

CARLA C. KEIRNS, M.D., Ph.D.
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Present Position

07/2006 – present *Clinical Instructor & Robert Wood Johnson Clinical Scholar*, Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan

Residency

06/2003 – 06/2006 *Resident in Internal Medicine*, Department of Internal Medicine, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

Education

07/2006 – *Master of Science Program in Health & Health Care Research*
University of Michigan School of Medicine, Ann Arbor, Michigan
Coursework in univariate and multivariate statistical analysis, multilevel and longitudinal modeling, qualitative and mixed methods research, survey methods, health policy, and community based participatory research.

06/2007 – 07/2007 *Summer Institute in Survey Research Techniques, Institute for Social Research*
University of Michigan, Ann Arbor, Michigan
Courses in survey design, interviewing, focus groups, and mixed methods

08/1999 – 05/2003 *Doctor of Medicine May 19, 2003*
University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania

09/1994 – 12/2004 *Doctor of Philosophy December 20, 2004; Master of Arts May 20, 1996*
Graduate Group in History & Sociology of Science, Graduate School of Arts & Sciences, University of Pennsylvania, Philadelphia, Pennsylvania

Dissertation: Short of Breath: A Social and Intellectual History of Asthma in Twentieth-Century America
focuses on the changing biological definitions and social meanings of asthma, exploring the nature of chronic disease, psychosomatic explanations, immunologic models, environmental conditions, socioeconomic factors, epidemiologic trends, as well as the varied prescriptions for its cure. (Advisor, Charles E. Rosenberg, Additional Readers: Rosemary A. Stevens, Robert A. Aronowitz, Charles L. Bosk)

Doctoral Qualifying exams completed May 1997

Charles E. Rosenberg, History of Medicine
Mark B. Adams, History of Biology
Charles L. Bosk, Sociology of Medicine
Arthur L. Caplan, Medical Ethics and Philosophy of Medicine

08/1990 – 08/1994 *Bachelor of Arts magna cum laude and with distinction in all subjects 1994*
Cornell University College of Arts & Sciences, Ithaca, New York
Major: Biological Sciences with Concentration in Genetics and Development
Interdisciplinary Concentration: Science & Technology Studies

02/1993 – 07/1993 University of Sydney, Exchange Student, Sydney, New South Wales, Australia

Employment History

September 2002 – December 2002: *Co-Instructor, HSS 248; Medical Care & Medical Research in the 20th Century, History & Sociology of Science, University of Pennsylvania, Philadelphia, Pennsylvania*

January 1998 – August 1999: *Co-Curator, Breath of Life Exhibit, National Library of Medicine, Bethesda, Maryland*

Working with Drs. Robert Aronowitz, Sheldon G. Cohen and Elizabeth Fee to plan an exhibit on the history of asthma for the Library's rotunda, including overall concepts, selection of books and objects from multiple museums, libraries, and archives, and writing of exhibition text and associated materials

February 1997 – July 1998: *Research Assistant in History of Medicine, Robert Wood Johnson School of Medicine & Cooper Hospital, Camden, New Jersey*

For Dr. Robert Aronowitz, searching literature, maintaining databases and files, copy-editing and indexing

June 1996 – August 1996: *Senior Research Assistant, Center for Bioethics, University of Pennsylvania, Philadelphia, Pennsylvania*

For Drs. Pamela Sankar, Mildred Cho and Glenn McGee on studies of ethics and genetics

Fall 1995 – Spring 1997: *Teaching Assistant, History & Sociology of Science, University of Pennsylvania, Philadelphia, Pennsylvania*

HSS: 001 Introduction to the History of Science; HSS 110 Science & Literature

June 1995 – March 1997: *Research Associate, GRASP, Philadelphia, PA*

Worked with building scientists, architects, medical researchers and Philadelphia Department of Health on environmental health issues

June 1994 – August 1994: *Summer Intramural Research Award, Laboratory of Immunoregulation, National Institute of Allergy & Infectious Diseases, National Institutes of Health, Bethesda, Maryland*

Worked on signal transduction of HIV-1 running western blots to characterize inhibitor and promoter sequences and proteins

Summers 1991, 1992, 1993: *Library Assistant, Cornell University Law Library, Ithaca, New York*

