34878, 7<sup>th</sup> Nov 1996

General Native Ligation  
 US6307018 B1, issued Oct 23<sup>rd</sup> 2001  
 WO 9828434 A1, issued 1998

Synthesis of Novel *Staphylococcus Aureus* Peptides For Bacterial Interference  
 US6337385 B1, issued Jan 8, 2002

WO 9967286 A2, issued 1999

Process for Characterizing Proteins  
US 6495314, issued Dec 17<sup>th</sup>, 2002

Methods of Ligating Expressed Proteins  
US 6875594B2, issued April 5<sup>th</sup> 2005

Multiple Sensor-Containing Active Modified Polypeptides, Preparation and Uses Thereof  
Application filed January 2000

Phosphohistidine analogs  
US 9,035,068, issued May 19 2015

Phosphohistidine analogs  
US 9,765,154, issued September 19 2017

Phosphohistidine mimetics and Antibodies to Same  
US 10, 351,581, issued July 16, 2019

DNA barcoding of designer mononucleosome and chromatin array libraries  
US 10,087,485, issued October 2, 2018

### **Current Support**

R37 GM086868 (P.I. Muir)

**NIH/NIGMS**

“Structure, Function and Applications of Inteins”

The major goal of this project is to explore the enzymology and mechanisms of inteins using semi-synthetic & NMR approaches.

Role: P.I.

R01 AI042783 (P.I. Muir)

**NIH/NIAD**

“Peptide autoinducers of staphylococcal pathogenicity”

The major goal of this project is to utilize chemical and biochemical methods to investigate how histone methylation occurs and what is the function of this modification in regulating the expressions pattern in cells.

Role: P.I.

P01 CA196539 (PI: Allis, Co-PI: Muir)

**NIH/NCI**

“Oncohistones: Role of Histone H3 Mutations in the Oncogenesis of Pediatric Cancers”

The broad goal of this project is to develop a suite of chemistry-driven tools to study the detailed mechanism by which histone H3 mutations, oncohistones, associated with pediatric brain and bone cancers mis-regulate epigenetic control of gene expression, leading to disease.

Role: Co-PI

LKR144237 (PI: Muir)

**Merck & Co., Inc.**

“Merck Nucleosome Collaboration”

Role: P.I.

R01 CA259365 (PI: Kadoch, Co-P.I. Muir)

**NIH/NCI**

"Structure-activity relationships governing mammalian SWI/SNF chromatin remodeling activity as a function of chromatin state"

The broad goal of this project is to define the mechanisms governing mSWI/SNF targeting and activity to enable an understanding of disease-specific biology which may provide a powerful foundation for the identification of new therapeutic strategies.

Role: Co-PI

**Distinguished Lectureships**

Society of Fellows Distinguished Lecturer, The Scripps Research Institute, May 2004

Baker Chemical Biology Lecturer, Chemistry Dep't., Cornell University, April 2005

Distinguished Lecture Series, New England Biolabs, Boston, May, 2006

Danny Thomas Lectureship St. Judes Children's Hospital, February 2007

2008 Treat Johnson Lectureship, Chemistry Department, Yale University, February 2008

2008 du Vigneaud Lecture, Peptide Gordon Conference, Ventura California, February 2008

Astra-Zeneca Lectureship, Department of Chemistry, University of Montreal, Canada, September, 2008

Peter Yates Lectureship, Department of Chemistry, University of Toronto, Canada, October, 2008

Distinguished Lecturer, EMBL Chemical Biology Symposium, Heidelberg, October, 2008

2009 Samuel M. McElvain Lecturer in Organic Chemistry, University of Wisconsin, Madison, April 2009

Green Distinguished Lectureship, EMBL-Heidelberg, April 2011

2012 Bender Distinguished Lectureship Series, Department of Chemistry, Northwestern University, August, 2012

Eminent Scholar Series, Chemistry Department, U. Arizona, Tucson, February 2013

Frontiers of Chemistry Symposium, The Scripps Research Institute, February 2013

Hyp Dauben Lecturer, Department of Chemistry, University of Washington, April 2013

Johnson Symposium Lecturer, Department of Chemistry, Stanford University, October 2013

Halocarbon Lecture, Department of Chemistry, Cornell University, January 2014

Morningside Lectureship, Chemistry Department, University of Hong Kong, December 2014

Arun Guthikonda Memorial Lecture, Chemistry Department, Columbia University, March 2015

O'Malley Lectureship, Chemistry Department, Boston College, March 2015

William H. Stein Memorial Lecture, The Rockefeller University, March 2015

Friedman Lecture, Brooklyn College, May 2015

Sigma-Aldrich Lecture, Chemistry Department, Duke University, October 2015

Torkil Holm Lecturer, Danish Academy of Technical Sciences, Copenhagen, January 2016

