



# Newsletter

## Office of NIH History

*NIH History Lives Here*

Spring/Summer 2004



Dr. Marshall Nirenberg's French Press, used in his Nobel-Prize winning work. (see p.2)

### Office of NIH History Staff and Fellows:

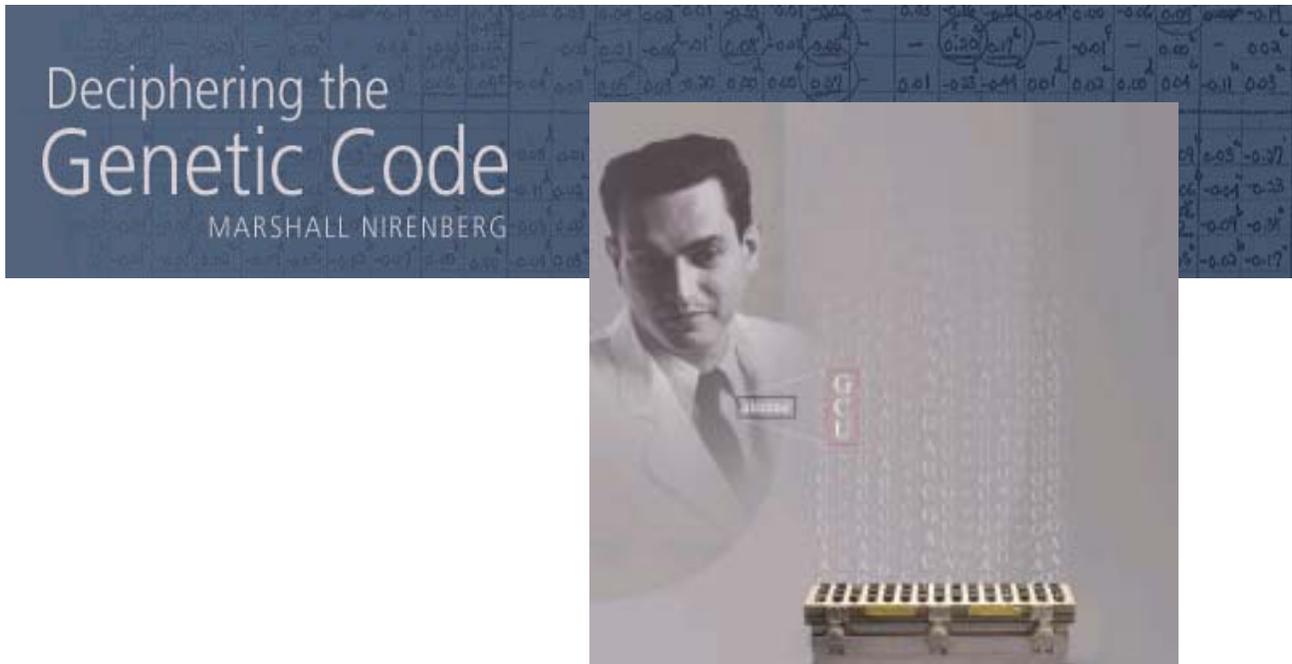
Victoria Harden, Director  
Michele Lyons, Curator  
Brooke Fox, Archivist  
Sarah Leavitt, Associate Historian  
Buhm Soon Park, Associate Historian  
Caroline Hannaway, Historian & Editor  
Sara Shostak, Stetten Fellow  
Ingrid Farreras, Stetten Fellow  
Maya Ponte, Pisano Grantee  
Roshni Lal, Assistant Curator

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The Office of NIH History is made up of the Historical Research Unit and the Stetten Museum. It is a component of the Office of Communications and Public Liaison, Office of the Director, NIH. Contact us at: Office of NIH History, Building 31, Room 5B38, MSC 2092, NIH, Bethesda, MD, 20892 Phone: (301) 496-6610, Fax: (301) 402-1434, web site: [www.history.nih.gov](http://www.history.nih.gov), email: [history@nih.gov](mailto:history@nih.gov)

## New Stetten Museum Exhibit on the Web



The Stetten Museum of the Office of NIH History is pleased to announce the launch of a new web exhibit: “Deciphering the Genetic Code,” honoring the work of NIH’s first intramural Nobel Laureate, Marshall Nirenberg. The exhibit, sponsored in part by the National Heart, Lung, and Blood Institute, was written by Sarah Leavitt and designed by Alan Hoofring and Donald Bliss of the Medical Arts and Printing department.

