

Program Report

[PROF 1 Doctors without orders: Highlights of the Sigma Xi postdoc survey](#)

Geoff Davis, Sigma Xi, The Scientific Research Society, 99 Alexander Drive, P.O. Box 13975, Research Triangle Park, NC 27709, gdavis@sigmaxi.org

A summary of highlights from the Sigma Xi Postdoc Survey, based on information provided by 7,600 postdoctoral scientists at 46 American research institutions, will be presented. Funded by the Alfred P. Sloan Foundation, the Sigma Xi Postdoc Survey was designed to improve the training and research environments for postdocs by providing a better understanding of their experiences. Survey results are expected to enable research institutions to benchmark their policies and practices against those at peer institutions.

[PROF 2 Postdoctoral fellowships and the career search](#)

Diane Kneeland, Natural Sciences Career Services, University of Texas at Austin, 1 University Station G2500, Austin, TX 78712, Fax: 512-471-6701, diane.kneeland@mail.utexas.edu

This talk will define the various types of postdoctoral fellowships, how to find them, how to choose which is best for you, and how to apply. Once you have chosen a postdoc, where will you go from there? The postdoc as preparation for a career in industry, academia or government is discussed.

[PROF 3 Benefits of a postdoctoral experience in a government facility](#)

Samuel B. Howerton, Analytical Chemistry Division, National Institute of Standards and Technology, 100 Bureau Dr, Mail Stop 8392, Gaithersburg, MD 20899-8392, Fax: 301-977-0685, samuel.howerton@nist.gov

Dr. Samuel Howerton is a National Research Council Postdoctoral Fellow at the National Institute of Standards and Technology and serves as the Chair of the Policy Committee for the National Postdoctoral Association. Dr. Howerton will address and respond to three issues: 1) The contributions of postdoctoral scholars in government facilities and how they are similar/dissimilar to traditional academic postdoctoral positions; 2) Alternate career paths for young scientists and the preparation both before and after graduation for such positions from the perspective of a recent graduate; and 3) How to maximize the benefits of the postdoctoral training experience.

[PROF 4 Role of the industrial postdoctoral position](#)

Paul Clark, Products Research, SC Johnson & Son, Inc, 1525 Howe Street, Racine, WI 53403-5011

The industrial postdoctoral position is probably the least understood of the postdoctoral positions available. This talk will address the role of the industrial postdoc and how it is similar or dissimilar to academic and government postdocs. It will also address how to choose an industrial postdoc and how to maximize the impact of the industrial postdoctoral position on your career options.

[PROF 5 Musical science: An NSF Discovery Corps postdoctoral project](#)

Catherine Oertel, Cornell Center for Materials Research, Cornell University, Ithaca, NY 14853, cmo25@cornell.edu

As an NSF Discovery Corps Fellow, I have combined my interests in music, materials chemistry, and education in a project on the chemistry of historical pipe organs. Centuries-old organ pipes provide unique opportunities to study long-term corrosion, specifically how alloy composition, microstructure, and environmental factors contribute to corrosion. In complementary efforts, I have developed outreach activities for students that use music and musical instruments to teach concepts of the science of sound. I am part of an international and interdisciplinary partnership between the Göteborg Organ Art Center

and Chalmers University of Technology in Sweden and Cornell University that will result in a new, historically informed pipe organ at Cornell. The Discovery Corps Fellowship Program is a pilot program seeking new postdoctoral and professional development models that combine research expertise with professional service. Discovery Corps Fellows leverage their research expertise through projects that address areas of national need.

PROF 6 The Bayh-Dole Act: A personal perspective

John H. Raubitschek, Office of Counsel, Department of Commerce, 1401 Constitution Ave., NW, Washington, DC 20230, jraubits@doc.gov

On December 12, 1980, President Carter signed the Bayh-Dole Act giving universities and small businesses the right to own their inventions made with federal funds. Previously, there were only a few laws, all requiring particular agencies to own any invention they funded. Other agencies operated under the Statements of Government Patent Policy by Presidents Kennedy in 1963 and Nixon in 1971, which permitted a variety of approaches to ownership of inventions depending on the nature of the project to be funded.

For 25 years under Bayh-Dole, universities have been very successful in commercializing their technology. Similarly, Federal laboratories have significantly expanded their patent licensing activities under this law especially after the Federal Technology Transfer Act of 1986, which allowed laboratories to keep royalties after sharing 15% with inventors. The success of Bayh-Dole has encouraged other countries to adopt similar laws.

