

## Gerwald Jögl: Completed Publications

### Refereed journal articles

1. Fernandezgalan R, Jalon FA, Manzano BR, Rodriguezdelafuente J, Vrahami M, Jedlicka B, Weissensteiner W, **Jögl G**; New chiral Palladium(0) and Palladium(II) complexes of (aminoferrocenyl)phosphine ligands Ppfa and Ptfa - X-ray crystal structure analysis and fluxional behavior involving alkene rotation, Pd-N bond rupture, and selective eta(3)-eta(1)-eta(3) allyl isomerization. **Organometallics** 16, 17, 3758-3768 (1997).
2. Reitzer R, Krasser M, **Jögl G**, Buckel W, Bothe H, Kratky C; Crystallization and preliminary X-ray analysis of recombinant glutamate mutase and of the isolated component S from *Clostridium cochlearium*. **Acta Cryst. D** 54, 1039-1042 (1998).
3. Langan P, Lehmann M, Wilkinson C, **Jögl G**, Kratky C; Neutron Laue diffraction studies of coenzyme cob(II)alamin. **Acta Cryst. D** 55, 51-59 (1998).
4. Reitzer R, Gruber K, **Jögl G**, Wagner UG, Bothe H, Buckel W, Kratky C; Glutamate mutase from *Clostridium cochlearium*: the structure of a coenzyme B<sub>12</sub>-dependent enzyme provides new mechanistic insights. **Structure** 7, 891-902 (1999).
5. Champloy F, **Jögl G**, Reitzer R, Buckel W, Bothe H, Michalowicz A, Meyer-Klaucke W, Kratky C; EXAFS data support a short axial cobalt-nitrogen bond of the B<sub>12</sub> cofactor in the two coenzyme B<sub>12</sub>-dependent enzymes glutamate mutase and 2-methyleneglutarate mutase. **J. Amer. Chem. Soc.** 121, 11780-11789 (1999).
6. Champloy F, Gruber K, **Jögl G**, Kratky C; XAS spectroscopy reveals X-ray-induced photoreduction of free and protein-bound B<sub>12</sub> cofactors. **J. Synch. Rad.** 7, 267-273 (2000).
7. Rozovsky S, **Jögl G**, Tong L, McDermott AE; Solution-state NMR investigations of triosephosphate isomerase active site loop motion: ligand release in relation to active site loop dynamics. **J. Mol. Biol.** 310, 271-280 (2001).
8. **Jögl G**, Tao X, Xu YW, Tong L; COMO: a program for combined molecular replacement. **Acta Cryst. D** 57, 1127-1134 (2001).
9. **Jögl G**, Shen Y, Gebauer D, Li J, Wiegmann K, Kashkar H, Kronke M, Tong L; Crystal structure of the BEACH domain reveals an unusual fold and extensive association with a novel PH domain. **EMBO J.** 21, 18, 4785-4795 (2002).
10. **Jögl G**, Rozovsky S, McDermott AE, Tong L; Optimal alignment for enzymatic proton transfer: Structure of the Michaelis complex of triosephosphate isomerase at 1.2 Å resolution. **Proc. Natl. Acad. Sci. USA** 100, 1, 50-55 (2003).
11. **Jögl G**, Tong L; Crystal structure of carnitine acetyltransferase and implications for the catalytic mechanism and fatty acid transport. **Cell** 112, 113-122 (2003).
12. Gobin S, Thuillier L, **Jögl G**, Faye A, Tong L, Chi M, Bonnefont JP, Girard J, Prip-Buus C; Functional and structural basis of carnitine palmitoyltransferase 1A deficiency. **J. Biol. Chem.** 278, 50428-50434 (2003).
13. **Jögl G**, Tong L; Crystal structure of yeast acetyl-coenzyme A synthetase in complex with AMP. **Biochemistry** 43, 1425-1431 (2004).
14. Hsiao Y, **Jögl G**, Tong L; Structural and biochemical studies of the substrate selectivity of carnitine acetyltransferase. **J. Biol. Chem.** 279, 31584-31589 (2004).

