SECOND ANNUAL SOCIETY LECTURE
TO BE HELD OCTOBER 30 AT THE NASSAU CLUB

The fall meeting of the MHSNJ will be held Tuesday, October 30 at The Nassau Club in Princeton. Alan Kraut, Ph.D., will present the Second Annual Society Lecture. Dr. Kraut's topic is "Deadly Deficiencies: Dr. Joseph Goldberger's War on Disease and Deprivation." Dr. Goldberger of the U.S. Public Health Service was the dominant figure in the fight against pellagra in the American south. His life and work reflect many of the themes of American medicine and health during the early decades of the 20th century. Dr. Kraut is the author of Silent Travelers: Germs, Genes and the "Immigrant Menace". Frederick C. Skvara, MD will display medical philately related to the program. Registration begins at 3:30 p.m.; the program begins at 4 p.m.

Business Meeting -- Allen B. Weisse, MD, President

New Jersey Medical School: The Early Years -- 1954-1971
Thomas R. Walters, MD

The Earliest Photomicrograph of a Human Pathogen?
William C. Campbell, Ph.D.

The Historical Consequences of a Misdiagnosis: The Tragedy of Friedrich III, Emperor of Germany
Robert L. Thompson, Ed.D

mEDISON: The Great Inventor's Health & His Impact on Ours -- 20th Century Battle Against Heart Disease
George Hill, MD
Cocktails and Dinner (6-7:30 p.m.)

Second Annual Society Lecture:

Deadly Deficiencies: Dr. Joseph Goldberger's War on Disease and Deprivation
Professor Alan Kraut, Ph.D., American University

Members, students, and friends are invited to attend the dinner meeting. Cost is $40/members, $50/guests; advance registration is required. For information, contact Cherie Ciciarelli, MHSNJ, 2 Princess Road, Lawrenceville, NJ 08648, (609) 896-1901 x12, ciciarelli@acadmed.org.

MEMBERS IN THE NEWS

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Francis P. Chinard, MD presented a "History of Ethical Research" at the May 11 conference Current Human Research Issues and Solutions sponsored by DHSS, OHRP, Veterans Administration, and UMDNJ at the New Jersey Medical School. On May 22, he presented "Can Our Medical Education, Designed 200 Years Ago by Thomas Jefferson, Continue to Serve Us?" to the New Jersey Chapter, World Future Society at Liberty Park Science Center.

Robert M. Klein, MD is currently serving as Vice-Chair of the History & Archives Committee, American Academy of Allergy, Asthma & Immunology.

Michael Nevins, MD will present an illustrated lecture February 3 entitled "300 Years of Memorable Bergen County Physicians" at The Hermitage, 335 North Franklin Turnpike, Ho-Ho-Kus (201-445-8311). Dr. Nevins is a featured speaker at a reception to be held in conjunction with the traveling exhibit, "A State of Health: New Jersey's Medical Heritage." The exhibit will run January 16-April 14. Visit their website at www.thehermitage.org for directions.

Karen Reeds, Ph.D. will present "Getting Sick and Getting Well in the 19th Century New Jersey: From Elijah Rosegrant, Country Doctor, to Scientific Medicine" on April 11 at The Hermitage. Dr. Reeds' lecture is part of The Hermitage History Lecture Series. Fee $5 for adults, $4 for members and $2 for students.

Richard P. Wedeen, MD is chairing the Military Medical History Committee of the VA New Jersey Health Care System Veterans Museum with Francis P.
Chinard, MD, Vincent Cirillo, Ph.D., Karen Reeds, Ph.D., Helen Sheehan, Ph.D., and Kenneth Swan, MD serving as consultants. The Museum is located in East Orange.

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ANNOUNCEMENTS

Save This Date!
The spring meeting of MHSNJ will be held on May 15, 2002.