June 1989 – August 1989: *Summer Research Program, Department of Epidemiology & Preventive Medicine, Roswell Park Memorial Institute, Buffalo, New York*

Assisted Dr. John E. Vena with a survey of sport fishermen about exposures to toxins during fishing and from eating fish from polluted waters

Bibliography

Monograph

Gasping for Breath: A Short History of Asthma, book on the history and sociology of asthma in the United States from 1850s to the 21st century, under contract after peer review, Johns Hopkins University Press

Museum Exhibition

Co-Curator with Dr. Robert Aronowitz, *Breath of Life: Asthma in Historical Perspective*, National Library of Medicine, Bethesda, Maryland, Open in Bethesda March 1999 to March 2001, published by NHLBI as a DVD, Online at: <http://www.nlm.nih.gov/hmd/breath/breathhome.html>

Peer-Reviewed Publications

Keirns, Carla C. & Charles L. Bosk, "The Unintended Consequences of Training Residents in Dysfunctional Outpatient Settings," *Academic Medicine*, May 2008 (forthcoming)

Keirns, Carla C. "Better than Nature: The Changing Treatment of Asthma and Hay Fever in the United States, 1910-1945" *Studies in History & Philosophy of Biological & Biomedical Sciences*, September 2003; 34C(3): 511-531.

Keirns, Carla C. "Seeing Patterns: Models, Visual Evidence and Pictorial Communication in the Work of Barbara McClintock," *Journal of the History of Biology*, 1999; 32: 163-196.

Chapters in Edited Volumes

Dorn, Michael and Carla C. Keirns, "Disability, Health, Nation," in *Handbook of Social Geography*, Smith, S., S. Marston, R. Pain and J. P. Jones III, eds. London: Sage Books (forthcoming).

"Asthma, Allergy & the Birth of Immunotherapy," *Crafting Immunity*, edited by Kenton Kroker, Pauline Mazumdar, and Jennifer Keelan, Aldershot, UK: Ashgate, 77-103 (forthcoming)

"Susan and the Simmonds-Sheehan Syndrome," in *Clio in the Clinic: History in Medical Practice*, edited by Jacalyn Duffin, Oxford & New York: Oxford University Press; Toronto and London: University of Toronto Press, 2005, pp. 116-127.

Essays

Keirns, Carla C. "Doctors and Divination," *Academic Medicine* (forthcoming)

Keirns, Carla C. "What if it were your father?" *Canadian Journal of Emergency Medicine*, May 2007, 9(3): 180-181.

Encyclopedia Entries

"Asthma and Allergy," and "Ragweed," in *The Encyclopedia of American Environmental History* (forthcoming)

"Asthma," in *The Encyclopedia of Disability*, edited by Gary L. Albrecht, Thousand Oaks, CA: Sage, 2005.

"Africa: Health and Healing [15-17]," "Evolutionary Synthesis [239-41]," and "Health, Social Class and Mortality in the United States [326-7]," in *Readers' Guide to the History of Science*, Edited by Arne Hessenbruch, Chicago: Fitzroy Dearborn Publishers, 2000.

Book Reviews

Review of *Allergy* by Mark Jackson, *Metascience*, July 2007; 16(2): 307-310.

Review of *Lovers and Livers* by Jacqueline Duffin, *Journal of the History of Medicine & Allied Sciences*, April 2006; 61(2): 230-32

Review of *A Change in the Weather: Climate and Culture in Australia*, edited by Tim Sherratt, Tom Griffiths, and Libby Robin, *Environmental History*, October 2005, 10(4): 803-4.

Review of *Machines in Our Hearts*, by Kirk Jeffrey, *Journal of the History of Medicine & Allied Sciences*, October 2003; 58(4): 487-488.

“Demythologizing McClintock,” Review of *The Tangled Field: Barbara McClintock's Search for the Patterns of Genetic Control*, by Nathaniel C. Comfort, *American Scientist*, January-February 2002; 90: 85.

Review of *The Promise and Peril of Environmental Justice*, by Christopher H. Forman for H-Environment (environmental history), June 1999, <http://www2.h-net.msu.edu/reviews/showrev.cgi?path=18724930073905>

Review of *The Science of Desire* by Dean Hamer for the *Journal of General Internal Medicine*, July 1996, 11(7): 444-45.