15. Gebauer D, Li J, **Jogi G**, Tong L; Crystal structure of the PH-BEACH domain of human LRBA/BGL. **Biochemistry** 43, 14873-14880 (2004).
16. **Jogi G**, Hsiao Y, Tong L; Crystal structure of mouse carnitine octanoyltransferase and molecular determinants of substrate selectivity. **J. Biol. Chem.** 280, 738-744 (2005).
17. Hsiao YS, **Jogi G**, Esser V, Tong L; Crystal structure of rat carnitine palmitoyltransferase II (CPT-II). **Biochem. Biophys. Res. Comm.** 346, 974-980 (2006).
18. Hsiao YS, **Jogi G**, Tong L; Crystal structures of murine carnitine acetyltransferase in ternary complexes with its substrates. **J. Biol. Chem.** 281, 28480-28487 (2006).
19. Holmes W and **Jogi G\***; Crystal structure of inositol phosphate multikinase 2 and implications for substrate specificity. **J. Biol. Chem.** 281, 38109-38116 (2006).
20. Demirci H, Gregory S, Dahlberg A, **Jogi G\***; Recognition of ribosomal protein L11 by the protein trimethyltransferase PrmA. **EMBO J.** 26, 567-577 (2007).
21. Li H and **Jogi G\***; Crystal structure of the zinc-binding transport protein ZnuA from *Escherichia coli* reveals an unexpected variation in metal coordination. **J. Mol. Biol.** 368, 1358-1366 (2007).
22. You Z, Omura S, Ikeda H, Cane DE, **Jogi G\***; Crystal structure of the non-heme iron dioxygenase PtlH in pentalenolactone biosynthesis. **J. Biol. Chem.** 282, 36552-36560 (2007).
23. Demirci H, Gregory S, Dahlberg AE, **Jogi G\***; Multiple site trimethylation of ribosomal protein L11 by the PrmA methyltransferase. **Structure** 16, 1059-1066 (2008)<sup>B</sup>.
24. Demirci H, Gregory S, Dahlberg AE, **Jogi G\***; Crystal structure of the *Thermus thermophilus* 16S rRNA methyltransferase RsmC in complex with cofactor and substrate guanosine. **J. Biol. Chem.** 283, 26548-26556 (2008).
25. Li H & **Jogi G\***; Structural and biochemical studies of TIGAR (*TP53*-Induced Glycolysis and Apoptosis Regulator). **J. Biol. Chem.** 284, 1748-1754 (2009).
26. Demirci H, Belardinelli R, Seri E, Gregory ST, Gualerzi C, Dahlberg AE, **Jogi G\***; Structural rearrangements in the active site of the *Thermus thermophilus* 16S rRNA methyltransferase KsgA in a binary complex with 5'-methylthioadenosine. **J. Mol. Biol.** 388, 271-282 (2009).
27. Gregory ST, Demirci H, Belardinelli R, Monshupanee T, Gualerzi C, Dahlberg AE, **Jogi G\***; Structural and functional studies of the *Thermus thermophilus* 16S rRNA methyltransferase RsmG. **RNA** 15, 1693-1704 (2009).
28. Demirci H, Larsen HGL, Hansen T, Rasmussen A, Cadambi A, Gregory S, Kirpekar F\*, **Jogi G\***; Multi-site specific 16S rRNA methyltransferase RsmF from *Thermus thermophilus*. **RNA** 16, 1584-1596 (2010).
29. Demirci H, Murphy IV FV, Belardinelli R, Kelley AC, Ramakrishnan V, Gregory ST, Dahlberg AE, **Jogi G\***; Modification of 16S ribosomal RNA by the KsgA methyltransferase restructures the 30S subunit to optimize ribosome function. **RNA** 16, 2319-2324 (2010).
30. **Jogi G**, Wang X, Mason SA, Kovalevsky A, Mustyakimov M, Fisher Z, Hoffman C, Kratky C, Langan P; High-resolution neutron crystallographic studies of the hydration of the coenzyme cob(II)alamin. **Acta Cryst. D** 67, 584-591 (2011).

