

# KEVIN A. MAHARAJ, Ph.D.

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## **Professional Profile**

Highly motivated structural biology Ph.D. graduate with over six years of scientific research experience and teaching experiences ranging from higher education to the high school classroom. Worked with students from various economic and social backgrounds. Currently teaching chemistry at a Title 1 charter school in Philadelphia. Seeking opportunities to implement inquiry based instruction and argumentation within the high school science classroom.

## **Education and Training**

University of Pennsylvania Graduate School of Education Philadelphia, PA	Certification	2013-2015	7-12 Biology/Chemistry Urban Education
University at Buffalo—S.U.N.Y. and The Hauptman-Woodward Medical Research Institute Buffalo, NY	Ph.D.	2006—2012	Structural Biology
Binghamton University, S.U.N.Y. Binghamton, NY	B.S.	2001—2006	Biochemistry

## **Teaching and Work Experience**

### **Secondary Science Advisor**

Eastern University Academy Charter School  
Philadelphia, PA  
Courses taught: Biology, Chemistry

**August 2013-present**

### **School Testing Coordinator**

Eastern University Academy Charter School  
Philadelphia, PA

**October 2014-present**

Designed and implemented benchmark assessments for all content areas. Designed systems to help students and staff track performance based on tested PSSA or Keystone subject anchors and standards. Provided professional development training for staff. Developed and implemented data analytics for state exams. Implemented diagnostic, formative, and benchmark assessments to develop literacy across all content and support data driven instruction.

### **Teaching Postdoctoral fellow**

Department of Biology, University of Sciences  
Philadelphia, PA  
Course taught: General Biology II, General Chemistry II

**January 2013—June 2013**

Created a project to immerse freshmen into scientific literature based on their own interests. Observed peers and took part in classroom observations by the teaching institute at U.Sciences.

## **Graduate Student**

**August 2007—September 2012**

Advisor: Dr. Daniel T. Gewirth

Department of Structural Biology, University at Buffalo—S.U.N.Y.

The Hauptman-Woodward Medical Research Institute; Buffalo, NY

Courses taught: Biochemistry lab, Molecular Biology lab, Protein Production & Purification

Trained and mentored undergraduate and graduate students in the molecular biology, biochemistry and structural biology. Served on pre-doctoral and post-doctoral review boards both at the University and National Science Foundation level. Provided hands-on demonstrations, technical guidance and supervised independent student research projects and public presentations. Developed, designed and executed biomedical research on the structure and function of hsp90 molecular chaperone family.

## **Undergraduate Researcher**

**Spring 2005—Spring 2006**

Advisors: Dr. Anna Tan-Wilson and Dr. Susan L. Bane

Department of Biological Sciences and Department of Chemistry

Binghamton University, S.U.N.Y Binghamton, NY

## **Fellowships, Awards and Honors**

NIH Ruth L. Kirschstein NRSA Predoctoral Fellow

July 2008—July 2012

CSHL Travel Award-Molecular Chaperone meeting

May 2008

University at Buffalo, S.U.N.Y., School of Medicine, Dean's Award

April 2008

## **Publications**

Maharaj K.A., Gill S., Wu S., Li Z., Gewirth D.T., "Getting a GRiP on Hsp90 domains" (submitted December 2015)

Seidler P.S., Que-Gewirth N.S., Maharaj K.A., Gewirth D.T., "Paralog specific inhibitors reveal altered lid conformations within the ER Hsp90, gp96/GRP94" (in preparation)

## **Invited Talk**

"Getting a GRiP on Hsp90 domain functionality." Abstract selected for oral presentation.

Presented at "Experimental Biology 2012: American Society for Biochemistry and Molecular Biology (ASBMB) Annual Meeting"; San Diego, CA, April 2012

## **Poster Presentations**

Gewirth D.T., Maharaj K.A., "Functional complementation of Hsp90 domains"— Cold Spring Harbor Laboratories Molecular Chaperone meeting; Cold Spring Harbor, NY, May 2012

Maharaj K.A., Gewirth D.T., "Getting a GRiP on Hsp90 domain functionality"—Experimental Biology 2012: ASBMB Annual Meeting; San Diego, CA, April 2012

Maharaj K.A., Dollins D.E., Gewirth D.T., "GRP94 gives mechanistic insight into Hsp90 function"—Cold Spring Harbor Laboratories Molecular chaperone meeting; Cold Spring Harbor, NY, May 2008

## **Mentorship**

1. Jack Carter, *Graduate Student*—University of Sciences
2. Jessica Bylerly, *Graduate Student*—University of Sciences
3. Han Yu, *Graduate Student*—University at Buffalo—S.U.N.Y.

Spring 2013

Spring 2013

Fall 2011

4. Sabrina Gill, *Medical Student*—Yale University Summer 2010-2011
5. Yuan Xue, *Graduate Student*—University at Buffalo—S.U.N.Y. Fall 2010
6. Colleen Judge, *Clinical Research Coordinator*—Children's Hospital of Philadelphia Summer 2009
7. Sarah Franjoine, *Medical Student*—Case-Western Reserve University Summer 2008

## **Other Related Experience and Service**

1. SeaPerch underwater robotics team coach 2014-2015
2. Science Olympiads team coach 2014-2015
3. *NYS Science Olympiads local and state competition—Protein Modeling* 2012
4. Graduate Student Association: Structural Biology Dept. President 2011—2012
5. Mark Diamond Research Fund: Advisory board and reviewer 2011
  - a. Participated in the peer-review of research proposals resulting in the funding of 50 graduate students from natural sciences and humanities
6. Graduate Student Association: Structural Biology Dept. Treasurer/Senator 2010—2011
7. Community Outreach: *Casimir Pulaski High School; Yonkers, NY* 2009
  - a. Created lectures and laboratory unit consisting of DNA properties and molecular biology techniques in my former HS teacher's class
8. Graduate Student Association: Structural Biology Dept. Secretary/Senator 2009—2010

## **Affiliations/Memberships**

The American Society of Biochemistry and Molecular Biology (ASBMB)  
 The American Association for the Advancement of Science (AAAS)  
 National Science Teachers Association (NSTA)  
 Teach for America (2013 Philly Corps Member)

## **References**

Valerie Villines  
 Secondary Science Certification Mentor—University of Pennsylvania  
 Graduate School of Education at UPENN  
 email: [villines.valerie@gmail.com](mailto:villines.valerie@gmail.com); phone: 215.370.6493

Caroline Deitch  
 Colleague at Eastern University Academy Charter School  
 12<sup>th</sup> Grade English Advisor and College Transition Coordinator  
 email: [carly.deitch@gmail.com](mailto:carly.deitch@gmail.com); phone: 267.261.5869

John Trey Smith III  
 Advanced Science Methods Instructor—University of Pennsylvania  
 Graduate School of Education at UPENN  
 email: [johsmi@sas.upenn.edu](mailto:johsmi@sas.upenn.edu)

Daniel T. Gewirth, Ph.D., Associate Professor/ Senior Research Scientist  
 Graduate Advisor—University at Buffalo—S.U.N.Y.  
 Department of Structural Biology at The Hauptman-Woodward Research Institute  
 email: [gewirth@hwi.buffalo.edu](mailto:gewirth@hwi.buffalo.edu); phone: 716.898.8635

Michael G. Malkowski, Ph.D., Assistant Professor/ Senior Research Scientist,  
 Graduate Committee Member—University at Buffalo—S.U.N.Y.  
 Department of Structural Biology at The Hauptman-Woodward Research Institute

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