**The exhibit is on the web at: <http://www.history.nih.gov/exhibits/nirenberg>.**

Marshall Nirenberg is best known for “breaking the genetic code” in 1961, an achievement that won him the Nobel Prize. But what exactly is the genetic code? And how did he decipher it? This exhibit explores genetics research in the 1950s and 1960s and explains the importance of Nirenberg’s experiments and discoveries. For at least a century and a half, the method by which organisms inherit and pass along certain traits has fascinated scientists all over the world. From Gregor Mendel’s pea plant experiments to the Human Genome Project, new discoveries have deepened our understanding of how life is sustained and changed from generation to generation.

“Nirenberg’s work,” notes NIH Historian Victoria A. Harden, “explained the function of the genetic code, as opposed to Watson and Crick’s determination of the structure of DNA. Knowing the structure suggested possible mechanisms of action, but knowing which mechanism was correct and how it worked to instruct the synthesis of proteins made the Genome Project and biotechnology and everything else possible.”

This exhibit outlines the history of genetics research, focusing on Nirenberg’s work in the 1960s which led to a new understanding of the genetic code. Featured are photographs of the people involved in the research and the scientific instruments used in the experiments. A helpful glossary explains terms for non-scientists.

## New Exhibits Around Campus

Roshni Lal, a recent Master's Degree recipient from the George Washington University's Museum Studies program, has joined the staff of the Office of NIH History as a contractor in the position of Assistant Curator. She is working with Michele Lyons, Curator, to prepare exhibits for Building 31 and the NIH Visitor Information Center in Building 45. She will also be working on educational materials for several upcoming web exhibits, including one to be called "Seventy Acres of Science," about NIH's move from Washington D.C. to Bethesda in the early 1940s.

A new exhibit will be installed this fall in Building 31, and will replace the case of historic balances now situated in the first-floor corridor near the cafeteria. The small exhibition, titled "How are You Healing?" will explore alternative healing practices. Whether it involves a session with a psychic healer or sticking needles into the body, exploring options other than conventional medicine is a growing trend. According to research supported by NIH's National Center for Complementary and Alternative Medicine (NCCAM), these therapies are not just a popular fad, but are also effective methods of healing. The exhibit will feature artifacts such as the quills from an African porcupine, given as a gift to former NIH Director Donald Fredrickson in the late 1970s, as well as acupuncture tools and photographs of alternative healing practices.

The NIH Visitor Information Center, which moved last year to the Natcher Conference Center (Building 45), is working with the Office of NIH History to re-install a small exhibit on the "healing waters of Bethesda." Coincidentally, the NIH is located in a town whose name is synonymous to many with healing powers based on a Biblical reference. The new exhibit case will feature a photograph (below) of the "pool of Bethesda," a feature of the Clinical Center in the 1950s.



## Clinical Center Renovation Bumps Museum Exhibits

Most of the Stetten Museum's exhibits in the Clinical Center had to be taken down in March 2004, as a first step in the Clinical Center's Core Renovation project. The exhibit on the work of Earl and Thressa Stadtman (outside Lipsett Hall) and the exhibit on Marshall Nirenberg (near the main elevator lobby) are the only exhibits left. The exhibit on Nobel Laureate Martin Rodbell was moved to the National Institute of Environmental Health Sciences in North Carolina, where Dr. Rodbell once served as Scientific Director. The exhibits on synthetic opiates, Gaucher disease, and genetics will be reinstalled when the renovation work is completed, but "World of Scientific Instruments" will not return.