31. Larsen LH, Rasmussen A, Giessing AM, **Jogl G\***, Kirpekar F\*; Identification and characterization of the *Thermus thermophilus* m5C methyltransferase modifying 23S rRNA base C1942. **J. Biol. Chem.** 287, 27593-27600 (2012).
32. Li H and **Jogl G\***; Crystal structure of decaprenylphosphoryl- $\beta$ -D-ribose 2'-epimerase from *Mycobacterium smegmatis*. **Proteins**, 81(3), 538-543 (2013).
33. Demirci H, Murphy IV FM, Murphy E, Gregory S, Dahlberg AE, **Jogl G\***; A structural basis for streptomycin-induced misreading of the genetic code. **Nature Comms.** 4, 1355 (2013).
34. Demirci H\*, Sierra R, Laksmono H, Shoeman RL, Botha S, Barends TRM, Nass K, Schlichting I, Doak RB, Gati C, Williams GJ, Boutet S, Messerschmidt M, **Jogl G**, Dahlberg AE, Gregory ST, Bogan MJ; Serial femtosecond X-ray diffraction of 30S ribosomal subunit microcrystals in liquid suspension at ambient temperature using an X-ray free electron laser. **Acta Cryst. F** 69, 1066-9 (2013).
35. Demirci H, Wang L, Murphy IV FV, Murphy EL, Carr JF, Blanchard SC, **Jogl G**, Dahlberg AE, Gregory ST\*; The central role of protein S12 in organizing the structure of the decoding site of the ribosome. **RNA** 19(12), 1791-801 (2013).
36. Demirci, H, Murphy IV FV, Murphy EL, Connett JL, Dahlberg AE, **Jogl G**, Gregory ST\*; A structural analysis of base substitutions in *Thermus thermophilus* 16S ribosomal RNA conferring streptomycin resistance. **Antimicr. Agents Chemotherapy** 58(8), 4308-17 (2014).
37. Gregory ST\*, Connett JL, Carr JF, **Jogl G**, Dahlberg AE; Phenotypic interactions among mutations in a *Thermus thermophilus* 16S rRNA gene detected with genetic selections and experimental evolution. **J. Bact.** 196(21), 3776-83 (2014).

\* indicates corresponding author(s)

### **Non-refereed journal articles**

1. **Jogl G**, Hsiao Y, Tong L; Structure and function of carnitine acyltransferases. **Ann. N.Y. Acad. Sci.** 1033, 17-29 (2004).

### **Chapters in books**

1. Gruber G, **Jogl G**, Klintschar G, Kratky C; High-resolution crystal structures of cobalamins. In: Vitamin B<sub>12</sub> and B<sub>12</sub>-Proteins (Kräutler B, Arigoni D, Golding BT eds.) Wiley-Vch: Weinheim, 335-347 (1998).
2. Gregory TS, Demirci H, Carr JF, Belardinelli R, Thompson JR, Cameron D, Rodriguez-Correa D, Murphy F, Ramakrishnan V, **Jogl G**, Dahlberg AE. Genetic and crystallographic approaches to investigating ribosome structure and function. In: Ribosomes: Structure, Function and Dynamics (Green R, Wintermeyer W, Rodnina M eds.) Springer Wien-New York, p 57-69. ISBN: 978-3-7091-0214-5 (2011).

