

Paul D. Adams

Curriculum Vitae

Title

Senior Scientist, Lawrence Berkeley Laboratory
Adjunct Professor, Dept. of Bioengineering, U.C. Berkeley
Deputy Division Director, Physical Biosciences Division, Lawrence Berkeley Laboratory
Division Deputy for Biosciences, Advanced Light Source, Lawrence Berkeley Laboratory
Vice President for Technology, the Joint BioEnergy Institute
Laboratory Research Manager, ENIGMA Science Focus Area

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Education

1992-1997 Postdoctoral Training, Yale University
1988-1992 Ph.D. in Biochemistry, University of Edinburgh
1985-1988 B.Sc. in Biological Sciences, University of Edinburgh

Appointments

2011-Present Division Deputy for Biosciences, Advanced Light Source, Lawrence Berkeley Laboratory, Berkeley, CA
2010-Present Deputy Division Director, Physical Biosciences Division, Lawrence Berkeley Laboratory, Berkeley, CA
2009-2010 Acting Division Director, Physical Biosciences Division, Lawrence Berkeley Laboratory, Berkeley, CA
2008-2011 Investigator, Energy Biosciences Institute, Berkeley, CA
2007-Present Vice President for Technology, the Joint BioEnergy Institute, Emeryville, CA
2007-Present Adjunct Professor, Department of Bioengineering, UC Berkeley, CA
2007-2009 Deputy Division Director, Physical Biosciences Division, Lawrence Berkeley Laboratory, Berkeley, CA
2005-Present Senior Scientist, Lawrence Berkeley Laboratory, Berkeley, CA
2004-Present Head, Berkeley Center for Structural Biology, Lawrence Berkeley

- Laboratory, Berkeley, CA
- 1999-Present Group Leader, Computational Crystallography Initiative, Lawrence Berkeley Laboratory, Berkeley, CA
- 2003-2007 Deputy Principal Investigator, Berkeley Structural Genomics Center, Lawrence Berkeley Laboratory, Berkeley, CA
- 2002-2003 Department Deputy, Structural Computational and Theoretical Biology, Lawrence Berkeley Laboratory, Berkeley, CA
- 1999-2005 Staff Scientist, Lawrence Berkeley Laboratory, Berkeley, CA
- 1998-1999 Senior Associate, Howard Hughes Medical Institute, Bethesda, MD
- 1998-1999 Research Scientist, Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, CT
- 1997-1998 Associate Research Scientist, Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, CT

Honors and Awards

- Outstanding Performance Award, Lawrence Berkeley Laboratory, Berkeley (2004)
- Technology Transfer Award, Lawrence Berkeley Laboratory, Berkeley (2003)
- Upjohn Prize for Biochemistry, University of Edinburgh, Edinburgh, Scotland (1988)
- Science Faculty Bursary, University of Edinburgh, Edinburgh, Scotland (1986-1987)
- Class medal for Chemistry, University of Edinburgh, Edinburgh, Scotland (1986)

Professional Activities

- Reviewer for: Acta Crystallographica Section D, Biophysical Journal, J. Chem. Inf. and Modeling, Protein Science, Proteins, J. Mol. Biol., J. Synchrotron Radiation, JACS, Nature, Nature Methods, Nature Structural and Molecular Biology, PNAS, Science and Structure.
- Charter Member, NIH Molecular Structure and Function D study section (2011-Present)
- Ad hoc reviewer, NIH R13 grants (2011)
- Ad hoc member, NAGMS Council (2010)
- Reviewer, DOE Knowledgebase program (2010)
- Instructor, UC Berkeley BioE 290D (Biomolecular Structure Analysis) (2009-Present)
- Reviewer, Los Alamos Biofuels LDRD program (2009)
- Guest lecturer Stanford Bio207 (Protein Folding and Disease) (2009, 2010)
- Member, Photon Factory International Science Advisory Committee, Life Science Subcommittee (2009-Present)
- Member, UCLA-DOE Institute for Genomics and Proteomics External Advisory Committee (2008-Present)
- Member, wwPDB X-ray Validation Task Force (2008-Present)
- Member, NIGMS/NCRR NSLSII advisory panel (2008-Present)
- Reviewer, NCRR P41 special emphasis panel (2008)