Under Review

Keirns, Carla C. “Asthma: The Making of an Epidemic, 1900-2007.”

Keirns, Carla C. “Urban Asthma a century ago.”

Keirns, Carla C. “Parentectomy” and Psychosomatic Medicine: Mind and Body in the Treatment of Asthma, 1930-1980.”

Keirns, Carla C. & Esther A. Clinton, “ ‘The Surgery Killed Him’: Lung Cancer and the Origins of Surgical Cure, 1900-1950.”

Delisser, Horace, Carla C. Keirns & Mitchell Margolis, “Surgery and Tumor Growth.”

Keirns, Carla C. “Oaths, Rituals and the Making of the Modern Physician.”

Keirns, Carla C. “When the patient requests less dialysis.”

Keirns, Carla C. “Donating His Body.”

Keirns, Carla C. “Who will treat them? The promise and reality of modern medical miracles.”

Keirns, Carla C. & Brendan Carr, “From the Emergency Department to Vital Statistics.”

Research Presentations

1. Lung Cancer and Tuberculosis 1910-1930: Differential Diagnosis, Changing Technologies, and Hidden Epidemiologies, American Association for the History of Medicine, Rochester, NY, April 11, 2008

2. The Role of Discordant and Concordant Comorbidities in Hypertension Self-management, Society for General Internal Medicine, Pittsburgh, April 10, 2008
3. Asthma Activism: Consumer Advice or Environmental Justice, Society for Applied Anthropology/Society for Medical Anthropology Meeting, Memphis, TN, March 28, 2008
4. Sick Stresses and Stigmatized, Sick, Stressed and Stigmatized: Asthma and Changing Models of Mind and Body in the Past Century, Michigan State University, January 23, 2008
5. Asthma: The Rise and Fall of an Epidemic, University of Virginia, Charlottesville, VA, January 18, 2008
6. Asthma: The Rise and Fall of an Epidemic, The University of Texas Medical Branch, Galveston, TX, January 14, 2008
7. Asthma in Context: Individuals, Families and Communities, Baylor College of Medicine, Houston, TX, December 4, 2007
8. MRSA in the Community: Drug Resistance since 1939, American Society for Bioethics & Humanities, Washington, DC, October 21, 2007
9. "Asthma: A Chronic Disease in Social Context," Robert Wood Johnson Clinical Scholars Program Research Conference, University of Michigan, Ann Arbor, MI, March 21, 2007
10. "The Surgery Killed Him": Lung Cancer and the Selling of Surgical Cure 1870s-1950s, American Association for the History of Medicine, Halifax, Nova Scotia, Canada, May 6, 2006
11. "My Diseases are an Asthma and a Dropsy"
Conference in Honor of Charles E. Rosenberg, Cambridge, Massachusetts, June 19, 2004
12. The Rise of Allergen Immunotherapy, 1900-1940
Bench and Bedside: Immunology in Practice, Toronto, Ontario, Canada, June 18, 2004
13. Asthma Germs and Germicides: The Rise and Fall of Infectious Asthma, 1860-1925
American Association for the History of Medicine, Boston, Massachusetts, May 2, 2003
14. Race, Space and Asthma: The Making of an Urban Epidemic
American Society for Environmental History, Providence, Rhode Island, March 28, 2003
15. Mountain Retreats, Asthma Germs & Patent Medicines: Episodes in the History of Asthma
Francis C. Wood Institute, College of Physicians of Philadelphia, Pennsylvania, December 3, 2002
16. Climate, Meteorology & the Science of Health Resorts: Dr. Charles Denison of Denver, Colorado
American Society for Environmental History, Denver, Colorado, March 20-23, 2002
17. Plenary Address: The History of Asthma
Asthma Update, Illinois Lung Association, Springfield, Illinois, October 22, 2001
18. "Mostly Momma": Parentectomy Treatment for Asthma in the United States, 1920-1970
Conference on the History of Allergic Diseases, University of Exeter, England, March 29, 2001
19. Asthma: Ancient Condition and Modern Disease
Joint Allergy-Pulmonary Medicine Conference, University of Pennsylvania, December 4, 2000