Heinrich Wieland Prize Symposium Lecturer, Munich, October 2016

Gassman Lecture Series, University of Minnesota, Twin-Cities, March 2017

Chatt Lecture, John Innes Center, Norwich, UK, May 2017

Astbury Annual Lecture, Astbury Centre, Leeds University, July 2017

Keynote Lecture, 7<sup>th</sup> CPS Meeting, Haifa, Israel, September 2017

Keynote Lecture, Australian Peptide Symposium, Noosa, Australia, October 2017

Cutting Lecture, Departmental of Systems and Chemical Biology, Stanford University, February 2018

Jack Fox Presidential Lecture, Memorial Sloan Kettering Cancer Institute, April 2018

Streck Award Lecture, University of Nebraska, Lincoln, May 2018

Keynote Lecture, Peptide Therapeutics Symposium, San Diego, October 2018  
Andrew Braisted Award Lecture, UCSF, November 2018  
John M. Lewis Memorial Lecture, The Rockefeller University, January 2019  
Novartis Lecture, Department of Chemistry, NYU, March 2019  
Ernest Ritchie Memorial Lecture, University of Sydney, September 2019  
Watanabe Lecture, Indiana University, October 2019  
Keynote Lecture, Chemical Biology Symposium, OHSU, Portland, December 2019

### **Selected Invited Talks**

Biological Chemistry Series, Waksman Institute, Rutgers University, January 1999  
Lorne Conference in Protein Science, Lorne, Australia, February 1999  
Medicinal Chemistry Lecture Series, 3D Center, University of Queensland, February 1999  
Chemistry Seminar Series, Chemistry Dep't., University of Pennsylvania, February 1999  
Bioorganic Seminar Series, Chemistry Dep't., SUNY Stony Brook, March 1999  
Yale Chemical Biology Symposium, Yale University, May 1999  
American Society for Microbiology Conference, Chicago, June 1999  
Bioorganic Gordon Conference, New Hampshire, June 1999  
American Peptide Symposium, Minneapolis, June 1999  
Protein Society Symposium, Boston, July 1999  
French Academy of Sciences Symposium in Protein Science, Paris, August 1999  
American Chemical Society Western Conference, Los Angeles, September 1999  
Protein Chemistry Seminar, Abbott Labs, Chicago, October 1999  
Biochemistry Lecture Series, Astra-Zeneca, Manchester, November, 1999  
Chemistry Seminar Series, Chemistry Dep't., Cornell University, November 1999  
Microbial Targets for Small Molecules, Banbury Conference, Cold Spring Harbor, December 1999  
Chemistry Section, Nycomed-Pharmacia, Oslo, January, 2000  
Scandinavian Biochemistry Society, Geillo, Norway, January 2000  
Biochemistry and Biophysics Seminar Series, Brandeis University, January 2000  
Chemistry Seminar Series, Chemistry Dep't., University of California, Berkeley, February 2000  
Bioorganic Chemistry Series, Chemistry Dep't., M.I.T., Cambridge, March 2000  
American Chemical Society National Meeting, San Francisco, March 2000  
Biological Chemistry Series, ICCB, Harvard University, April 2000  
Organic Chemistry Colloquium, University of Delaware, April 2000  
Chemistry Seminar Series, University of Utah, May 2000  
Proteomics Symposium, SUNY Stony Brook, May 2000  
Chemistry Seminar Series, Albert Einstein College of Medicine, June 2000  
National Science Foundation Workshop in Physical Organic Chemistry, June 2000  
Biological Regulatory Systems Gordon Conference, July 2000  
Chemistry Seminar Series, Ohio State University, Nov, 2000  
Chemistry Seminar Series, Tufts University, February, 2001  
Biochemistry Seminar Series, UT Southwestern Medical Center, March 2001  
Chemical Biology Seminar Series, University of California, San Francisco, April 2001  
Biochemistry Lecture Series, Biochemistry Dep't., University of Dundee, May 2001  
Organic Chemistry Seminar, Chemistry Dep't. University of Edinburgh, May 2001  
Biochemistry Seminar Series, Biochemistry Dep't., University of Chicago, May 2001  
Biochemistry Seminar Series, New Jersey Medical Center, Newark, May 2001  
Burroughs-Wellcome Meeting, San Diego, July, 2001