- Ad hoc member, NIH Molecular Structure and Function D study section (2008-2010)
- Reviewer, DOE INCITE program (2007)
- Reviewer, IMCA-CAT 17-ID Experiment End Station Upgrade, APS (2007)
- Co-teaching of UC Berkeley Chem 272A/B graduate class (2006-Present)
- Member, Protein Information Management System (PIMS) Scientific Advisory Board (2006-Present)
- Reviewer, NCI Intramural Structural Biology Program (2004)
- Chair, NIH Protein Structure Initiative data management committee (2003-Present)
- Member, International structural genomics organization task force on data deposition (2002-2009)
- Co-chair, Computational Methods, International Union of Crystallography Meeting, Madrid (2011)
- Co-chair, Computational Methods, American Crystallographic Association Meeting, Salt Lake City (2006)
- Chair, Diffraction Methods Gordon Conference, Bates College, Lewiston, Maine (2006)
- Co-chair, Computational Methods, American Crystallographic Association Meeting, Chicago (2004)
- Co-chair, Diffraction Methods Gordon Conference, Bates College, Lewiston, Maine (2004)

Invited Lectures, Meeting and Workshop Presentations

2011

- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 26th-30th.
- Phenix workshop, ILL Grenoble, October 21st.
- Neutrons in Biology, ILL Grenoble, October 19th-20th.
- SBGrid Annual Meeting, Harvard Medical School, Boston, USA, June 23rd-24th.
- CCP4 workshop, Argonne National Laboratory, Illinois, June 12th-15th.
- Phenix workshop, American Crystallographic Association Annual Meeting, New Orleans, USA, May 28th.
- Phenix workshop, Utrecht University, Utrecht, Netherlands, May 22nd.
- Canadian Light Source Crystallography School, Saskatoon, Canada, May 16th-19th.
- Phenix workshop, International Conference on Structural Genomics, Toronto, Canada, May 10th.

2010

- BHT Meeting, Kingston, Canada, November, 5th.
- University of Waterloo, Waterloo, Canada, November 4th.
- Sick Kids Hospital, Toronto, Canada, November 3rd.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 22nd-26th.
- SSRL User Meeting, Workshop 8, Stanford, USA, October 20th.
- Phenix workshop, Rockefeller University, New York, USA, October 6th.

- European Crystallography Meeting, Darmstadt, Germany, August 28th-31st.
- Canadian Light Source Annual Users Meeting, Saskatoon, Canada, June 17th.
- CCP4/NIH workshop, Argonne National Laboratory, USA, June 11th-14th.
- Phenix workshop, University of Houston, Texas, USA, May 30th.
- Bio207 (The Life and Death of Proteins), Stanford University, Palo Alto, USA, January 28th.
- Recent trends in Macromolecular Structure and Function, Chennai, India, January 7th-14th.

2009

- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 23rd-27th.
- SSRL Summer School, Stanford, USA, September 10th.
- American Crystallographic Association Annual Meeting, Toronto, Canada, July 26th-30th.
- CCP4/NIH workshop, Argonne National Laboratory, USA, June 29th-July 2nd.
- Mid Atlantic Structural Biology meeting, University of Maryland, Maryland, USA, May 29th.
- Quantitative Biology Seminar Series, Los Alamos National Laboratory, USA, May 27th.
- Bio207 (The Life and Death of Proteins), Stanford University, Palo Alto, USA, April 29th.
- Teach SG workshop, Prague, Czech Republic, April 1st-5th.
- DOE Genomics:GTL awardees meeting, Bethesda, USA, February 7th-11th.

2008

- Pittsburgh Diffraction Conference, Pittsburgh, USA, October 30th-31st. [session co-chair]
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 24th-28th.
- International Conference on Structural Genomics, Oxford, UK, September 20th-24th.
- XXIst IUCr Congress and General Assembly, Osaka, Japan, August 23rd-27th.
- Diffraction Methods in Structural Biology, Gordon Research Conference, Lewiston, Maine, USA, July 13-18th.
- Macromolecular Crystallography Course, Beijing, China, 10th-15th.
- PDB New Validation Tools, Cambridge, UK, April 13th-16th.
- Pittsburgh Conference, New Orleans, USA, March 4th-5th.
- Recent trends in Macromolecular Structure and Function, Chennai, India, January 7th-14th. [Member, organizing committee]

2007

- 16th CoLuAa meeting, Aarhus, Denmark, November 9th.
- X-ray Crystallography Computing Workshop, Aarhus, Denmark, November 7th-8th.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 26th-30th.

- RapiData course, Brookhaven National Laboratory, Brookhaven, USA., April 23rd-27th.
- CCP4/MAX-INF Workshop on Phasing and Refinement, York University, UK, April 10-15th.
- The Molecular Replacement method, CCP4 Study Weekend, University of Reading, UK, January 4-6th.

2006

- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 26th-31st.
- International Conference on Structural Genomics workshop, Yokohama, Japan, October 19th-20th.
- Distributed Data Analysis for Neutron Scattering Experiments (DANSE) meeting, Caltech, USA, August 15th-16th.
- European Crystallography Meeting, Leuven, Belgium, August 9th-10th.
- Neutron Diffraction Workshop, American Crystallographic Association Annual Meeting, Honolulu, Hawaii, USA, August 22nd-26th. [co-organizer]
- Canadian Light Source 9th Annual Users Meeting, Saskatoon, Canada, June 15th-17th.
- 8th International School on the Crystallography of Biological Macromolecules, Como, Italy, May 21st-25th.
- CCP4/MAX-INF Workshop on Phasing and Refinement, Barcelona, Spain, March 1st-7th.
- Trends in Macromolecular Structure and Function, Chennai, India, January 18th-20th.