20. ‘Nowhere to Hide’: from changing the environment to changing the asthmatic, 1910-1940
Good Airs and Bad, Wellcome Conference, University of East Anglia, England, November 11, 2000
21. Measured Breath: Spirometry and the Definition of Asthma and Chronic Lung Diseases
Society for the History of Technology, Munich, Germany, August 18, 2000
22. Diseases and Dilemmas: The History of Asthma Research at the National Institutes of Health
American Association for the History of Medicine, Bethesda, Maryland, May 20, 2000
23. The Racialization of Asthma
Fontaine Foundation Series in Race and Health, University of Pennsylvania, February 17, 2000
24. Asthma: An Epidemic in the Making
Washington Society for the History of Medicine, Bethesda, Maryland, September 30, 1999
25. Asthma & Its Environments: Climate, Idiosyncrasy & Development
International Society for the History, Philosophy, and Social Studies of Biology, Oaxaca, Mexico, July 8, 1999
26. “Parentectomy” and Environment: Psychosomatic Medicine and Residential Treatment of Asthma, 1940-1970, Cheiron: International Society for History of the Behavioral and Social Sciences, Ottawa, Canada, June 12, 1999
27. “Parentectomy” and Environment: Psychosomatic Medicine and Residential Treatment of Asthma, 1940-1970, American Association for the History of Medicine, New Brunswick, New Jersey, May 8, 1999
28. What History? The History of Asthma Research in the National Institutes of Health Intramural Programs, John J. Pisano Visiting Scholar’s Seminar, NIH, Bethesda, Maryland, July 21, 1998
29. Skill, Model-Building, and Visual Evidence: The Difficult Career of Barbara McClintock
Joint Atlantic Seminar for the History of Biology, Baltimore, Maryland, April 11, 1998
30. From Tobacco to Salbutamol: Asthma in the Changing Pharmacopœia
Chemical Heritage Foundation, Philadelphia, Pennsylvania, January 21, 1998
31. Measurements of Carbon Monoxide, Oxides of Nitrogen and Carbon Dioxide Levels and Occupant Health Survey in Dwellings Heated Primarily by Unvented Kerosene Heaters and Gas Ovens
Affordable Comfort Conference, Chicago, Illinois, April 17, 1997
32. Babies in Bottles and Sharp Metal Objects: Medical Museums in Medical Research and Teaching
Wood Institute Seminar, College of Physicians of Philadelphia, November 14, 1996

Grant Support

Health Disparities Loan Repayment Program, National Institutes of Health

Date: 7/2007-6/2009

Principal Investigators: Joel Howell, Carla Keirns

Peer-reviewed program to repay a portion of the educational loans of promising researchers in health disparities research.

Source: Environmental Protection Agency, Environmental Justice Program

Title: Asthma as an Environmental Justice Problem in Philadelphia

Date: 7/1996-6/1997

Budget: \$25,000

Principal Investigators: Mary Mikus, Carla Keirns, Laurie Cameron, Nicholas Ide, scientific staff of GRASP, Philadelphia, Pennsylvania in cooperation with Dr. David M. Lang of the Allegheny University for the Health Sciences and the Philadelphia Department of Public Health's Asthma Task Force – project withdrawn due to death of key staff

Honors and Awards

1999 – 2003	Benjamin & Mary Siddons Measey Foundation Fellowship
1997 – 2003	Benjamin Franklin Medical Fellowship, University of Pennsylvania School of Medicine
2000	Summer Dissertation Award in Western History, Charles Redd Center for Western Studies, Brigham Young University, Provo, Utah
1997 – 1999	History & Sociology of Science 25th Anniversary Fellowship, Chemical Heritage Foundation, Philadelphia, Pennsylvania
1999	Johnson & Johnson Fellowship in Children's Health, Woodrow Wilson National Foundation, Princeton, New Jersey
1999	Mary Ellis Bell Research Prize, University of Pennsylvania School of Medicine
1999	History of Medicine Prize, University of Pennsylvania School of Medicine
1998	Dissertation Grant-in-Aid, American Institute for the History of Pharmacy, Madison, Wisconsin
1998	John J. Pisano Travel Grant for Research in NIH History, Dewitt Stetten Museum of Medical Research, National Institutes of Health, Bethesda, Maryland
1997	Francis C. Wood Institute Fellowship, College of Physicians of Philadelphia, Philadelphia, Pennsylvania