Firbush Biological Chemistry Meeting, Royal Society of Chemistry, August 2001  
Biochemistry Department, Columbia University Medical School, September 2001  
Chemical Biology Seminar Series, Washington University, St. Louis, October 2001  
Biochemistry Seminar Series, Chemistry Dept., Univ. Maryland, November 2001  
Chemistry Colloquium, Chemistry Dept, Johns Hopkins University, April 2002  
Chemical Protein Synthesis Symposium (National Med. Chemistry Meeting) June 2002 – Organizer  
Frontiers in Chemistry Symposium, University of Marburg, Germany, June 2002  
American Chemical Society National Meeting, Boston, August 2002  
German-American Chemistry Societies Joint Meeting, Durham, New Hampshire, August 2002  
Chemistry Department, University of Naples, Italy, August 2002  
European Peptide Symposium, Sorrento, Italy, September, 2002  
Chemical Biology Seminar Series, Pharmacology Dept. Johns Hopkins Medical School, Nov., 2002  
Biochemistry Seminar Series, University of Wisconsin, Madison, March, 2003  
Keystone Meeting in Proteomics, Keystone Colorado, March 2003  
Chemical Biology Symposium, FASEB Meeting San Diego (Organizer), April 2003  
Pharmacology Departmental Seminar Series, UCLA, April 2003  
Presidents Lecture Series, Memorial Sloan-Kettering Cancer Institute, April 2003  
Chemistry Colloquium, Swiss Chemical Society, Zurich, Switzerland, May 2003  
Keynote Lecture, 18<sup>th</sup> American Peptide Symposium, Boston, Massachusetts, July 2003  
Keynote Lecture, New York Structure Biology Symposium, Cold Spring Harbor, August 2003  
Chemical Biology Symposium, Chemistry Dep't, University of Michigan, December, 2003  
Keynote Lecture, 1<sup>st</sup> International Biomol. Chem. Symposium, Awaji, Japan, December, 2003  
Department of Pharmaceutical Chemistry, The University of Tokyo, December, 2003  
Lorne Conference in Protein Science, Lorne, Australia, February 2004  
Chemical Biology Lecture Series, IMB, University of Queensland, February 2004  
Department of Biophysics, Columbia University, March 2004  
American Chemical Society National Meeting, Anaheim, April 2004  
Chemistry Department, Princeton University, April 2004  
Student Hosted Seminar, Chemistry Department, UC Berkeley, April 2004  
Chemistry Department, Stanford University, April 2004  
Chemistry Department, CUNY Staten Island, May 2004  
Genomic Science Department, University of Washington, May 2004  
Bioorganic Gordon Conference, New Hampshire, June 2004  
Peptide Society Mini-Symposium, San Diego, August 2004  
Protein Society Meeting, San Diego, August 2004  
American Chemical Society National Meeting, Philadelphia, August 2004  
Protein Engineering Symposium, Danish Chemical Society, Copenhagen, September 2004  
Chemical Engineering Department, RPI, Albany, September 2004  
Chemistry Department, University of Chicago, November 2004  
Rockefeller University Lecture, January 2005  
Biology Department, Argonne National Lab, March 2005  
Biotechnology Seminar Series, UT Southwestern, Dallas, March 2005  
Chemistry Department, Duke University, April 2005  
Chemistry Department, Harvard University, May 2005  
Lipids, Liposomes and Membrane Proteins Symposium, Vancouver, Canada, July 2005  
Protein Society Symposium, Boston, August 2005  
Australian Peptide Symposium, Hamilton Island, October, 2005  
ESF Meeting on Protein Chemistry, Barcelona, November 2005