Part of the renovation plans involve building a floor over the current open space where the Visitor Information Center used to be to make room for an expanded pharmacy. The project will take several years, but the Museum staff hopes that exhibits will be brought back as finished space is made available. Until then, the exhibits can be visited online at [www.history.nih.gov](http://www.history.nih.gov).



## Are You Moving?

If you are one of the many people whose offices and laboratories will be moving out of the Clinical Center in the coming months, now is the time to sort out which papers, books, and instruments you want to take with you to your new space. But before you throw anything away or surplus it, consider donating it to the Office of NIH History instead.

What are we interested in? We collect scientific instruments and non-scientific objects, such as nurses' uniforms or lapel pins, which document NIH history. Instrument manuals for instruments you are donating or for those you no longer have, and trade catalogs also are items of interest.

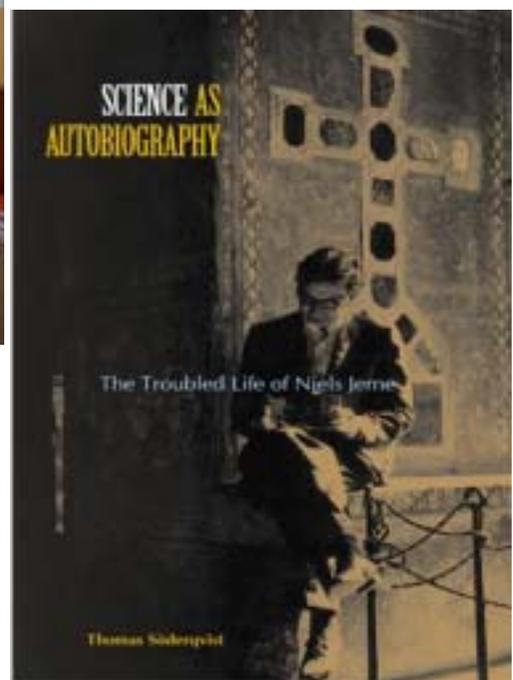
We also collect documents and correspondence relating to programs, policies, and laboratories; scientific notebooks; and audio and visual materials such as photographs, slides, old PowerPoint presentations and videos. For those items you want to keep, we can make copies and return the originals to you. We also seek old NIH telephone books, annual reports, books, and other such materials.

## NIH History Day 2004: “Scientific Biography”

On Tuesday, September 21, 2004, NIH will celebrate the second NIH History Day. This year’s theme is “Scientific Biography,” and the goal is to point out how advances in biomedical research depend on individual curiosity, perseverance, and creativity, augmented occasionally by serendipity.

Posters in the NIH Clinical Center will describe the individuals who played key roles in creating the original Clinical Center, the Ambulatory Care Research Facility, and the brand-new Clinical Research Center.

The highlight of NIH History Day will be a lecture by Dr. Thomas Soderqvist (pictured below, left), Professor of the History of Medicine and Director of the Medical Museum at the University of Copenhagen. His most recent book (cover below, right) is *Science as Autobiography: The Troubled Life of Niels Jerne*, a personal and scientific portrait of Nobel Laureate Niels K. Jerne. Professor Soderqvist’s lecture is titled, “The Seven Virtues of Biography, or: What’s the Use of Biographies of Life Scientists?” It will be held at 3:00 p.m., September 21, in Lipsett Auditorium, NIH Clinical Center (Building 10). The public is invited, but non-NIH ID holders should alert the Office of NIH History if they wish to attend because of heightened security. Please contact Sarah Leavitt, [leavitts@od.nih.gov](mailto:leavitts@od.nih.gov) or 301-496-8856.



## Zebrafish, Acupuncture, and Phenolphthalein: Research Featured on new NIH Health Information Page



Drs. Connaughton and Nelson work with zebrafish in their research.