2005

- EMBL M2M Practical Course, EMBL Hamburg, Germany, November 9th-15th.
- Get Phases workshop, Peking University, Beijing, China, October 29th-November 4th.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 20th-24th.
- NCCR Practical Course, Swiss Light Source, Villigen, Switzerland, October 3rd-7th.
- SSRL Summer School, Stanford, USA, September 13-15th.
- 12th Northern Protein Structural Workshop, Galashiels, Scotland, September 7th-9th.
- EMBO Anomalous Diffraction Workshop, ESRF, Grenoble, France, June 15th-22nd.
- American Crystallographic Association Annual Meeting, Orlando, Florida, USA, May 28th-June 1st.
- Evolving Methods in Crystallography, Erice, Italy, May 11th-22nd.
- Data management for high-throughput crystallography, Cambridge University, Cambridge, UK, February 9th-11th.

2004

- American Crystallographic Association mmCIF workshop, CARB, Gaithersburg, Maryland, USA, November 16th.

- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 30th-November 2nd.
- NIH Protein Structure Initiative Advisory Committee meeting, NIH, Bethesda, USA, October 28th.
- ALS Users Meeting, Macromolecular Crystallography Workshop, USA, October 19th.
- SSRL Summer School, Stanford, USA, August 16-20th.
- EMBO course on automated macromolecular structure solution, Amsterdam, Netherlands, May 23rd-June 2nd.

2003

- UC Berkeley department of Bio-engineering colloquium talk, Berkeley, December 18th.
- NIH Protein Structure Initiative Advisory Committee meeting, NIH, Bethesda, USA, December 2nd.
- Frontiers in Structural Biology Royal Swedish Academy of Sciences, Stockholm, Sweden, September 11-12th.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 25th-30th.
- American Crystallographic Association Annual Meeting, Covington, Kentucky, USA, July 26-30th.
- NIH Data Management Workshop, NIH, Bethesda, Maryland, USA, July 10-11th. [co-organizer]
- EMBO Anomalous Diffraction Workshop, ESRF, Grenoble, France, June 17-23rd.
- International Symposium on Diffraction Structural Biology, Tsukuba, Japan, May 28th-31st.
- Data management aspects of high-throughput structure determination, European Bioinformatics Institute, Hinxton, UK, March 14th-15th.

2002

- Getting the most from biological data: bridging the gap between experiment, analysis and simulation, LBNL offices, Washington DC, December 13th.
- Automation for High Throughput Structure Determination, Lawrence Berkeley Laboratory, USA, December 6th-8th. [co-organizer]
- High-throughput Synchrotron Crystallography, Argonne National Laboratory, USA, November 20th-22nd.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 25th-28th.
- Automation of X-ray Structure Determination for Structural Genomics, Berlin, Germany, October 8th-9th.
- Diffraction Methods in Molecular Biology, Gordon Research Conference, New London, Connecticut, USA, July 14-19th.
- Berkeley & Stanford Synchrotron Radiation Summer School, Stanford, USA, July 8-12th.
- Structural Genomics Informatics and Software Integration Workshop, San Antonio, USA, May 22nd-23rd.
- EMBO Course on Automated Macromolecular Structure Solution, Heidelberg, Germany, May 7-16th.

- Interdisciplinary workshop promoting collaboration in high-throughput X-ray structure determination, Santa Fe, USA, March 22-23rd. [co-organizer]
- High-throughput structure determination, CCP4 Study Weekend, University of York, UK, January 4-5th.

2001

- Polarizability in Biomolecular Simulations, Utah, USA, December 13th-14th.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 19th-21st.
- ALS Users Meeting, Macromolecular Crystallography Workshop, USA, October 16th.
- EMBO/MAX-INF Anomalous Diffraction Workshop, ESRF, Grenoble, France, June 18-23rd.
- West Coast Protein Crystallography Workshop, Asilomar, USA, March 25th-28th.
- ESRF High-throughput workshop, ESRF, Grenoble, France, February 20-21st.
- CCP4 Workshop on Refinement of Macromolecular Structure, York University, UK, January 3-9th.

