

BIOGRAPHICAL SKETCH

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NAME Jeremy M. Berg	POSITION TITLE Pittsburgh Foundation Chair and Director, Institute for Personalized Medicine		
eRA COMMONS USER NAME (credential, e.g., agency login) jeremyberg	Professor, Computational and Systems Biology, University of Pittsburgh		
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Stanford University, Stanford, CA	B.S., M.S.	06/80	Chemistry
Harvard University, Cambridge, MA	Ph.D.	06/85	Chemistry
Johns Hopkins University School of Medicine, Baltimore, MD	Postdoctoral	10/05-8/06	Biophysics

A. Personal Statement

Dr. Berg is Pittsburgh Foundation Chair and Director of the Institute for Personalized Medicine at the University of Pittsburgh, a collaborative effort between the University and the associated health care system, UPMC. In addition, he serves as Associate Senior Vice Chancellor for Science Strategy and Planning in the Health Sciences and Professor of Computational and Systems Biology. Prior to coming to Pittsburgh two years ago, Dr. Berg served as Director of the National Institute of General Medical Sciences at NIH where he was deeply involved in national training policies including leading the development of the NIGMS strategic plan on training which serves as one of the drivers for subsequent NIH-wide discussions of training.

B. Positions and Honors**Positions**

1986-1990 Assistant Professor, Department of Chemistry, Johns Hopkins University, Baltimore, MD
 1990-2003 Professor and Director, Department of Biophysics and Biophysical Chemistry
 Director, Markey Center for Macromolecular Structure and Function
 Johns Hopkins University School of Medicine, Baltimore, MD
 2002-2003 Co-Director, Keck Center for the Rational Design of Biologically Active Molecules
 2002-2003 Director, Institute for Basic Biomedical Sciences, Johns Hopkins University School of Medicine
 2003-2011 Director, National Institute of General Medical Sciences, National Institutes of Health,
 Bethesda, MD
 2011-Present Associate Senior Vice Chancellor for Science Strategy and Planning (Health Sciences)
 University of Pittsburgh
 Professor, Department of Computational and Systems Biology
 University of Pittsburgh School of Medicine
 2012-Present Professor of Chemistry, University of Pittsburgh
 2013-Present Pittsburgh Foundation Chair and Director, Institute for Personalized Medicine

Honors

Phi Beta Kappa, 1979; 1980; National Science Foundation Predoctoral Fellowship, 1980-1983; Jane Coffin Childs Memorial Fund Postdoctoral Fellowship, 1984-1986; Dreyfus Foundation Distinguished New Faculty in Chemistry Award, 1986; Searle Scholar, 1987-1990; Alfred P. Sloan Fellow, 1988; Presidential Young Investigator, 1988-1993; Eli Lilly Grantee in Biochemistry, 1988; Excellence in Chemistry Award, ICI Pharmaceuticals, 1992; American Chemical Society Award in Pure Chemistry, 1993; Drew University Research Scholar, 1994; Eli Lilly Award for Fundamental Research in Biological Chemistry, 1995; Maryland

Outstanding Young Scientist of the Year, 1995; W. Barry Wood Teaching Award, Johns Hopkins University, 1995, 1996; Graduate Student Teaching Award, Johns Hopkins University, 1997; Professor's Teaching Award for the Preclinical Sciences, Johns Hopkins University, 1997; Harrison Howe Award, Rochester Sect, American Chemical Society, 1997; American Association for the Advancement of Science Fellow, 2007; 2008; NIH Director's Award, 2008; Distinguished Service Award, Biophysical Society, 2009; NIH Merit Award, 2010; Society of Scholars, Johns Hopkins University, 2010; Howard K. Schachman Public Service Award, American Society of Biochemistry and Molecular Biology, 2010; Institute of Medicine, National Academy of Sciences, 2010; American Chemical Society Public Service Award, 2011; American Society for Cell Biology Public Service Award, 2013

C. Selected publications (from over 150 publications)

Most relevant to the current application

1. **Berg JM.** Career Alternatives, not Alternative Careers, ASBMB Today, November 2013.
2. **Berg JM** and NIGMS Staff, Investigating in the Future: Strategic Plan for Biomedical and Behavioral Research Training, US Department of Health and Human Services, 2011.

Other recent publications (in chronological order)

1. Jantz D, **Berg JM.** Reduction in DNA-Binding Affinity of Cys₂His₂ Zinc Finger Proteins by linker phosphorylation. Proc Natl Acad Sci U S A. 2004 May 18;101(20):7589-93. PubMed PMID: 15128941; PubMed Central PMCID: PMC419650.
2. Maynard EL, Gatto, Jr GJ, **Berg JM.** Pex5p Binding Affinities for Canonical and Non-Canonical PTS1 Peptides. Proteins. 2004 Jun 1;55(4):856-61. PubMed PMID: 15146484.
3. Blasie CA, **Berg JM.** Entropy-Enthalpy Compensation in Ionic Interactions Probed in a Zinc Finger Peptide. Biochemistry. 2004 Aug 17;43(32):10600-4. PubMed PMID: 15301557.
4. Thickman KR, Davis A, **Berg JM.** Site Selection in Tandem Arrays of Metal-Binding Domains. Inorg Chem. 2004 Dec 13;43(25):7897-901. PubMed PMID: 15578823.
5. Maynard EL, **Berg JM.** Quantitative Analysis of Peroxisomal Targeting Signal Type-1 Binding to Wild-type and Pathogenic Mutants of Pex5p Supports an Affinity Threshold for Peroxisomal Protein Targeting. J Mol Biol. 2007 May 18;368(5):1259-66. Epub 2007 Mar 12. PubMed PMID: 17399738.
6. Davis AM, **Berg JM.** Homodimerization and Heterodimerization of Minimal Zn(II)-Binding Domain Peptides of T-cell Proteins CD4, CD8 α , and Lck. J Am Chem Soc. 2009 Aug 19;131(32):11492-7. PubMed PMID: 19624124; PubMed Central PMCID: PMC2769085.
7. Jantz D, **Berg JM.** Probing the DNA-Binding Affinity and Specificity of Designed Zinc Finger Proteins. Biophys J. 2010 Mar 3;98(5):852-60. PubMed PMID: 20197039; PubMed Central PMCID: PMC2830443.
8. Ghosh D, **Berg JM.** A Proteome-wide Perspective on Peroxisome Targeting Signal (PTS1)-Pex5p Affinities. J Am Chem Soc. 2010 Mar 24;132(11):3973-9. PubMed PMID: 20178365.
9. Guerrero, AL, **Berg JM.** Design of Single-Stranded Nucleic Acid Binding Proteins Based on Nucleocapsid CCHC-Box Zinc Binding Domains. J Am Chem Soc. 2010 Jul 21;132(28):9638-43. PubMed PMID: 20586464.
10. Namuswe, F, **Berg JM.** Secondary Interactions Involving Zinc-Bound Ligands: Roles in Structural Stabilization and Macromolecular Interactions. J Inorg Biochem 2011 Jun 111:146-9. PubMed PMID: 22196020. PubMed Central PMCID: PMC3371127.

D. Research Support

PA Department of Health 2011 Formula Grant SAP # 4100057687 Berg 1/1/12-6/30/14
Thermodynamic Studies of Protein-Peptide Interactions
Role: PI

Pittsburgh Foundation Chair in Personalized Medicine Berg 10/1/13-Present