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David L. Cowen Lecture in the History of Pharmacy

The Rutgers University College of Pharmacy, The American Institute of the History of Pharmacy, and the Alpha Zeta Chapter of Rho Chi announce The Thirteenth Annual David L. Cowen Lecture in the History of Pharmacy. The title of this year's lecture is 'That Amiable Science': A Brief History of American Medical Botany" and will be presented by Michael A. Flannery, recipient of the American Institute for the History of Pharmacy's Edward Kremers Award for his biography of John Uri Lloyd. The lecture will be held in the William Levine Hall Pharmacy Building on the Rutgers Busch Campus at 4:30 p.m. on October 23. It is open to the public and especially those particularly interested in pharmacy, history, or botany. A reception and dinner will follow the lecture. For more information or dinner reservations, contact Mary French (732) 445-2675 ext. 605.

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New Jersey Veterans Museum

MHSNJ members are taking a very active role in the New Jersey Veterans Museum, a new museum-in-the-making in the Veterans Administration Medical Center in East Orange. Richard P. Wedeen, MD, Prof. Helen Sheehan, Dr. Vincent Cirillo, and Dr. Karen Reeds have been working closely with the VA's Public Relations officer, Mary Therese Hankinson--a new MHSNJ member--and veterans groups on planning the museum. They have already mounted four exhibits on medical contributions from the American military and Veterans Administration--focussing on Dr. Oscar Auerbach's work on smoking and lung cancer, the use of X-rays in the Spanish-American War, aviation medicine in World War I, and Vietnam medevac work.

For 2001-2002 additional medical history exhibits are planned on antibiotics in World War II, on kidney dialysis in Korea, and on the VA's Civil War forerunner, the New Jersey Home for Disabled Soldiers. Other MHSNJ members who have given invaluable advice, assisted with research, spoken at museum programs, and donated historical artifacts include: Francis Chinard, MD, Kenneth Swan,
MD, William Sharp, MD, and Lois Densky-Wolff. For more information: Mary Therese Hankinson, (973) 676-1000 x 12672, marv.hankinson@med.va.gov or Karen Reeds, (908)-464-0714, reeds@openix.com.

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MHSNJ Videotapes Available for Viewing

The MHSNJ began videotaping its meetings in May 1992. Christine Haycock, MD is the official recorder. To borrow videotapes for at home viewing, contact Cherie Ciciarelli at the AMNJ, (609) 896-1901, x12. Return postage is the responsibility of the borrower. Videotapes available are:

May 1992 - Medical Book Collecting
- Bibliophilia or Bibliomania: A Case Study, Francis P. Chinard, MD
- A Quiet Lover of Books: Dr. Samuel Lewis of Philadelphia and His Library, Thomas A. Horrocks, MA, MS, MLA
- Enough Responsibilities for All: Collectors, Book Dealers, & Librarians, Estelle Brodman, Ph.D.
- An Historic Find: Charcot's Gift to Lanceriaux, Richard P. Wedeen, MD
- Medical Book Collecting and Scholarship: Past, Present, and Future, W. Bruce Fye, MD, Saffron Lecturer

October 1992
- PCP and Me: The Small Joys & Great Satisfactions of Medical Sleuthing, Allen B. Weisse, MD
- The Nobel Prize and Surgery, Kenneth Swan, MD
- Their Bones Just Rotted, William D. Sharpe, MD
- In Dr. Harrison S. Martland's Footsteps: The Radium Dial Episode, Ross Mullner, Ph.D., MPH

May 1993
- Paradigm in Anatomy, Richard J. Wein, MD
- 'A Statement of Causes': The Court Martial of William A. Hammond, MD, Surgeon General, Murray A. Rosenberg, MD
- New Jersey Cares for Civil War Veterans: A Model for the Nation, Helen E. Sheehan, Ph.D., and Richard P. Wedeen, MD
- Spreading the Germ Theory, Nancy Tomes, Ph.D., Saffron Lecturer

October 1993
- Thomas Jefferson and Physicians: A 250th Anniversary Commentary, Francis P. Chinard, MD
- From Glasgow to Newark: Neurological Surgery in New Jersey, George L. Becker, Jr., MD
- The Medical History of Franklin D. Roosevelt, Hugh E. Evans, MD
- Aesthetics and the Making of Darwin’s Theory, David Kohn, Ph.D.