2000

- Computational methods in structural biology, Florida State University, Tallahassee, USA, December 5th.
- SCBMB seminar, Baylor College of Medicine, Houston, USA, November 6th.
- RTG Student Seminar, Arizona State University, Tempe, USA, November 16th.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 21-23rd.
- SSRL Summer School, Stanford, USA, September 18-23rd.
- Diffraction Methods in Molecular Biology, Gordon Research Conference, Andover New Hampshire, USA, July 2-7th.
- EMBO workshop for automated macromolecular structure solution, EMBL, Grenoble, France, March 15-25th.
- CNS workshop, Uppsala University, Uppsala, Sweden, February 7-8th.

1999

- High-throughput methods for structural genomics, Argonne National Lab, USA, November 15-16th.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 25-27th.
- International School of Crystallography of Biological Macromolecules, Barcelona, Spain, September 9-15th.
- IUCr Crystallographic Computing School, Cambridge, UK, August 14-20th.
- XVIIIth IUCr Congress and General Assembly, Glasgow, UK, August 4-13th.
- ACA Summer Course in Crystallography, University of Georgia, USA July 12-24th.
- Automation of Structure Determination workshop, Brookhaven National Lab, USA, June 20-21st.

- 29th Mid-Atlantic Protein Crystallography Workshop, Rockville, USA, April 28-30th.
- CNS Workshop, University of Georgia, USA, April 21st.

1998

- EC and CCP4 Workshop on Refinement of Macromolecular Structure, York University, UK, December 14-20th.
- Advanced School of Macromolecular Crystallography, Sao Carlos, Brazil, November 29th - December 6th.
- Macromolecular Crystallography Course, Cold Spring Harbor Laboratory, USA, October 25-27th.
- Diffraction Methods in Molecular Biology, Gordon Research Conference, Andover New Hampshire, USA, June 21-26th.
- Modelling and membrane proteins, Biochemical Society UK Spring Meeting, Southampton, UK, March 31st.

1997

- CCP4 Refinement and Validation Workshop, York University, UK, September 1-6th.
- Validation and Refinement of Macromolecular Structures, Oporto, Portugal, August 29-30th.
- Modelling of Membrane Proteins, University of Toronto, Canada, May 5th.
- West Coast Crystallography Workshop, Asilomar, USA, March 15-18th.

Prior to 1997

- Macromolecular Refinement, CCP4 Study Weekend, Chester College, Chester, UK, January 5-6th (1996).
- IMA Program on Protein Structure and Dynamics, University of Minnesota, Minnesota, July 18-22nd (1994).
- CECAM Workshop on Simulations of biological macromolecules: improving sampling with parallelism and other techniques. Orsay, Paris, November 15-17th (1993).

Meetings Organized

2011

- Computational Methods session, International Union of Crystallography Meeting, Madrid, Spain, August 22-30th. [Session co-chair]
- Phenix workshop, American Crystallographic Association Annual Meeting, New Orleans, USA, May 28th. [Session organizer]
- Phenix workshop, International Structural Genomics Conference, Toronto, Canada, May 10th. [Session co-organizer]

2010

- Diffraction Methods in Molecular Biology, Gordon Research Conference, Lewiston, Maine, USA, July 18-23rd. [Session chair]

2008

- Pittsburgh Diffraction Conference, Pittsburgh, USA, October 30th - November 1st. [Session co-organizer]
- Recent trends in Macromolecular Structure and Function, Chennai, India, January 7th-14th. [Member, organizing committee]

2007

- International Symposium on Diffraction Structural Biology, Tokyo, Japan, September 10th-13th. [Member, international advisory committee]
- Computational Methods Session, American Crystallographic Association Annual Meeting, Salt Lake City, Utah, USA, July 23rd-26th. [Session co-organizer]
- Multiscale Imaging Workshop, Lawrence Berkeley Laboratory, Berkeley USA, May 17th-18th. [Meeting co-organizer]

2006

- International Conference on Structural Genomics workshop, Yokohama, Japan, October 19th-20th. [Meeting co-organizer]
- Neutron Diffraction Workshop, American Crystallographic Association Annual Meeting, Honolulu, Hawaii, USA, August 22-26th. [Session co-organizer]
- Diffraction Methods in Molecular Biology, Gordon Research Conference, Lewiston, Maine, USA, July 11-16th. [Meeting organizer]

2004

- Computational Methods Session, American Crystallographic Association Annual Meeting, Chicago, Illinois, USA, July 17-23rd. [Session co-organizer]
- Diffraction Methods in Molecular Biology, Gordon Research Conference, Lewiston, Maine, USA, July 11-16th. [Meeting co-organizer]

2003

- NIH Data Management Workshop, NIH, Bethesda, Maryland, USA, July 10-11th. [Meeting co-organizer]

2002

- Automation for High Throughput Structure Determination, Lawrence Berkeley Laboratory, USA, December 6th-8th. [Meeting co-organizer]
- Interdisciplinary workshop promoting collaboration in high-throughput X-ray structure determination, Santa Fe, USA, March 22-23rd. [Meeting co-organizer]