Office of NIH History staff members Michele Lyons, Sarah Leavitt, and Roshni Lal are collaborating with Kristin Mead and Dennis Rodrigues in the Online Information Branch of the Office of Communications and Public Liaison (OCPL) in the Office of the Director in creating some new features on the NIH Health Information page. Based on usability studies and other feedback, OCPL has decided to add stories of basic and clinical research to the health page to educate visitors about the process and products of NIH research. Check out the stories at: <http://health.nih.gov>.

The first story featured the role of zebrafish in NIH research. Tiny striped zebrafish are common in home aquariums, but it is not widely known that they are a valuable investigative tool for medical researchers. The little zebrafish, native to India, has become a tool for scientists at NIH to learn about human conditions including obesity and heart disease, cancer and blindness, diabetes and deafness. Learn more at: <http://www.nih.gov/health/zebrafish.htm>.

Future stories from the Office of NIH History will include an overview of studies of acupuncture at the National Center for Complementary and Alternative Medicine and an exploration of toxicity studies of the chemical phenolphthalein by the National Institute of Environmental Health Sciences.

# The NIH Archive, 2003-2004

For the second year in a row, Brooke Fox has been working on a special project documenting the year's NIH-related events and research. This project, initiated by Director of Communications John Burklow, has the Office of NIH History collecting invitations, letters, programs, table tents, photographs, and newspaper clippings commemorating a range of events. This year, the archive consists of a presentation book for NIH Director Dr. Elias Zerhouni and a scanned copy for the office, accompanied by a box of corresponding documents. For example, when headlines are included in the presentation book, the archival box includes the complete text of each article.

This year, the book included items from several institute anniversaries (NCAAM, NIDA, and NICHD celebrated their 5th, 30th, and 40th respectively); articles about scientific achievements such as genome sequencing and obesity research; photographs from HHS and NIH trips to Africa and Wisconsin; headlines from newspaper articles on the sex research controversy and the conflict of interest controversy; a copy of the Maryland Work-Life Alliance award, won by the NIH this year; a letter from President Bush praising the NIH for its leadership in diversity issues; a crossword puzzle featuring "NIH" as an answer; photographs of Dr. Zerhouni's key meetings, and much, much more. Here are just a few sample pages, as well as a photograph of Brooke Fox presenting the book to Dr. Zerhouni on May 27. If you would like to see the whole book, please contact our office.



## Oral Histories

Oral history interviews with scientists and NIH staff are part of most research projects in our office. Buhm Soon Park has been conducting oral histories as part of his research on the history of the NIH intramural research program in the second half of the 20th century. Fellows Sara Shostak and Maya Ponte are also conducting oral histories as part of their research this year.

A noteworthy recent oral history was a special videotaped interview conducted by Nobel Laureate Marshall Nirenberg and Bernhard Witkop with another of NIH's Nobel Laureates, Julius Axelrod. (Pictured from the left are Drs. Witkop, Nirenberg, and Axelrod.)

The interviewers asked about Dr. Axelrod's upbringing, his early interest in science, his work in anti-malarial research before coming to NIH, and the experiments that led up to his discoveries about neurotransmitters in the 1960s. The interview will be a valuable addition to resources about Dr. Axelrod and that important period in NIH history.



## Archival Donations

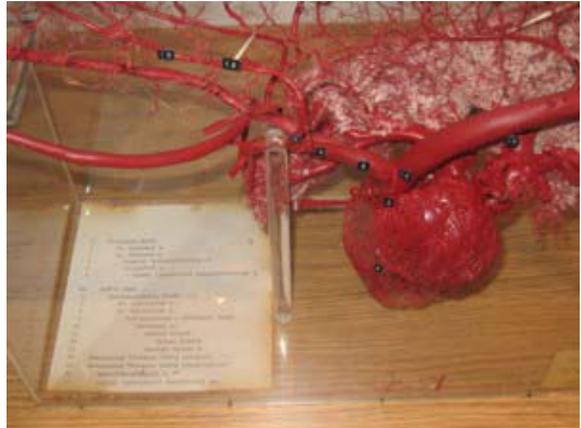
Ailene Ross, wife of the late NICHD researcher and Clinical Center administrator Griff Ross, donated several items including photographs and documents to the archives collections this winter. She found out about the Office of NIH History by reading an article in *USA Today* about our web exhibit "A Thin Blue Line" that featured her husband's work.