Biochemistry and Biophysics Department, Mount Sinai School of Medicine, November 2005  
PacifiChem 2005, Engineered Proteins Symposium, Honolulu, December 2005  
Chemistry Department, University of Pharmaceutical Sciences, Copenhagen, Denmark, January 2006  
Knud Lind Larsen Symposium; Organic Chemistry at the Interface to Biology, Copenhagen, January 2006  
Volcano Conference in Bioorganic Chemistry, Seattle, Washington, February 2006  
Molecular and Cellular Physiology Department, Yale Medical School, March 2006  
Chemical Biology Series, Mount Sinai School of Medicine, April 2006  
Department of Molecular Pharmacology, Stanford University School of Medicine, April 2006  
Student Hosted Seminar, Chemistry Department, UC San Diego, April 2006  
Chemical Biology Initiative Symposium, Department of Chemistry, Harvard University, May, 2006  
Protein Society Symposium (Session Organizer and Chair), San Diego, August 2006  
Seminar - Max Planck Institute for Molecular Physiology, Dortmund, Germany, October, 2006  
IMPRS Symposium on Chemical Biology, Dortmund, Germany, October, 2006  
43<sup>rd</sup> Japanese Peptide Symposium, Yokohama, November 2006  
Kyoto University, Chemistry Department, November 2006  
International Symposium on Biomolecules and Related Compounds, Kyoto, November, 2006  
Japanese-American Kavli Frontiers of Science Symposium, Irvine, CA, December 2006  
Chemistry Colloquium, Chemistry Dep't., M.I.T., Cambridge, December 2006  
New York Structural Biology Discussion Group, Plenary Speaker, January 2007  
Biochemistry Dep't., University of Geneva, Switzerland, March 2007  
Chemistry Dep't., Indiana State University, April 2007  
Organic Chemistry Seminar, California Institute of Technology, April 2007  
Biological Chemistry Symposium, University of Chicago, May 2007  
20<sup>th</sup> American Peptide Symposium, Montreal, June 2007  
ACS National Meeting, Boston, August 2007  
New York University Chemistry Department Colloquium, September 2007  
Roche Peptide Symposium, Bolder, Co., September 2007  
Protein Chemical Synthesis Symposium, Heron Island, Australia, October 2007  
International Peptide Symposium, Cairns, Australia, October 2007  
Chemistry Department Colloquium, Yokohama University, December 2007  
Chemistry Department Colloquium, University of Michigan, Ann Harbor, January 2008  
Chemistry Department Colloquium, Georgia Tech, Atlanta, January 2008  
International Seminar, National Cancer Institute (NKI), Amsterdam, The Netherlands, Feb 2008  
Biochemistry Seminar, CUNY City College, March 2008  
Chemical Biology Symposium, ASBMB Meeting San Diego, April 2008  
Departmental Seminar, Department of Physiology, Columbia University, April 2008  
American Chemical Society National Meeting (Session Chair), Philadelphia PA, August 2008  
Departmental Seminar, Department of Chemistry, Princeton University, October 2008  
Monday Lecture Series, The Rockefeller University, November 2008  
Student Hosted Seminar, Chemistry and Chemical Biology Program, UC San Francisco, January 2009  
Departmental Seminar, Department of Chemistry, University of Pittsburgh, February 2009  
Friday Colloquium, The Rockefeller University, March 2009  
Nichols Distinguished Symposium Speaker, ACS, March 2009  
CABM Institute Seminar, Rutgers University, April 2009  
Departmental Seminar, Department of Molecular Biology, UT Southwestern, April 2009  
Departmental Seminar, Department of Biochemistry, Thomas Jefferson University, May 2009  
Departmental Seminar, Department of Biochemistry, Albert Einstein, May 2009  
Plenary Lecture, 21<sup>st</sup> APS, Bloomington, IN, June 2009



Plenary Lecture, European Protein Society Symposium, Zurich, June 2009  
Plenary Lecture, Enzymes Gordon Conference, New Hampshire, July 2009  
Plenary Lecture, IUPAC Symposium, Glasgow, Scotland, August 2009  
Departmental Seminar, Department of Chemistry, Technical University of Munich, September 2009  
Keynote Speaker, Protein Chemistry Symposium, MPI-Castle Ringberg, Germany, September 2009  
Plenary Speaker (and Session Chair), Chromatin Keystone Meeting, Taos, New Mexico, January 2010  
Departmental Seminar, Department of Biochemistry, Ohio State University, February 2010  
Plenary Lecture (and Session Chair), ACS National Meeting, San Francisco March 2010  
Plenary Lecture 31<sup>st</sup> EPS, Copenhagen, Denmark, September 2010  
Student Invited Seminar, Department of Chemistry, MIT, October 2010  
Departmental Seminar, Department of Chemistry, Brandeis University, October 2010  
Organizer and Speaker, Protein Engineering Symposium, Pacificchem, Hawaii, December 2010  
Student Invited Seminar, Department of Chemistry, UI-Urbana-Champaign, January 2011  
Departmental Seminar, Department of Chemistry, UC-Berkeley, February 2011  
Departmental Seminar, Department of Pharmacology, Vanderbilt University, February 2011  
Student Invited Seminar, Department of Chemistry, U. Pennsylvania, February 2011  
Departmental Seminar, Department of Chemistry, Tufts University, March 2011  
Keynote Lecture, TIDES Symposium, Boston. May 2011  
Plenary Lecture, Proteins Gordon Conference, New Hampshire, June 2011  
Plenary Lecture, Proteins Society 25<sup>th</sup> Symposium, Boston, July 2011  
Plenary Lecture, Chemical Biology Symposium, Beijing, China 2011  
Departmental Seminar, Department of Chemistry, Oxford University, August 2011  
Plenary Lecture, NCCR Structural Biology Symposium, Zurich, Switzerland, September 2011  
Plenary Lecture, Australian Peptide Symposium, Hamilton Island, Australia, October 2011  
Plenary Lecture, Nature Chemical Biology Cancer Symposium, Boston, October 2011  
Departmental Seminar, Department of Biological Chemistry, Harvard Medical School, January 2012  
Plenary Lecture, Keystone Symposium In Chemical Biology, Santa Fe, NM, February 2012  
Plenary Lecture, Peptides Gordon Conference, Ventura, California, February 2012  
Lecture, Amgen, Thousand Oaks, California, February 2012  
Lecture, Merck, West Point, Pennsylvania, March 2012  
Lecture, Biogen-Idec, Boston, Mass, March 2012  
Lecture, Cell Signaling Technologies, Boston, Mass, March 2012  
Keynote Address, CBI Symposium. U. Penn. April 2012  
Institute Seminar, Netherlands Cancer Institute, Amsterdam, June 2012  
Keynote Address, NYAS Chemical Biology Meeting, June 2012  
Plenary Lecture, ISACS 7 Symposium, Edinburgh, June 2012  
Plenary Lecture, Tetrahedron Symposium, Amsterdam, June 2012  
Ecole National Superior, Paris; Visiting Professor Lectures in Chemistry, July 2012  
Lecture, Genentech, San Francisco, California, August 2012  
Plenary Lecture, 32<sup>nd</sup> European Peptide Symposium, Athens, September 2012  
Departmental Seminar, Department of Molecular Biology, Princeton University, September 2012  
Departmental Seminar, Scripps Florida, September 2012  
Titisee Conference in Chromatin Biochemistry (co-organizer and speaker), Titisee, Germany, October 2012  
Lecture, Merck, Rahway, New Jersey, November 2012  
Lecture, Norvartis, Cambridge, January 2013  
Departmental Seminar, Department of Chemistry, Cambridge University, March 2013  
Departmental Seminar, Department of Chemistry, UCL, March 2013  
Departmental Seminar, Department of Chemistry, St. Andrews University, March 2013