PROF 7 Twenty-fifth anniversary of Bayh-Dole Act: Fulfilling its promise

Richard Kordal, Intellectual Property Office, University of Cincinnati, 3130 Highland Ave., Cincinnati, OH 45219-2374, richard.kordal@uc.edu

Prior to the passage of the Bayh-Dole landmark legislation few technologies or inventions (only approximately 5%) created with government funding were being transferred to the public sector for commercial development. This ineffective transfer was due in part to a lack of a uniform policy by the various federal agencies and a preference on the part of the government to grant only non-exclusive licenses. The passage of the Bayh-Dole Act in 1980 dramatically changed this dynamic. Bayh-Dole enabled universities, non-profit institutions and small businesses to obtain ownership of intellectual property developed with federal funding. Since its passage patenting and licensing activity at universities have skyrocketed. The Economist has touted the Bayh-Dole Act as “perhaps the most inspired piece of legislation to be enacted in America over the past half-century.” This presentation will trace the change in government policy and legislative history leading up to the passage of the Bayh-Dole Act, describe its key provisions and the impact it has and continues to make on society.

PROF 8 University licensing under Bayh-Dole: What are the issues and evidence?

Jerry G. Thursby, Department of Economics, Emory University, Rich Bldg, Atlanta, GA 30322, jthursby@emory.edu, and **Marie C. Thursby**, College of Management, Georgia Institute of Technology

There has been dramatic growth in university licensing in the two decades since passage of the Bayh-Dole Act. While university administrators tout this as evidence of the increasing role of universities in economic growth, others question the efficacy of licensing under Bayh-Dole and some have questioned whether incentives created by license opportunities have diverted universities from their primary missions. This talk will highlight the issues and evidence in this regard.

PROF 9 Reflections on Bayh-Dole at 25

Arti Rai, Duke University Law School, P.O. Box 90360, Durham, NC 27708-0360, rai@law.duke.edu

"Twenty-five years after its passage, the Bayh-Dole Act of 1980 has clearly achieved its goal of promoting patenting by federally funded universities. The overall social impact of such patenting is less clear, however. Has increased patenting affected the ability of scientists to do research? Has such patenting contributed to skepticism, even within universities themselves, about the desirability and/or availability of an experimental use exemption? And what, if anything, does Bayh-Dole have to say about the issue of drug pricing? These are some of the issues that will be addressed by this talk."

[PROF 10 WARF for 80 years providing the margin of excellence](#)

Carl E. Gulbrandsen, Wisconsin Alumni Research Foundation, 614 Walnut Street, Madison, WI 53726, carl@warf.org, and Andrew Cohn, Wisconsin Alumni Research Foundation

This talk will tell the story of the Wisconsin Alumni Research Foundation, the first university technology transfer program in the United States. In the New Economy, academic research is a critical asset to businesses around the world. Technology transfer from the world of academia to the world marketplace boosts the economy, creates jobs, and brings money back to the University of Wisconsin to fund additional research. Since its founding in 1925, the Wisconsin Alumni Research Foundation (WARF) has served the University of Wisconsin-Madison scientific community by patenting the discoveries of UW-Madison researchers and licensing these technologies to leading companies worldwide. Royalties paid by the licensing companies are given by WARF to the University to fund further scientific research. WARF distributes the income from commercial licenses to the UW-Madison Graduate School, the inventors and their departments. WARF technologies have enabled over 30 start-up companies in Wisconsin.

[PROF 11 Bayh-Dole: What it can and cannot do](#)

Ed Wasserman, Du Pont Company, E328/406, Wilmington, DE 19880-0328

The Bayh – Dole Act has led to a significant change in the potential of academic research for influencing society. It has benefits both in terms of a broader concept of what is possible within the university, as well as a wider world-view of technology transfer. From the industrial side, universities are becoming a new, richer source of fundamental research, coupled to possible applications. In addition to many benefits, there are some limitations, which if addressed, should lead to even more productive and efficient means of technology transfer.

[PROF 12 How congressional science fellows help Congress](#)

John L. Mimikakis, Committee on Science, House of Representatives, 2320 Rayburn H.O.B., Washington, DC 20515, john.mimikakis@mail.house.gov

Abstract text not available.

[PROF 13 Scientists influencing science policy](#)

Kathryn L. Parker, Science Communications, Outreach and Adaptation, U.S. Environmental Protection Agency, Global Program Division, 1200 Pennsylvania Ave., N.W. 6205J, Washington, DC 20460, parker.kathryn@epa.gov

Abstract text not available.