### **Abstracts**

*Presented by GJ:*

- Jogl G and Holmes W; Crystal structure of inositol polyphosphate multikinase 2 with substrate kinetic analysis. American Crystallographic Association National Meeting 2007, Salt Lake City.
- Jogl G, Demirci H, Belardinelli R, Seri E, Gregory ST and Dahlberg AE; Structure of the *Thermus thermophilus* rRNA methyltransferase KsgA. Experimental Biology 2009 (ASBMB annual meeting) New Orleans, April 2009.
- Jogl G, Demirci H, Belardinelli R, Seri E, Gregory ST, Gualerzi C, Dahlberg AE; Structure and function of rRNA methyltransferases. Nucleic Acids Gordon Research Conference, Biddeford, ME, 2009.
- Jogl G, Demirci H, Belardinelli R, Seri E, Gregory ST, Gualerzi C, Dahlberg AE; Structure and function of rRNA methyltransferases. VIII European Symposium of the Protein Society, Zürich, Switzerland, 2009.
- Jogl G, Demirci H, Gregory ST, Murphy F, Kelley AC, Ramakrishnan V, Dahlberg AE; Structural Dynamics of the *Thermus thermophilus* 30S ribosomal subunit induced by a streptomycin-dependence mutation in 16S rRNA. 23<sup>rd</sup> Symposium of the Protein Society, Boston, MA, 2009.
- Jogl G, Demirci H, Murphy F, Belardinelli R, Kelley AC, Ramakrishnan V, Gregory ST, Dahlberg AE; The impact of 16S rRNA methylation by KsgA on the structure of the 30S ribosomal subunit. 2010 Ribosome Meeting, Orvieto, Italy.
- Jogl G, Demirci H, Murphy F, Belardinelli R, Kelley AC, Ramakrishnan V, Gregory ST, Dahlberg AE; Impact of conserved 16S rRNA methylation by KsgA on the structure of the 30S ribosomal subunit. American Crystallographic Association National Meeting 2010, Chicago.
- Connett JL, Murphy L, Dahlberg AE, Gregory ST, Jogl G; X-ray crystal structure of a 30S ribosomal subunit lacking ribosomal protein S17. 2013 Ribosome Meeting, Napa Valley, CA.

*Presented by members of the laboratory:*

- Demirci H, Gregory ST, Thompson J, Jogl G and Dahlberg AE; Structural Studies on *Thermus thermophilus* L11 methyltransferase (PrmA) methylation of ribosomal protein L11. Annual East Coast Ribosome Meeting, University of Massachusetts Amherst, MA, June 2005.
- Demirci H, Gregory ST, Jogl G and Dahlberg AE; Structural and Biochemical Studies on *Thermus thermophilus* L11 methyltransferase (PrmA) methylation of ribosomal protein L11. "Ribosomes: form and function" North Falmouth, MA, June 2007.
- Demirci H, Gregory S, Dahlberg AE, Jogl G; Structure based protein engineering of ribosomal protein trimethyltransferase PrmA. American Crystallographic Association National Meeting 2007, Salt Lake City. (This poster received the best student poster award from the Protein Data Base)
- Li H and Jogl G; Crystal structure of the zinc-binding transport protein ZnuA from *Escherichia coli* reveals an unexpected variation in metal coordination. American Crystallographic Association National Meeting 2007, Salt Lake City.
- Li H and Jogl G; Crystal structure of ZnuA from *E. coli* reveals an unexpected variation in metal coordination. The 4<sup>th</sup> Annual North Eastern Structure Symposium. Storrs, CT, October 2007.
- Li H and Jogl G; Crystal structure of TIGAR and implications in tumor cell metabolism regulation. Rhode Island Research Alliance Symposium, Providence, RI, June 2008.