Organic Seminar, Department of Chemistry, University of Washington, April 2013  
Burgenstock Conference, Brunnen, Switzerland, May 2013  
Tercentennial Chemistry Symposium, University of Edinburgh, June 2013  
Plenary Talk, Organic Reactions GRC, Bryant Academy, RI, July 2013  
Plenary Talk, ISACS Meeting on Chemical Biology, Boston, July 2013  
Departmental Seminar, Department of Pharmacology, UCSF, October 2013  
Solvay Meeting in Chemistry, Brussels, Belgium, October 2013  
Institute Seminar, Rutgers University, New Brunswick, NJ, November 2013  
Chemical Biology Symposium, Geneva, Switzerland, November 2013  
Lorne Conference in Protein Science, Lorne, Australia, February 2014  
University of Melbourne, Bio21 Institute, February 2014  
University of Sydney, Chemistry Department, February 2014  
Departmental Seminar, Department of Biochemistry, UTSW, April 2014  
Institute Colloquium, IST Austria, Vienna, June 2014  
Institute of Organic Chemistry and Biochemistry, Czech Academies of Science, Prague, June 2014  
Departmental Colloquium, Department of Chemistry, Brown University, September 2014  
Medicinal Chemistry Symposium, Janssen Pharmaceuticals, September 2014  
Lecture, Merck, Rahway, New Jersey, October 2014  
Departmental Seminar, Department of Biochemistry, Albert Einstein Med. School, November 2014  
Armenise Symposium in Chemical Biology, Harvard Medical School, November 2014  
Singapore International Chemistry Symposium, Plenary lecture, Singapore, December 2014  
Lecture, Amgen, Thousand Oaks, March 2015  
Biological Chemistry Seminar, Department of Chemistry, USC, April 2015  
Student Invited Seminar, Department of Chemistry, Texas A&M University, April 2015  
Fellows Invited Seminar, NIH-NIDDK, Washington D.C. April 2015  
Chemical Protein Synthesis Symposium, St. Augustine, Florida, June 2015  
American Peptide Symposium, Orlando, Florida, June 2015  
Transcription Regulation Meeting, Penn State, July 2015  
RSC Firth Bioorganic Chemistry Meeting, Scotland, September 2015  
Plenary Talk, Chemical Biology Symposium, University of Konstanz, Germany, October 2015  
Plenary Talk, Pharmaceutical Sciences Symposium, UNC-Chapel Hill, October 2015  
Student Invited Chemical Biology Lecture, Yale University, November 2015  
Pacifichem, Keynote Speaker, Honolulu, December 2015  
Keynote Talk, Takeda Symposium in Chemistry, Osaka, Japan, January 2016  
Chemistry Department, Osaka University, Japan, January 2016  
Lecture, Novo Nordisk, Copenhagen, Denmark, January 2016  
Biochemistry Seminar, U. Penn. Medical School, February 2016  
Plenary Talk, Merck Symposium in Chemical Biology, March 2016  
GRC-Chromatin Structure and Function, Les Diablerets, Switzerland, May 2016  
American Chemical Society National Meeting, Philadelphia, August 2016  
Scientific Oktoberfest, LMU, Munich, September 2016  
Pfizer, Chemical Biology Seminar Series, December, 2016  
Keynote Lecture, ERATO Meeting, Tokyo, Japan, January 2017  
Keynote Lecture, Peptide Forum, University of Tokyo, January 2017  
Keynote Lecture, Epigenetics Meeting, RIKEN, January 2017  
Scottish Chemistry Symposium, Northwestern University, January 2017  
Plenary Speaker, Protein Society Meeting, Montreal, July 2017  
Plenary Speaker, 63<sup>rd</sup> Benzon Symposium, Copenhagen, August 2017