May 1994
- 'Blutwuschung' -- Building the Artificial Kidney, Sandra Moss, MD
- A History of the Treatment of the Rupture: The Silent Plague, Benjamin F. Rush, Jr., MD
- How Shall We Determine Whether a Treatment Works? -- A Brief History of Clinical Trials, Bart K. Holland, Ph.D.
- Nineteenth Century Addiction Cures, William H. Helfand, Saffron Lecturer
October 1994
Why Did New Jersey Become a Center for Pharmaceutical Innovation? The Case of the Merck Research Laboratories, Jeffrey L. Sturchio, Ph.D.
Tuberculosis: Why the 'White Plague'?, Allen B. Weisse, MD
Latter Day Encounters with Radium: Changing Concepts of the Benefits and Evils of Radioactivity, M. Donald Blaufax, MD, Ph.D.

May 1995 - Roentgen 100th Anniversary
Radiology: Past, Present and Future, Murray A. Rosenberg, MD, FACP
History of Radiological Societies in the U.S., Julie Kelter Timmins, MD
'Start Up at the Top and Work Down': Thomas A. Edison and the Fluoroscope, George Tselos, Ph.D.
Early one morning, 50 years ago, nearly the entire staff of the X-ray department of Budapest's Jewish Hospital was led away, for no apparent reason, to the death camp at Auschwitz. No one survived. Judith K. Amorosa, MD
As Others See Us: The Artist Looks at the Doctor, Sherwin B. Nuland, MD, FACS, Saffron Lecturer

May 1995
Non-Surgical Uses of Ether and Chloroform in Mid-19th Century America, Donald Kent, MD, Ph.D.
Breeches of Impropriety: Transvestite Woman Physicians, Gretchen Worden, AA, BA
The Interface of Jewish, Greek and Arabic Medicine as Exemplified by Three Physicians: Asaph, Maimonides and Amatus Lusitanus, Michael Nevins, MD
American Surgery and the Civil War: A Time of Revolution, Ira Rutkow, MD, MPH

May 1996
The Worm and the Tumor: Did the Nobel Committee Make a Mistake?, William C. Campbell, Ph.D.
Medicine, Hippocrates, and the Island of Kos: Some New Ideas for an Old Place, Christos B. Moschos, MD, F.A.C.C.
Bioethics Committees: Where They Came From, Where Are They Going, Joseph. C. D’Oronzio, Ph.D., MPH
American Psychiatry: Past, Present, and Future, Gerald N. Grob, Ph.D., Saffron Lecturer

October 1996
Bleeding as a Treatment and Treatment of Bleeding, Benjamin F. Rush, Jr., MD
Taking Charge: The Unspoken History of Nursing, 1873-1920, Sandra Lewenson, EdD, RN
History of Caesarean Childbirth, Marco A. Pelosi, MD
A Medical Visit to Ellis Island, Vincent J. Cirillo, MS
Moving Pictures: Animal Experimentation and the Silver Screen in the 1930s and '40, Susan Ledger, Ph.D.

May 1997
Misreading the Bitch: Consequences for Medicine and Society at Large, Prof. Dr. Wolfgang Jochle
The Death of General Albert Sidney Johnston, Kenneth G. Swan and Michael H. Tarlowe, BA
On the Centenary of Sir Ronald Ross' Discovery of the Role of the Mosquito in the Life Cycle of the Malaria Parasite, Frank F. Katz, Ph.D.
Annals of Military Medicine: Galahad in Myitkyina -- Merrill's Marauders and Their Medical Problems, Murray A. Rosenberg, MD
Naval Medicine in the Age of Sail, J. Worth Estes, MD, Saffron Lecturer
October 1997
A New Jersey Doctor and the King of Siam, Sandra W. Moss, MD
Beth Hatefutsot: History of Jews and Medicine -- Images and Commentary, Aaron J. Feingold, MD, F.A.C.C.
New Jersey Public Health: A Social and Historical Perspective, Sam Alewitz, Ph.D.
Experiment Perilous: Forty-Five Years as a Participant Observer of Patient-Oriented Research, Renee S. Fox, Ph.D.

