

# METALS IN BIOLOGY

## GORDON RESEARCH CONFERENCE PROGRAM

January 21-25, 1996  
Doubletree Hotel, Ventura, CA, USA

**A Look to the Future, Richard Holm**, Harvard University, USA: Chair  
**Gregory Petsko**, Brandeis University, USA: Cytochrome P450 in Four Dimensions

**Cytochrome Oxidases, Gerald Babcock**, Michigan State University, USA: Chair  
**Robert Gennis**, University of Illinois, USA: Structure and function of the heme-copper oxidases  
**Ninian Blackburn**, Oregon Graduate Institute, USA: XAS studies on heme-copper oxidases and models  
**Stuart Ferguson**, Oxford University, United Kingdom: Structure of Cytochrome cd1: An Oxidase and a Nitrite Reductase with an Unusual Haem

**Models for Oxidases, Kenneth Karlin**, Johns Hopkins University, USA: Chair  
**James Collman**, Stanford University, USA: Functional Synthetic Analogues of the Oxygen Binding/Activating Heme Proteins: Myoglobin and Cytochrome c Oxidase  
**Joann Sanders-Loehr**, Oregon Graduate Institute, USA: Raman spectroscopy of blue, non-blue, and purple copper proteins  
**William Tolman**, University of Minnesota, USA: Using synthetic chemistry to gain insight into O-O bond cleavage and C-H bond activation reactions of copper proteins

**Metal DNA Processing and Repair, Thomas O'Halloran**, Northwestern University, USA: Chair  
**Gregory Verdine**, Harvard University, USA: Molecular mechanism of the Ada protein: a metalloactivated chemosensor for methylation damage in DNA  
**Jacqueline Barton**, California Institute of Technology, USA: Damage and repair of DNA by rhodium complexes  
**Dagmar Ringe**, Brandeis University, USA: The structure of the iron-activated regulatory protein diphtheria tox repressor

**Metal Channels and Neuroscience Signal Transduction, Jeremy Berg**, Johns Hopkins University, USA: Chair  
**Joseph Falke**, University of Colorado, Boulder, USA: Molecular tuning of calcium binding sites in signaling pathways  
**Gary Yellen**, Massachusetts General Hospital, USA: A conformation-sensitive engineered metal site in an ion channel

**Metal-binding Biomolecules and Metallorecognition, John Groves**, Princeton University, USA: Chair  
**Francois Diederich**, ETH-Zurich, Switzerland: Dendritic metalloporphyrins and dendritic receptors  
**Carol Fierke**, Duke University Medical Center, USA: Architecture of catalytic zinc binding sites in proteins  
**Claude Meares**, University of California, Davis, USA: Mapping protein surfaces with metal ions

**Metal Mobilization, Edward Stiefel**, Exxon, USA: Chair  
**Donald Kurtz, Jr.**, University of Georgia, USA: Structure and redox properties of rubrerythrin  
**Peter Lindley**, CCLRC Daresbury Laboratory, United Kingdom: The X-ray structure of human ceruloplasmin at 3.1 Å: a putative role for the enzyme in iron metabolism