Adrienne Farrar, Chief of the Clinical Center's Social Work Department, donated several boxes of photographs and documents collected by former Clinical Center Social Worker Dale Boggs, who retired in 2003. Dorothy Sogn donated two notebooks, one book, and three reports she collected during her tenure as Medical Officer for the Division of Clinical Research. She retired from NIH in 2002.

We also received many photographs in the spring of 2004, including some taken by William Gay of the construction of Building 33.

## Museum Donations

Dr. John T. Watson (NHLBI) donated five colorful corrosion cast models of bovine and ovine circulatory systems to the Stetten Museum on the occasion of his retirement. The models (one example, right) were made in the late 1960s for Watson's research on artificial heart devices. Watson later spearheaded the NIH's Total Artificial Heart program and also worked on the development of ventricular assist devices. He actively supported bioengineering applications to medical problems. Watson is now a professor at the University of California, San Diego.



The delicate and beautiful models were made by Drs. Walter J. Mackey and Wesley D. Anderson, both of whom were professors at the University of Minnesota School of Veterinary Medicine. The corrosion cast method which they used to produce the models was:

1. Sacrifice the animal
2. Put a catheter in the vena cava
3. Drain the blood
4. Inject plastic dyed either red or blue (for arteries or veins) under pressure
5. Allow the plastic to harden
6. Place the specimen into a vat of acid to eat away the tissues and the bones

Sometimes the plastic looks as if it is clear because the particles Mackey and Anderson used to color the plastic were too big to go through the very small capillaries. The plastic would leave the colored particles behind and harden as clear plastic. Mackey and Anderson produced models of all sizes of animals, from guinea pigs to horses. These models are still used as teaching devices in veterinary schools. The technique also has been developed for applications in electron microscopy.

Mackey also held a patent for a skeletal vascular cast method. The process for this method was essentially the same as for corrosion casting except that the animals were not put in acid. Instead they were skinned, dried, and coated in fiberglass. Beetles crawled through special holes in the fiberglass and ate the soft tissues, leaving only the bones which then had to be wired back together.

After several years, Mackey left the University of Minnesota to become the Assistant State Veterinarian of Minnesota. Anderson went to Saskatoon as a professor of veterinary anatomy and then went on to Ohio State. His last book was published in 1994 and included cast models to explain canine anatomy.

## Staff News

This winter and spring have been busy seasons for the staff of the Office of NIH History. From speaking at conferences to scouring the NIH campus for documents and artifacts to collect, staff members have been spreading the word about the history of NIH research and the Museum's collecting policies.



Office of NIH History staff member Sarah Leavitt (far right) looks on as Steve Puglia of the National Archives and Records Administration speaks about technical issues at the Society for History in the Federal Government meeting in April. Looking on are Patricia Tuohy and Stephen Greenberg of the National Library of Medicine. (Photograph by Charles Downs)

Staff members have participated in many conferences including those of the Society for History in the Federal Government; the Small Museums Association; and the American Association for the History of Medicine. Presentation topics ranged from Victoria Harden's "how to get a job in history" seminar to Sarah Leavitt's look back at the history of the pregnancy test kit (see: [www.history.nih.gov/exhibits/thinblueline](http://www.history.nih.gov/exhibits/thinblueline)).

At the Museums & the Web conference in Arlington, Virginia, Michele Lyons and Sarah Leavitt entered the Office of NIH History's web site in a "usability lab." Ideas gleaned from that session will help them plan for a reorganization of the site this fall.