May 1998
Getting Certified -- Before You've Done and Died, Allen B. Weisse, MD, F.A.C.C.
Patriotic Odor: Sanitation and Typhoid Fever in the National Encampments During the Spanish-American War, Vincent J. Cirillo, MS, Ph.D. candidate
The Amazing Dr. Dinslak, Stephen Maron, MD
Anchor and Caduceus: the Creation of the United States Public Health Service, John Parascondola, Ph.D., Saffron Lecturer

October 1998
Books Have Their Stories, David L. Cowen, Ph.D.
Scalpel and Tongs: Medical Philately, Frederick C. Skvara, MD
Three Jewish Medical Menschen: Paul Ehrlich, Emanuel Libman, and Janusz Korczak, Michael Nevins, MD
Medical and Collegiate: Student Life in the Golden Age of The Woman's Medical College of Pennsylvania, Steven J. Peitzman, MD

May 1999
No regular meeting was held. The MHSNJ instead sponsored two luncheon sessions at the annual meeting of the American Association for the History of Medicine, which met in New Brunswick. Medicine in New Jersey -- An Historical View on Friday, May 7, featured Donald F. Kent, MD, Ph.D., and Allen B. Weisse, MD. Michael Bliss, Ph.D., presented the Twentieth Annual Saffron Lecture on Saturday, May 8, on What's a Doctor? How William Osler Practiced Medicine. No videotape was made of these lectures.

October 1999
The Murderer and the Parasite: A Reminiscence of Nathan Leopold, William Campbell, Ph.D.
Using Cold Water for Health: A Century of Shifting Paradigms in Denville, NJ, Wolfgang Jochle, DVM
From Amulets to Zodiac Man: History Resources at UMDNJ, Lois Densky-Wolff, MA
Dr. Franklin's Thoughts on Food, Drink, and Gout, Frances P. Chinard, MD
Thinkin' of Maybe Havin' a Baby...When I'm 64: Contemporary Reproductive Technology in Historical Perspective, Margaret Marsh, Ph.D. and Wanda Ronner, MD

May 2000 - Civil War Medicine
James Bolton, Confederate Surgeon: External Fixation in Longbone Fractures, Joshua Beck, MD and Kenneth Swan, MD
The Identification and Autopsy of John Wilkes Booth: Myth and Reality, Jan K. Herman, Ph.D.
Songs of the Civil War, Roberta Wedeen, BA, Folksinger, Songwriter
Dr. Samuel Mudd: Innocent or Guilty?, Marc Mappen, Ph.D.
Middleton Goldsmith and Antisepsis, 1863, William D. Sharpe, MD, Saffron Lecturer

October 2000
The Red Cross and the Rising Sun: A Photographic Essay, Raffaele Roncalli, DVM, MS
Death by Dixie Diet: Did Pellagra Kill Many Civil War POWs and Who's to Blame? Barrett P. Brenton, Ph.D.
The 25th Anniversary of the New Jersey Public Health Association: Building the Temple of Hygeia, Sam Alewitz, Ph.D., NJ Public Health Association
Princes, Politicians, and Policy Makers: A History of Support for Traditional Medicine in India, Helen Sheehan, Ph.D.
Photographing the Unseen: The Spanish-American War and Military Radiology, Vincent Cirillo, MS, Ph.D.
What's New at UMDNJ Special Collections

Samuel Sterns' *The American Herbal, or Materia Medica* (1801, G-M 838.2) was acquired with funding from the Saffron Book Endowment. It is the first herbal written and published in the United States and includes remedies obtained from Native Americans.