- Li H and Jogl G; Crystal structure of a TIGAR homolog from *Danio rerio* and implications for cancer metabolism. The 22<sup>nd</sup> Symposium of the Protein Society. San Diego, CA, July 2008.
- Demirci H, Gregory ST, Dahlberg AE and Jogl G; Recognition and catalysis of ribosomal protein L11 by the protein trimethyltransferase PrmA. XXI Congress and General Assembly of the International Union of Crystallography, Osaka, Japan, August 2008.
- Li H and Jogl G; The crystal structure of Atg8 from *S. cerevisiae*. 23<sup>rd</sup> Symposium of the Protein Society, Boston, MA, 2009.
- Demirci H, Gregory ST, Murphy F, Kelley AC, Jogl G, Ramakrishnan V, Dahlberg AE; Structural dynamics of the *Thermus thermophilus* 30S ribosomal subunit: a new crystal form induced by a streptomycin-dependence mutation in 16S rRNA. Ribosomes Conference 2010, Orvieto, Italy.
- Li H and Jogl G; Crystal structure of decaprenylphosphoryl-β-D-ribose 2'-epimerase from *Mycobacterium smegmatis*. American Crystallographic Association National Meeting 2013, Hawaii.
- Demirci H, Sierra RG, Laksmono H, Shoeman R, Botha S, Barends T, Deponte DD, Boutet S, Messerschmidt M, Jogl G, Dahlberg AE, Gregory ST, Bogan MJ; Serial femto-second X-ray diffraction of 30S ribosomal subunit microcrystals in liquid suspension at ambient temperature using an X-ray free electron laser. Ribosomes Conference 2013, Napa Valley, CA.

### **Invited Lectures**

- 2003      Lerner Research Institute, Cleveland Clinic  
                Department of Molecular Cardiology/Molecular Biology
- 2004      Brown University  
                Department of Molecular Biology, Cell Biology and Biochemistry  
                Boston Biomedical Research Institute, Boston, MA  
                Virginia Polytechnic Institute, Blacksburg, VA
- 2005      Brown University  
                Department of Molecular Biology, Cell Biology and Biochemistry
- 2007      Pfizer Global Research and Development, Groton, CT.
- 2009      Columbia University, New York.  
                Department of Biochemistry and Molecular Biophysics  
                Innsbruck Medical University, Austria.  
                Division of Genomics and RNomics  
                University of Southern Denmark, Denmark.  
                Department of Biochemistry and Molecular Biology
- 2010      University of Camerino, Italy.  
                Department of Biology  
                Polytechnic University of Ancona, Italy.  
                Facolta di Scienze  
                Graz University of Technology, Graz, Austria  
                Plenary lecture, DocDay – NAWI Graz Doctoral School Molecular Biosciences and Biotechnology.
- 2011      University of Illinois, Chicago.  
                Center for Pharmaceutical Biotechnology  
                University of Massachusetts, Dartmouth  
                Department of Biology  
                IGBMC/University of Strasbourg, France

Columbia University, New York  
Department of Chemistry  
Rhode Island College, Providence  
BioNES Meeting, Roger Williams University, RI  
2013 University of Wisconsin - Madison

**Papers Read**

- 2003 Jogi G and Tong L. Crystal structure of carnitine acetyltransferase and implications for fatty acid transport. American Crystallographic Association, National Meeting 2003.
- 2007 Jogi G, Gregory ST, Dahlberg AE, Demirci H. Recognition and Catalysis of Ribosomal Protein L11 by the Protein Methyltransferase PrmA. American Crystallographic Association, National Meeting 2007.
- 2009 Demirci H, Gregory ST, Belardinelli R, Gualerzi C, Dahlberg AE, Jogi G. Structure and function of ribosomal RNA methyltransferases. Annual Meeting of the RNA Society, Madison, Wisconsin, 2009.

**Research Grants****Current Grants**

1R01GM094157-03 (MPI: Jogi G and Gregory ST) 09/01/10 – 08/31/15  
NIH \$ 181,517 direct costs FY13  
Structural robustness of ribosome functional centers.  
Role: Co-PI [contact author of this multi-PI proposal with Steven Gregory, Assistant Professor (Research), Brown University].

**Completed grants**

P20 RR15578 (PI: Atwood, W.J.) 07/01/05 – 02/28/10  
NIH/NCRR \$ 1,569,519 total costs  
Center for Cancer Signaling Networks  
Role: Lead Investigator of a subproject: Structural studies of phosphoinositol kinase related protein kinases.