[PROF 14 Helping Congress understand science](#)

Carl Picconatto, The Mitre Corporation, N2-30, 7515 Colshire Drive, McLean, VA 22102, picconatto@mitre.org

Abstract text not available.

PROF 15 A scientist in Congress

Sreela Nandi, Senate Committee on Energy and Natural Resources, U.S. Senate, 364 Dirksen Senate Building, Washington, DC 20510, Fax: 303 492 5894, nandi@jila.colorado.edu

Abstract text not available.

PROF 16 At the interface of science and government

Julie Carruthers, Office of Senator Feinstein, U.S. Senate, 331 Hart Senate Office Building, Washington, DC 20510, cmt93@acs.org

Abstract text not available.

PROF 17 Careers after the congressional science fellowship

Kristin M. Omberg, Decision Applications Division, Los Alamos National Laboratory, PO Box 1663, MS F607, Los Alamos, NM 87545, Fax: (505) 665-5283, komberg@lanl.gov

Abstract text not available.

PROF 18 Value of congressional science fellow experience

Daniel M. Horowitz, U.S. Chemical Safety Board, 2175 K St. N.W, Suite 400, Washington, DC 20037, daniel.horowitz@csb.gov

Abstract text not available.

PROF 19 The value of congressional science fellows

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Abstract text not available.

PROF 20 Adjunct faculty issues in higher education

Seymour Patinkin, retired, 4610 Dempster Street, Skokie, IL 60076, shpatinkin@comcast.net, and Susan Shih, Natural Science Division, College of DuPage

A symposium was held at the Great Lakes Regional Meeting in Chicago in 2003. The presenters included a long time adjunct faculty member, a full time faculty member, a college administrator and the Higher Education coordinator of the Illinois Education Association. After each individual had presented their views on the issues which they felt to be important, a panel discussion was held with contributions from the audience. This poster presents the highlights of the symposium.

PROF 21 Chemical career opportunities in the finishing industry

Michael J. Brownfield, Raytheon Corporation, 3122 Parnell Avenue, Ft. Wayne, IN 46805, Fax: 260-429-4774, mike_j_brownfield@raytheon.com

Abstract to follow

PROF 22 GLIC Great Lakes instrumental laboratories: Realtime instrument laboratory from East Africa to Chicago

Alanah Fitch, Department of Chemistry, Loyola University Chicago, 1068 W. Sheridan, Chicago, IL 60626, Fax: 773-508-3086, afitch@luc.edu, Michael Kishimba, Department of Chemistry, University of Dar-es-Salaam, Ward Mavura, Edgerton University, and Alice Muriithi, Department of Applied Biology, Kenya Methodist University

Intercontinental professional relations and activities that do not rely on telecommunications.

PROF 23 Designing successful career transitions

John K. Borchardt, Southhaven Communications, 8010 Vista del Sol Drive, Houston, TX 77083-5039, Fax: 281-495-0146, jkborchardt@aol.com

Switching careers successfully is not easy as picking a new line of work, updating your résumé, networking with people and hoping for the best. The most successful career transitions involve careful planning and a gradual shift using the concept of parallel careers: your current career and your future one. This process could take months or years. However it greatly increases the odds of a successful career transition. Having an alternative career “on the back burner” should you lose your job or feel unfulfilled is just common sense. Planning and the concept of parallel careers enables you to explore various career options to see if they satisfy your professional, personal and financial needs without making a long-term commitment that puts your professional future and financial security at risk. Yet few chemists take this precaution and then must make a career change in one big leap, a process that is often unsuccessful. This poster will discuss the process of making successful career transitions from someone who has made a successful transition and, as an ACS Career Consultant, advised both younger and seasoned chemists in doing so.

PROF 24 Chicago Section Job Club

Thomas Kucera¹, Paul Young², and Herbert S. Golinkin². (1) T. J. Kucera & Associates, 9310 Hamlin Avenue, Evanston, IL 60203-1302, Fax: 847-679-7136, tjucera@interaccess.com, (2) N/A

The Chicago Section Job Club began in 1993 with the intention of helping both unemployed members and members looking for a change in their employment. It services to help people with their resumes, interview techniques and the overall job search endeavor. As it a networking group it also enables frustrations to be aired and steam blown off. This presentation will present the assistance that is available and a summary of the feedback from members who have used this service.