Medical Staff Appointments

01/2007 –	Attending Physician in General Internal Medicine, Department of Ambulatory Care, VA Medical Center, Ann Arbor, Michigan
8/2006 –	Clinical Instructor, General Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan

Certification and Licensure

08/2007	Diplomate, American Board of Internal Medicine (exp. 12/31/2017)
06/2004	National Board of Medical Examiners (USMLE Step 1 February 2002, USMLE Step 2 October 2002, USMLE Step 3 June 2004)
08/2005 –	Licensed Medical Physician and Surgeon, Commonwealth of Pennsylvania (exp. 12/31/2008)

- 10/2005 – Practitioner Controlled Substance Registration, United States Department of Justice, Drug Enforcement Administration (exp. 12/31/2008)
- 10/2005 – Licensed Physician, State of Michigan (exp. 1/31/2010)
- 03/2006 – Controlled Substance License, State of Michigan (exp. 1/31/2010)
- 3/2006 – Drug Control License, State of Michigan (exp. 1/31/2010)
- 02/2002 Advanced Cardiac Life Support (recertified 3/2004 to 3/2006 and 3/2006 to 3/2008)
- 9/2007 Basic Life Support (certified 1990, recertified 1991, 1994, 2001, 2003, 2005, 2007)

Community and University Service

- 2007 Member, Adult Ethics Committee, University of Michigan Hospital
- 5/2007 Visiting Professor, Temple University in Jamaica, St. Thomas, Jamaica
- 10/2006 – 11/2006 Visiting Medical Officer, Princess Marina Hospital, Gaborone, Botswana
- 2/2002 U of Pennsylvania, Curriculum Committee on Medical Student Evaluation
- 1/1997 – 2/2000 Member, Philadelphia Asthma Task Force, City of Philadelphia Department of Health, Philadelphia, Pennsylvania
- 2/1993 – 7/1993 Volunteer, Royal Prince Alfred Hospital, Camperdown, New South Wales, Australia
- 3/1993 – 7/1993 Volunteer, St. John Ambulance Corps, Sydney, New South Wales, Australia
- 8/1990 Volunteer, Department of Cardiology, Instituto Nacional de la Nutrición Salvador Zubirán, Mexico, D.F., Mexico

Memberships and Offices in Professional Societies

- 2006 – Associate Member, Society for General Internal Medicine;
Reviewer for Annual Meeting Program, Humanities and Ethics, 2007
- 2003 – Associate Member, American College of Physicians
- 1999 – Member, American Medical Association
- 1998 – Associate Fellow, New York Academy of Medicine, New York, New York
- 1996-1998 Associate Member, American Thoracic Society
- 1995 – Member, History of Science Society
- 1994 – Member, American Association for the History of Medicine;
Member, Committee on Meetings 2005-2007

Teaching Activities

Visiting Lecturer, University of the West Indies-Temple University, Jamaica program, St. Thomas, Jamaica

1. HIV and Development in Africa, May 30, 2007 (Instructors: Novella Keith, PhD & Michael Dorn, PhD)
2. The Global Significance of Malaria, May 31, 2007 (Instructors: Novella Keith, PhD & Michael Dorn, PhD)

Teaching University of Michigan School of Medicine

1. The History of Medical Experimentation and Research Regulation, in HHCR 701 for fellows in health services research, University of Michigan, February 5, 2008 (Coordinator: Michele Heisler, MD, MA)
2. Race as a Variable in Health Research, in HHCR 701 for fellows in health services research, University of Michigan, scheduled for January 29, 2008 (Coordinator: Michele Heisler, MD, MA)
3. Screening and Diagnostic Testing small group leader, Patients and Populations course for 1st and 2nd year medical students, University of Michigan, October 16, 2007 (Coordinator: Raj Mangrulkar, MD)
4. The Academic Medical Center and the Community: Historical Relationships and Conflicts, in HHCR 700, for fellows in health services research, September 11, 2007 (Coordinator: Michele Heisler, MD, MA)
5. Ethics Discussion Leader, second year medical students, February 21, 2007 (Coordinator: Susan Goold, MD, MHSA, MA)
6. Cardiac Classics, teaching heart exam and heart murmurs to first year medical students, December 7, 2006 (Coordinator: Robert Lash, MD)