Brown University 01/2008 – 12/2008  
Richard B. Salomon Faculty Research Award \$ 15,000  
Structural biology of the human Sir2 homolog, Sirt6, in complex with the Gcip tumor suppressor.  
Role: PI

Brown University Seed Funds Award 02/01/2006 – 01/31/2007  
Structural biology and function of macromolecular complexes \$ 53,074  
Role: Co-PI (with Rebecca Page)

Rhode Island Foundation Medical Research Grant 01/01/2006 – 12/31/2006  
X-ray structure determination of inositol phosphate multikinase Ipk2 \$10,000  
Role: PI

## **Service**

### **Service to the University**

MCB Curriculum Committee 2014 - present  
Laboratories of Molecular Medicine Operations Committee, 2005 - present  
Biochemistry Concentration Advisor, 2009 – present  
First-Year Advisor, 2009 – present  
Sophomore Advisor, 2009 - present  
  
MCB Graduate Program Admissions Committee, 2005/2006  
MCB Faculty Executive Committee, 2006/2007  
MCB Curriculum Committee, 2007/2008  
MCB Faculty Executive Committee, 2008/2009  
MCB Curriculum Committee, 2009-2011  
MCB Structural Biology Faculty Search Committee 2012/2013  
MCB Graduate Program Admissions Committee 2012/2013  
Member TEAM (Team Enhanced Advising and Mentoring), 2012/2013  
MCB Space Committee 2013/2014

### **Service to the Profession**

Member, American Crystallographic Association  
Member, American Society for Biochemistry and Molecular Biology  
Member, American Association for the Advancement of Sciences  
Member, RNA Society

## **Academic Honors**

1994        M. Sc. Thesis Award of the Austrian Chemical Society.

## **Teaching**

### **Courses**

#### *Fall 2008*

BIOL0221 Current Topics in Biochemistry and Molecular Biology: Molecular Mechanisms in Signal Transduction (with A. Salomon)

#### *Spring 2009*

BIOL0280 Introductory Biochemistry (with A. Salomon)

#### *Spring 2010*

BIOL0280: Introductory Biochemistry (with A. Salomon)

#### *Spring 2011*

BIOL0280: Introductory Biochemistry (with A. Salomon)

BIOL2200A: Molecular Biology and Chemistry (with R. Page)

*Fall 2011*

BIOL2200D: Current Topics in Biochemistry: Epigenetics, Chromatin, and Transcription  
(with E. Larschan)

*Fall 2012*

BIOL1270/2270: Advanced Biochemistry (with Alex Brodsky and Al Dahlberg)

BIOL1270 S02: Advanced Biochemistry (Pfizer-Brown graduate program)

*Spring 2013*

BIOL0280: Introductory Biochemistry

*Fall 2013*

BIOL2030: Foundations for Advanced Study in Experimental Biology

*Spring 2014*

BIOL2000D: Current Topics in MCDB, Antibiotics, antibiotic resistance and ribosome function (with Susan Gerbi).

### **Guest Lectures**

*Spring 2008*

PH2620: Special Topics Physics

*Fall 2008*

BIOL0201A: Introduction to MCB Graduate Program Faculty Research

*Spring 2013*

BIOL1200: Protein Biophysics and Structure

*Spring 2014*

BIOL1200: Protein Biophysics and Structure

*Fall 2014*

BIOL1300: Biomolecular Interactions: Health, Disease and Drug Design

### **External Guest Lectures**

*Spring 2012, 2013 & 2014*

RapiData Collection & Structure Solving, a practical course in macromolecular X-ray diffraction measurement. Brookhaven National Laboratory, Upton, NY. Guest lecture and intensive day-long tutorials in crystallographic data processing with the XDS software package.