Departmental Colloquium, Department of Chemistry, University of Rochester, October 2017  
 Distinguished Lecture Series, MPI-Dortmund, Germany, October 2017  
 Departmental Colloquium, Department of Chemistry, Harvard University, February 2018  
 Student Invited Seminar, Johns Hopkins Biophysics Program, April 2018  
 ASBMB National Meeting, San Diego, April 2018  
 Keynote lecture, Charles Revson Foundation Annual Meeting, NYC, May 2018  
 Distinguished Lecture Series, Helmholtz Center for Epigenetics, Munich, Germany, June 2018  
 Keynote lecture, FASEB Meeting in Protein Methylation, Florence, Italy, June 2018  
 GRC-Chromatin Structure and Function, Bethel, Maine, July 2018  
 Seminar, Merck, West Point, October 2018  
 Seminar, Genentech, San Francisco, November 2018  
 IKCOC-14, Kyoto, Japan, Plenary Speaker, November 2018  
 Departmental Seminar, Biochemistry Dep't., Colorado State University, April 2019  
 Plenary Talk, 8<sup>th</sup> Chemical Protein Synthesis Meeting, Berlin, Germany, June 2019  
 Plenary Speaker, American Peptide Symposium, Monterey, California, June 2019  
 Plenary Speaker, Solid Phase Synthesis Meeting, Port Douglas, September 2019  
 Departmental Colloquium, Department of Chemistry, Penn State University, October 2019  
 Plenary Speaker, Weill Institute Symposium, Cornell University, October 2019  
 Plenary Speaker, Tsinghua-AAAS Symposium on Protein Structure, November 2019  
 Plenary Speaker, 9<sup>th</sup> NIH Symposium on Chromosome Biology, November 2019  
 Departmental Colloquium, Department of Chemistry, University of Chicago, October 2019  
 Departmental Colloquium, Department of Chemistry, University of Pittsburgh, February 2020  
 Speaker, Transcriptional Therapeutics Symposium (virtual), St. Jude's, Memphis, September, 2020  
 Graduate Invited Webinar, Northwestern University, Chemical Biology Interface Program, October 2020  
 Distinguished Speakers Series, Van Andel Institute (Webinar), December, 2020  
 Plenary Speaker, EMBL Symposium in Epigenetics, Heidelberg, Germany, May 2021 (Webinar)

### **Publications (\* Corresponding Author)**

1. McLellan, J.F., \*McNab, H. & Muir, T.W. 1993, 839-840. *J. Chem. Soc., Chem. Comm.*  
Ring Expansion and Rearrangement Reactions of N-Heteroarylmethyl Radicals.
2. Layfield, R., Muir, T.W., Ramage, R., Landon, M., & \*Mayer, R.J., 1993, *J. Neurochem*, **61**, 174.  
Ubiquitin Carboxyl-terminal Hydrolases in Human Brain.
3. Muir, T.W., \*Kent, S.B.H., 1993, **4**, 420-427, *Curr. Opin. Biotechnology*.  
Chemical Synthesis of Proteins.
4. Muir, T.W., Williams, M.J., Ginsberg, M.H. & \*Kent, S.B.H., 1994, *Biochemistry*, **33**, 7701-7708.  
Design and Chemical Synthesis of a Neo-Protein Structural Model for the Cytoplasmic Domain of a Multi-Subunit Cell-Surface Receptor: Integrin  $\alpha$ IIb $\beta$ 3 (Platelet GP11b-IIIa).
5. Muir, T.W., Williams, M.J., Ginsberg, M.H., & \*Kent, S.B.H., 1994, *J. Am. Chem. Soc.* **116**, 10797-10798.  
Total Chemical Synthesis of a Folded  $\beta$ -Sandwich Protein Domain: A Fibronectin Type 3 Module.
6. Baca, M., Muir, T.W., Schnolzer, M. & \*Kent, S.B.H., 1994, *J. Am. Chem. Soc.* **117**, 1881-1887.

The Chemical Ligation of Cysteine-Containing Peptides: Synthesis of a 22 kDa Tethered Dimer of HIV-1 Protease.