Teaching University of Pennsylvania School of Medicine

1. Coping with Your Cadaver: A Family's Perspective, part of introduction to gross anatomy for 1st year medical students, August 30, 2007 (Coordinator: Paul N. Lanken, MD)
2. Coping with Your Cadaver: A Family's Perspective, part of introduction to gross anatomy for 1st year medical students, August 31, 2006 (Coordinator: Paul N. Lanken, MD)
3. Recent studies of circumcision to prevent transmission of HIV, Journal Club for Internal Medicine Residents, Presbyterian Hospital, Philadelphia, Pennsylvania. December 8, 2005 (Coordinator: Ilene Rosen, MD)
4. "AIDS as Chronic Illness" and *Debility and Moral Imagination in Botswana*, Joint Baylor University-University of Pennsylvania HIV Journal Club, Gaborone, Botswana, November 10 2005, (Coordinator: Elizabeth Lowenthal, MD and Steven Gluckman, MD)
5. Cardiac Exam, hands-on teaching of cardiac auscultation to 2nd year medical students, September 15 2005 (Coordinators: John Hirshfeld, MD and Susan Wieggers, MD)
6. Coping with Your Cadaver: A Family's Perspective, part of introduction to gross anatomy for 1st year medical students, September 6, 2005 (Coordinator: Paul N. Lanken, MD)
7. Coping with Your Cadaver: A Family's Perspective, part of introduction to gross anatomy for 1st year medical students, September 7, 2004 (Coordinator: Paul N. Lanken, MD)

8. Coping with Your Cadaver: A Family's Perspective, part of introduction to gross anatomy for 1st year medical students, September 24, 2003 (Coordinator: Paul N. Lanken, MD)
9. Medical Professionalization and the Ethics of Clinical Care, lecture to MBioethics students, March 18, 2003 (Professor: Charles Bosk, PhD)
10. History of Medicine, Teaching assistant in course for MS1-4 students, Monday evenings September to December 2002 (Professor: Arthur Rubinstein, MBBCh)
11. Coping with Your Cadaver: A Family's Perspective, part of introduction to gross anatomy for 1st year medical students, September 16, 2002 (Coordinator: Paul N. Lanken, MD)
12. Pseudoseizures, Functional Disorders, and Patient Distress, Consult-Liaison Psychiatry Conference, June 13, 2002 (Coordinator: James Stenett, MD)
13. History of Psychiatry: A Whirlwind Introduction, Lecture to Psychiatry Residents PGY 1 and PGY 2, June 19, 2002 (Coordinator: Anthony L. Rostain, MD)
14. Recurrent Chicken Pox: A Puzzling Case, Allergy & Immunology Conference, Hospital of the University of Pennsylvania, June 14, 2002 (Coordinator: Arnold I. Levinson, MD)
15. Coping with Your Cadaver: A Family's Perspective, part of introduction to gross anatomy for 1st year medical students, September 4, 2001 (Coordinator: Paul N. Lanken, MD)

Teaching University of Pennsylvania Undergraduate Curriculum

1. Co-Instructor with Michael L. Dorn, HSS 248: *Medical Science & Medical Research in the Twentieth Century*, Fall 2002, Department of History and Sociology of Science, University of Pennsylvania, Philadelphia, PA
2. Teaching Assistant, HSS 001 Introduction to the History of Science with Loren Butler-Feffer, *Fall 1995*, Department of History and Sociology of Science, University of Pennsylvania, Philadelphia, PA
3. Teaching Assistant, HSS 110 Science & Literature with Mark B. Adams, *Spring 1996 and Spring 1997*, Department of History and Sociology of Science, University of Pennsylvania, Philadelphia, PA

Visiting Lecture Temple University

1. *Bodyworlds* and Anatomy on Display in Art and History, February 8, 2006, Lecture to master's course in disability studies, School of Education, Temple University, Philadelphia, PA
2. Health, Schooling and Development in Botswana, December 1, 2005, Lecture to undergraduates, School of Education, Temple University, Philadelphia, PA

Public Lectures

1. AIDS in Botswana, First Unitarian Church of Philadelphia Social Justice Forum, March 5, 2006
2. The New Genetics & Your Health, First Unitarian Church of Philadelphia, March 6, 1997