### **Brown University First Readings Seminars**

*Fall 2007* Alain de Botton, How Proust can Change your Life

*Fall 2008* Rory Stewart, The Places in Between

*Fall 2009* Jonathan Weiner, The Beak of the Finch

*Fall 2010* Edwidge Danticat, *The Dew Breaker*  
*Fall 2011* Leslie T. Chang, *Factory Girls*  
*Fall 2012* Charles Rappleye, *Sons of Providence*  
*Fall 2013* Eyal Press, *Beautiful Souls*  
*Fall 2014* Oil and Water

### **Undergraduate Independent Study**

*Fall 2005*  
Jonathan Herman (BIOL0195), Devina Swarup (BIOL0195)

*Spring 2006*  
Jonathan Herman (BIOL0196), Devina Swarup (BIOL0196)

*Fall 2006*  
Megha Katti

*Spring 2007*  
Megha Katti, Siqing He,

*Fall 2007*  
Megha Katti (BIOL0195), Siqing He (BIOL0195), Holly Careskey (BIOL0195)

*Spring 2008*  
Megha Katti (BIOL0196), Siqing He (BIOL0196), Holly Careskey (BIOL0196), Ashwin Cadambi

*Fall 2008*  
Ashwin Cadambi (BIOL0195), SeanMcGeary (BIOL0195), Rohan Keshwara (BIOL0195), Kevin Huang

*Spring 2009*  
Ashwin Cadambi (BIOL0196), SeanMcGeary (BIOL0196), Rohan Keshwara (BIOL0196), Kevin Huang

*Fall 2009*  
Kevin Huang, Ayoosh Pareek

*Spring 2010*  
Kevin Huang

*Fall 2010*  
Kevin Huang (BIOL0195), Timothy Eisen (BIOL0195), Faiz Jiwani

*Spring 2011*  
Kevin Huang (BIOL0196), Timothy Eisen (BIOL0196)

*Fall 2012*  
Tae Ho Rho (BIOL0195), Sha Sha

Spring 2013

Tae Ho Rho (BIOL0196), Sha Sha, Mamadou Diallo

Fall 2013

Darish Hyunh (BIOL0195), Matthew Gasteiger, Mamadou Diallo

Spring 2014

Darish Hyunh (BIOL0196), Matthew Gasteiger (BIOL0196), Mamadou Diallo, David Perry

Fall 2014

Matthew Gasteiger (BIOL0195), Mamadou Diallo (BIOL0195), Michael Ayele (BIOL0195), Cecilia Berriz (BIOL0195), Jessica Yu

### **Brown Undergraduate Teaching and Research Assistant Awards**

Devina Swarup (2005)

Research project: Furin-like prohormone convertase from *Giardia lamblia*

Siqing He (2007)

Research project: Purification and crystallization of the metal-free ZnuA zinc-transport protein.

Kevin Huang (2010)

Research project: The interaction between nucleolar RNA methyltransferase NSun2 and microtubule-stabilizing protein NuSAP during mitotic spindle assembly.

Matthew Gasteiger (2014)

Research project: Crystallization of yeast ribosomes.

David Perry (2014)

Research project: Crystallization of 50S ribosomal subunits from *M. smegmatis*.

### **Undergraduate Honors Theses**

2008

Holly Careskey Sc.B. Biochemistry

Megha Katti Sc.B. Biology

Siqing He Sc.B. Biology, Siqing was awarded a Class of 2008 Senior Prize in Biology for her thesis.

2009

Ashwin Cadambi Sc.B. Computational Biology

Sean McGahey Sc.B. Biophysics

2011

Kevin Huang Sc.B. Biology

Timothy Eisen Sc.B. Chemistry

### **Ph.D. Theses**

Hasan Demirci (MCB)

2003 – 2007, “Structure determination of the *Thermus thermophilus* protein methyltransferase A in complex with its substrate ribosomal protein L11”

Hua Li (MCB)

Prior degree: M.Sc. Northeastern University

2004 – 2009, “Structural and biochemical studies of TIGAR and ZnuA”

**Academic Advising**

Trainer for the MCB and MPPB graduate programs.