A set of "Levi's Metallic Splits" manufactured by the Ellwood Lee Co. of Philadelphia together with wood, leather and cloth braces (circa 1890) were a recent donation. The orthopedic set in its original wooden box belonged to Austin Howard Patterson, MD (1846-1918) of Freehold, who used them in his practice. Another outstanding medical artifact was purchased with funds from the Academy of Medicine of New Jersey. *Johnson & Johnson's Industrial First Aid Cabinet Containing Articles for Accident Emergency Use*, Johnson & Johnson, New Brunswick, N.J., Chicago, Ill. (circa 1936) differs from one previously acquired; the medical contents are nearly complete.

To consult these and other research materials, please contact Lois Densky-Wolff, (973) 972-7830 or densky@umdnj.edu.

**Specialization** and **Specialism** in Medicine

by

Daniel P. Greenfield, MD, MPH, MS

"Probably since at least the 18th Century, the mass of scientific detail in medicine has been beyond the grasp of any one mind."1

The study of history conveys a good understanding of the evolution of specialization in medicine, whereas the study of science does not. It is possible to develop a taxonomy based on science of some specialties in medicine (Table), but this schema does not do justice to the historical, economic, regulatory, and other
such non-scientific trends and influences which have generated the myriad of specialties, subspecialties, and infraspecialties which abound in contemporary medicine.

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<th>Table. Basis For a Medical Specialty</th>
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<td><strong>BASIS</strong></td>
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<td>Organ System</td>
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<td>Pathogen (Agent)</td>
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<td>Technique</td>
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<td>Signs and Symptoms</td>
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<td>Others</td>
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In Europe and England in the 18th and 19th Centuries, scientific research based medicine began. At first, the art of medicine predominated its science, and "... during the first half of the 19th Century, most physicians were generalists..."2 Medical education had long been established by that time, with the earliest major differentiation among trained professional medical practitioners having been between physicians and non-physicians (such as apothecaries, surgeons, homeopaths, and others).3 Subsequent union between physicians and surgeons occurred in France4 and England5 in the late 1800's.

In the United States, scientific medicine began to make great strides and to develop the potential for further specialization in the early 20th Century. The combination of public health initiatives; establishment of Federal research institutes and funding of medical research and education; the "Flexner Report" standardizing and improving the structure and quality of American medical education (for physicians); private research agencies such as the (then) Rockefeller Institute for Medical Research; and other such activities accelerated the growth and influence of American medicine, and began the proliferation of specialties and specialization in the U.S.

According to Beeson, the "partitioning" of internal medicine into subspecialties began in the 1930's, "... about a half century later than in surgery."6 Since that time, a plethora of specialties and subspecialties, has evolved, in which overlap exists among approaches (e.g. behavioral neurology and psychiatry), techniques
(e.g. cardiovascular interventional techniques by cardiologists, cardiac surgeons, radiologists, and others), and symptomatology treated (e.g. pain management, by neurologists and anesthesiologists, among others). At last count a total of 109 specialties and subspecialties has evolved, administered and monitored through the American Board of Medical Specialties.7

The future of medicine will undoubtedly continue the exponential scientific growth of the past two centuries. Genomic medicine, for example, will identify, prevent, and even cure genetically-based illnesses (which most are, or will turn out to be); stem-cell research will permit the replacement of worn-out, defective, or disabled body parts; nanomedicine will deploy surgical reparative interventions at the cellular level and below; diagnostic techniques such as virtual scanning will permit the earliest possible noninvasive identification of developing disease; and pharmacotherapeutics will continue to develop effective medicines and interventions to treat illnesses at all levels of pathophysiology. The list is endless.