7. Dawson, P.E., Muir, T.W., Clark-Lewis, I. & \*Kent, S.B.H., 1994, *Science*, **266**, 776-779.  
Synthesis of Proteins by Native Chemical Ligation.
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5. Pietanza, M.C. and Muir, T.W. In *Peptides 1997, Frontiers in Peptide Science: Proceedings of the 15th American Peptide Symposium*, J. P. Tam and P.T.P Kaumaya (Editors), ESCOM, 459-460.  
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6. Camarero, J.A., Pavel, J. and Muir, T.W. In *Peptides 1997 : Proceedings of the 15th American Peptide Symposium*, J. P. Tam and P.T.P Kaumaya (Editors), ESCOM, 387-388.  
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7. Camarero, J.A. and Muir, T.W. 1999, in *Current Protocols in Protein Science* , Unit 18.4.1-18.4.21  
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12. Camarero, J.A., Shekhtman, A., Campbell, E., Darst, S.A., Cowburn, D. and Muir, T.W. 2001 in *Peptides: The Wave of the Future : Proceedings of the 17th American Peptide Symposium*, M. Lebl and R.A. Houghten (Editors), Kluwer, 816-817.  
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**Former Muir Lab Postdocs**

Rob Thompson	Post/Res. Assoc.	2015-2020	Research Scientist, Discovery Chemistry, Merck, San Francisco
Qian Xie	Post/Res. Assoc.	2016-2020	Staff Scientist, Dana-Farber Cancer Center, Harvard Medical School
Katharine Diehl	Post/Res. Assoc.	2015-2019	Assistant Professor of Medicinal Chemistry, University of Utah
Felix Wojcik	Post	2014-2019	Development Research Scientist, Novo Nordisk, Copenhagen
Glen Liszczak	Post/Res. Assoc.	2013-2018	Assistant Professor of Biochemistry, UT-Southwestern
Jeffrey Bos	Post	2014-2018	Senior Scientist Bioconjugate Chemistry, Abzena
Galia Debelouchina	Post	2012-2017	Assistant Professor, Chemistry and Biochemistry, UCSD
Zack Brown	Post/Res. Assoc.	2010-2017	Senior Scientist, Merck, Kenilworth

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Yael David-Shternberg	Post	2011-2016	Assistant Professor of Chemical Biology, Memorial Sloan Kettering
Rob Oslund	Post	2011-2016	Scientist, Merck Exploratory Science Center, Cambridge, MA
Manuel Müller	Post	2010-2016	Sir Henry Dale Research Fellow, Lecturer in Chemistry, Kings College London
Lenka Bittova	Lab Manager	2011-2015	Lecturer, Univ. of South Bohemia, Czech Republic
Miquel Vila-Perello	Post/Res. Assoc.	2005-2014	Co-founder and CSO at SpliceBio, Barcelona, Spain
Jung-Min Kee	Post	2008-2014	Assistant Professor of Chemistry, Pusan National University, Busan, South Korea
Uyen Nguyen	Post	2009-2014	Senior Scientist, Bayer Pharmaceuticals, Berlin
Zhihua Liu	Post	2011-2014	Scientist, Bristol-Myers Squibb
Nami Ohashi	Post	2011-2012	Associate Professor, Showa Pharmaceutical University

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Beat Fierz	Post	2007-2011	Associate Professor of Chemistry, EPFL, Lausanne
Peter Moyle	Post	2007-2011	Lecturer, U. Queensland
Sylvia Frutos-Dominguez	Post	2007-2010	COO, SpliceBio, Barcelona
Champak Chatterjee	Post	2005-2010	Professor of Chemistry, University of Washington
Matthew Pratt	Post	2004-2009	Associate Professor of Chemistry, USC
Steve Lockless	Post	2007-2009	Associate Professor of Biology, Texas A&M Univ.
Kyle Chiang	Post	2007-2007	Director at LogicBio Therapeutics
Baldissera Giovani	Post	2002-2007	Scientist, Pharmaceuticals, Paris
Jean-Philippe Pellois	Post	2002-2006	Professor of Chemistry, Texas A&M
Yuichiro Hori	Post	2002-2006	Associate Prof., Osaka U., Japan
Jennifer Ottesen	Post	2001-2005	Associate Prof. of Chemistry, Ohio State

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			University
Jianxin Shi	Post	2003-2005	Postdoc, Taylor Lab, UCSD
Francis Valiyaveetil	Post	2000-2005	Professor of Chemical Physiology and Biochemistry, Oregon Health Sciences University
Henning Mootz	Post	2001-2003	Professor of Chemistry, Muenster U, Germany
Alessandra Romanelli	Post	2001-2003	Associate Prof., Pharmaceutical Sciences, University of Milan
Roseanne Hofmann	Post	2000-2002	Abcam
Graham Cotton	Post	1997-2001	Head of Protein Therapeutics, Almac Group
Ulrich Blaschke	Post	1998-2000	Cinfa Biotech, Spain
Julio Camerero	Post	1996-2000	John A. Biles Professor of Pharmaceutical Sciences, USC