Brooke Fox represented the Office of NIH History at the NIH's "Share the Health" festival this spring, talking to visitors about the role historical knowledge can play in educating the public about health issues.

## News of Former Stetten Fellows

**Caroline J. Acker** (1993-1994), associate professor in the Department of History at Carnegie Mellon University, has co-edited with Sarah W. Tracy a book titled *Altering American Consciousness: The History of Alcohol and Drug Use in the United States, 1800-2000* (University of Massachusetts Press, 2003). She also wrote one of the chapters in the book: "Portrait of an Addicted Family: Dynamics of Opiate Addiction in the Early Twentieth Century." In the summer of 2003, she was a Fellow at the Lemelson Center for the Study of Invention and Innovation at the Smithsonian Institution's National Museum of American History.

**Mark Parascandola** (1996-1997) is now an Epidemiologist with the Tobacco Research Branch at the National Cancer Institute. In addition to taking on new responsibilities in the extramural program related to tobacco control grants, he is continuing his research on tobacco control policy and public health. On an interesting historical note, the official start date of his new job was 11 January 2004, exactly forty years after the release of the first Surgeon General's Report on Smoking and Health, 11 January 1964.

**Marcia Meldrum** (1998-1999), lecturer and researcher at UCLA, is the editor of a recently published volume, *Opioids and Pain Relief: A Historical Perspective* (IASP Press, 2003) and has also published an article on "A Capsule History of Pain management," in a special issue of *JAMA* (12 November 2003) on the theme of pain. She has also been part of an Economic and Social Research Council collaborative project with the University of Sheffield in England on the history of cancer pain management.

**J. Rosser Matthews** (2001-2002) is visiting assistant professor of science and technology in society at Virginia Tech. He has written two articles on "Medical Evidence (Cause and Effect)" and "Insurance" for an encyclopedia on tobacco in Scribner's Turning Points in History Series to be published in 2004. He hopes to publish a revised and extended version of his Stetten Lecture, now titled "No-Fault Compensation Programs for Neurologically-Impaired Infants and the Epistemological Politics of Causation," in the *Journal of Health Politics, Policy, and Law*.

**Jessie Saul** (2002-2003) successfully defended her doctoral dissertation in January 2004 and her degree in Science and Technology Studies was conferred by Cornell University in May 2004. In July 2003, she accepted a position as the research program manager for the Minnesota Partnership for Action Against Tobacco, a non-profit organization created with a percentage of the settlement between the state of Minnesota and the tobacco industry. She is the co-editor of a special issue of *Science, Technology, & Human Values*, which will be published this summer, titled "Reconstructing Order Through Rhetorics of Risk."

## New Stetten Fellows Announced

The Office of NIH History is pleased to announce the appointment of three DeWitt Stetten, Jr., Memorial Fellows in the History of Biomedical Sciences and Technology for the 2003-2004 academic year. The new fellows will be:

**Maya Ponte**, an M.D.-Ph.D. candidate in medicine and medical anthropology at the University of California, San Francisco, will work with the National Institute of Neurological Diseases and Stroke on “Transmissible Spongiform Encephalopathy in the U.S. and U.K.”

**Leo Slater**, a postdoctoral fellow at the Max Planck Institut fur Wissenschaftsgeschichte in Berlin, will work with the National Institute of Allergy and Infectious Diseases on the history of “Malaria Research at NIAID.”

**Claudia Wassman**, a physician who is completing a Ph.D. in the history of science and medicine at the University of Chicago, will work with the National Institute of Biomedical Imaging and Bioengineering on the history of how imaging technology has shaped our understanding of emotion as a part of a larger project on “The Science of Emotion.”

For more information on the Stetten Fellowship program please see the Office of NIH History website at: [history.nih.gov/grants/memorial-fellowship/](http://history.nih.gov/grants/memorial-fellowship/)

You'll find:  
Application materials  
Testimonials from former fellows

...and more