How the different specialties, and subspecialties, and infraspecialties will lay claim to these new developments is difficult to predict. Overlap among approaches, techniques, and tasks will probably continue -- in the present absence of central coordination and regulation of these areas -- driven by ongoing scientific and research activities, professional "turf" issues, economic interests, and the many other forces, which have shaped and developed medical specialties and specialism to the present. With the potential for ever-finer splitting and fractionalization, however, the evolving medical establishment must remain aware of the caveat of medical historians, Singer and Underwood, some forty years ago:

"But in tracing the long course of rational medicine to its debouchment in our own time, ...we have found increasing difficulty in discussing rational medicine as a single channel of thought. It spreads into a delta which tends to diverge ever wider, ...This diffusion, brought about by increasing specialization, cannot go on indefinitely without defeating the objects for which specialization arose."1

REFERENCES


MEMBERS' RESEARCH IN PROGRESS

Name                  Subject

Francis P. Chinard, MD. Medical utopias from fiction to fact; development of current medical curriculum -- from Jefferson to virtuality.

Vincent Cirillo, Ph.D. The Spanish-American War's impact on military medicine.

Daniel P. Greenfield, MD Specialization in medicine.

Wolfgang Jöchle, DVM Contributions to the history of medical illustration.

Robert M. Klein, MD History of allergy & immunology at Columbia-Presbyterian Hospital.

Sandra Moss, MD Edgar Holden, MD, Newark physician, who invented an experimental heart-lung machine.

Michael Nevins, MD Bergen County physicians; letters of Dr. Elijah Rosencrantz to his medical student son, 1825-27.
William M. Wardell, MD, Ph.D.

History of the scientific evidentiary standards for "proof of causation" in biomedicine that underlie our present regulatory standards for proof of efficacy of drugs and other medical/surgical interventions. (And the implications these have for today's dilemmas in the evolving standards for proof of efficacy.) I would like to make contact with an expert in the relevant History or Philosophy of Science who might have complementary interests and perhaps co-author a paper on the topic. Eventually, the paper would be cited in a chapter for an update of my book, Regulation and Drug Development. Contact: (609) 279-9183 WardellAssocs@cs.com

Richard P. Wedeen, MD

Topics for the VA Museum.

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The Newsletter of the Medical History Society of New Jersey is published in May and October by the Society, and is a benefit of membership. Deadline for the next newsletter is April 1, 2002. Short articles (250 words) on medical history topics are especially welcome. Please send correspondence and submissions to:

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Since 1957, the United States Postal Service has periodically issued stamps promoting awareness of various health care issues. Although the list of subjects that have been commemorated is impressive, most noticeable by its absence is any stamp opposing the use of tobacco, a leading cause of preventable death in the United States.

The latest stamp in this "health care awareness" series is a 34 cent commemorative released nationwide on March 16, 2001 to promote diabetes awareness. The stamp was illustrated by James Steinberg, a commercial artist from Amherst, Massachusetts. The colorful, graphic design shows a tube of blood, a microscope and the silhouette of a head showing an eye, which represents knowledge and awareness, focused on the tube of blood. The self-adhesive stamp was printed in four-color offset on prephosphored paper and released in panes of 20 stamps.

The official first day of issue ceremony was held in Boston at the Joslin Diabetes Center. The center was named after Elliott P. Joslin, one of the advocates of a restrictive diet for diabetics which prolonged the lives of many of these patients before the advent of insulin. At the ceremony, the national anthem was sung by Nicole Johnson, Miss America 1999, who is a Type I diabetic and wears a continuous insulin infusion pump. Also present at the ceremony were Senators Edward Kennedy and John Kerry, Congressmen George Nethercutt and Michael Capuano and the stamp illustrator, James Steinberg.

A number of special cancellations relating to this stamp were available. This FDC from Newark, NJ was produced by the American Diabetes Association. Note the four parameters of diabetic control in the circular cancellation.

1. These stamps will be shown at the Fall 2001 meeting of the Medical History Society of New Jersey.