## Former Graduate Students

Sara Daley	Pre	2015-2021	Associate Research Scientist, Merck, Westpoint Campus
Aishan Zhao	Pre	2012-2019	Postdoc, Stanford University, Fischbach Lab
Lina Feng	Pre	2013-2019	MD student, Columbia University
Luis Guerra	Pre	2012-2019	
Eva Ge	Pre	2013-2019	Postdoc, UC Berkeley, Chang Lab
Ana Mostafavi	Pre	2013-2019	Assistant Professor, Mills College
Josef Gramespacher	Pre	2013-2019	Postdoc, UCSF, Wells Lab
Krupa Jani	MD-PhD	2014-2019	MD student, RWJ medical school, Rutgers University
Leslie Beh	Pre	2012-2018	Postdoc, Columbia Univ. Sternberg lab
Adam Stevens	Pre	2012-2017	Postdoc, UCSF, Lim Lab

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Geoff Dann	Pre	2012-2017	Staff Research Scientist, Dana-Farber Cancer Center, Harvard Medical School
Linjiao (Catlin) Zhou	Pre	2011-2016	
Boyuan Wang	Pre	2009-2015	Assistant Professor, Department of Pharmacology, UT Southwestern (Fall 2021)
Jeff Johnson	Pre	2008-2015	Residential Mentor at Waypointe
Matthew Holt	Pre	2008-2014	Associate, Biotechnology Equity Research at Jefferies
Neel Shah	Pre	2009-2013	Assistant Professor of Chemistry, Columbia University
Nathan Lee			Associate at Knobbe Martens Olson & Bear LLP
Disan Schold Davis	Pre	2007-2012	Program Manager, Rockefeller University.
Robert McGinty	MD-PhD	2005-2009	Assistant Professor of Biochemistry and Biophysics, UNC Chapel Hill

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Robert Flavell	MD-PhD	2004-2009	Assistant Professor of Radiology, UCSF
Elizabeth George Cisar	Pre	2004-2008	Patent Agent, McNeill Baur PLLC
Edmund Schwartz	Pre	2002-2008	Scientist at Kallyope
Michael Hahn	MD-PhD	2000-2007	Assistant Professor of Radiology, UCSD
Vasant Muralidharan	Pre	2001-2006	Associate Professor, University of Georgia
Isabela Gariat	Pre & Post	2000-2004	Postdoc, Grunstein Lab, UCLA
Mandë Holford	Pre	1998-2003	Associate Professor of Chemistry, Hunter College CUNY
Gholson Lyon	MD-PhD	1997-2003	Professor, Institute for Basic Research in Developmental Disabilities, The Graduate Center, CUNY
Michelle Trester- Zedlitz	Pre	1997-2003	Postdoc, von Zastrow Lab, UCSF
Morgan Huse	Pre	1999-2001	Professor of Immunology, MSKCI

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## Former Visiting and Collaborating Graduate Students

Ben Winer	Pre	Ploss Lab, Princeton
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Raphael Hofmann	Pre	Graduate Student, ETH
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Karola Gerecht	Pre	Graduate Student, King's College London
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Rasmus Pihl	Pre	Graduate Student, Aarhus Univ.
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Sam Pollock	Pre	Graduate Student, UCSF
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## Former Undergraduate Students

Eva Parisi	Undergrad	MD Student, Johns Hopkins University
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Anagha Prasanna	Undergrad	MD Student, Harvard University
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Insiya Essani	Undergrad	Undergrad, Princeton University class of 2020
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Christian Venturella	Undergrad	Undergrad, Princeton University class of 2021
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Kaitlin O’Riordan	Undergrad	
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Tony X. Phan	Undergrad	Research Asst, Vanderbilt University
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Ashley Wang	Undergrad	Research Asst, Rockefeller
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Rodney Chen	Undergrad	MD/PhD Student, UT Southwestern
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Buyan Pan	Undergrad	PhD Student, Penn
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Connie Wang	Undergrad	MD student, Columbia University College of Physicians and Surgeons
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Shivam Verma	Undergrad	MD/PhD Student, Stanford
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Sam Kim	Undergrad	MD/PhD Student, Stanford
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Ha Eun Kong	Undergrad	MD/PhD Student, Emory
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Joseph Dexter	Undergrad	Graduate Student, Harvard
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Albert Magnell	Undergrad	PhD Student, MIT
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Marla Jalbut

Undergrad

MD Student, Tufts Univ.

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John Alan Willis

Undergrad

Md/PhD Student, Univ. of Pittsburgh