

CHEMICAL HERITAGE FOUNDATION

**GARY H. GIBBONS**

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview  
Conducted by

Helene L. Cohen

at

Morehouse School of Medicine  
Atlanta, Georgia

on

20-22 February 2001

From the Original Collection of the University of California, Los Angeles

## ACKNOWLEDGEMENT

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Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about February 20, 2001, and tentatively entitled "Interview with Gary H. Gibbons". This Agreement relates to any and all materials originating from the interviews, namely the tape recordings of the interviews and a written manuscript prepared from the tapes, hereinafter collectively called "the Work."

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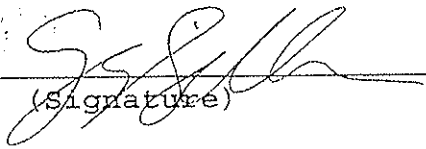
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Morehouse School of Medicine  
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Atlanta, Georgia 30310

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INTERVIEWEE

THE REGENTS OF THE UNIVERSITY  
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(Signature)

  
(Signature)

Gary H. Gibbons  
(Typed Name)

Victoria Steele  
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Morehouse School of Medicine  
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Date \_\_\_\_\_

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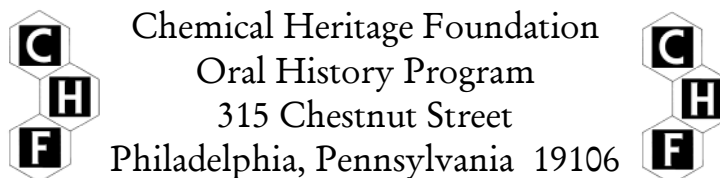
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## GARY H. GIBBONS

1956 Born in Philadelphia, Pennsylvania on 4 October

### Education

1978 B.A., Biology, Princeton, University  
1984 M.D., Harvard Medical School

### Professional Experience

Harvard Medical School, Cambridge, Massachusetts  
1984-1985 Intern, Brigham and Women's Hospital  
1985-1987 Resident, Brigham and Women's Hospital  
1987-1990 Cardiology Fellow, Brigham and Women's Hospital  
1990 Attending Physician, Brigham and Women's Hospital  
1996-1999 Assistant Professor of Medicine  
1996-1999 Attending Physician, Brigham and Women's Hospital

Stanford University, Stanford, California  
1990-1996 Assistant Professor of Medicine, Cardiology  
1991-1996 Associate Director, Cardiovascular Fellowship Program  
1991-1996 Director, Marfan Syndrome Clinic

Morehouse School of Medicine, Atlanta, Georgia  
1999-present Director, Cardiovascular Research Institute  
1999-present Associate Professor of Medicine

### Honors

1989-present Robert Wood Johnson Foundation Minority Faculty  
Development Fellowship  
1994 Baxter Foundation Award  
1994-1998 Pew Scholars Program in the Biomedical Sciences Grant  
1998 Established Investigator Award, American Heart Association

### Selected Publications

Gibbons G.H. et al., 1992. Vascular smooth muscle cell hypertrophy vs. hyperplasia: Autocrine transforming growth factor-beta expression determines growth response to angiotensin II. *J.*



- Clin Invest.* 90:456-61.
- Ohno M. et al., 1993. Shear stress elevates endothelial cGMP: Role of a potassium channel and G-protein coupling. *Circulation* 88:193-97.
- Morishita R. et al., 1993. Single intraluminal delivery of antisense cdc2 kinase and PCNA oligonucleotides results in chronic inhibition of neointimal hyperplasia. *Proc Natl Acad Sci.* 90:9474-78
- Pollman M.J. et al., 1996. Vasoactive substances regulate vascular smooth muscle cell apoptosis: countervailing influences of nitric oxide and angiotensin II. *Circulation Research* 99:1295-31.
- Mann, M.J. et al. 1997. Cell cycle inhibition preserves endothelial function in genetically engineered rabbit vein grafts. *J. Clin Invest.* 99:1295-1301.
- Tomita, N. et al., 1998. An oligonucleotide decoy for transcription factor E2F inhibits mesangial cell proliferation in vitro. *Am J. Physiol.* 275 (2 Pt 2):F278-84.
- Pollman, M.J. et al., 1998. Inhibition of neointimal cell bcl-x expression induces apoptosis and regression of vascular disease. *Nature Medicine* 4:222-27.
- Mann, M.J. et al., 1999. Pressure-mediated oligonucleotide transfection of rat and human tissue cardiovascular tissues. *Proc Natl Acad Sci.* 96:6411-16.
- Wang, B.Y. et al., 1999. Regression of atherosclerosis: role of nitric oxide and apoptosis. *Circulation* 99:1236-41.
- Bai, H.Z. et al., 1999. Regulation of vascular smooth muscle cell apoptosis: Modulation of bcl-2 by a phosphatidylinositol 3-kinase-dependent pathway. *Circ. Res.* 85:229-37.

## ABSTRACT

**Gary H. Gibbons** was born in 1956 in Philadelphia, Pennsylvania; the youngest of three siblings. His father was pharmacist-turned-schoolteacher from Philadelphia, Pennsylvania; his mother was a school teacher from Camden, New Jersey who had been orphaned at a very young age. Religion and spirituality were very important in the Gibbons household. Gibbons came through the Philadelphia public school system during the beginning of desegregation and was bused from his area to a traditionally Caucasian school. Later as a result of his good grades he attended Episcopal Academy during the institution's early attempts at integration. He credits these academic opportunities for much of his success, and as a result has always felt a great responsibility to succeed. Gibbons' early interest in science came from books, electronics, and the investigation of his surroundings.

Gibbons received his B.A. in Biology from Princeton University in 1978. At Princeton he participated in research and was a photographer for the school newspaper, *The Daily Princetonian*. He also developed an interest in the history and philosophy of science on which he wrote his senior thesis. Gibbons matriculated into Harvard Medical School, where he earned his M.D. in 1984. He elected to take two years off from medical school between his basic science and clinical years to pursue research in Dr. Clifford Berger's lab studying the renin-angiotensin system and cardiovascular disease. Following two years of clinical rotations Gibbons did his two-year internal medicine internship and a subsequent three-year cardiology fellowship at Brigham and Women's Hospital in Boston, Massachusetts.

In 1990 Gibbons was appointed assistant professor of medicine in the Cardiology Department at Stanford University, where he collaborated with Dr. Victor J. Dzau on further investigation of the renin-angiotensin system. He was then recruited back to Harvard Medical School by Dzau in 1996; there he pursued his research, focusing on the many complex factors that regulate blood pressure. In 1999 Gibbons was appointed director of the Cardiovascular Research Institute at the Morehouse School of Medicine in Atlanta, Georgia. In this capacity, Gibbons oversees large amounts of research aimed at decreasing the alarmingly high incidence of cardiovascular disease in the African-American population of the southern United States.

Throughout his oral history Gibbons acknowledges the many opportunities and rights obtained for him by the civil rights leaders of his day, and as a result feels a deep sense of greater purpose in his work. He has received several grants and awards, including the Robert Wood Johnson Foundation Minority Faculty Development Fellowship, a Baxter Foundation Award, an Established Investigator Award from the American Heart Association, and a Pew Scholars Program in the Biomedical Sciences grant, which he discusses in the oral history interview.

## UCLA INTERVIEW HISTORY

### INTERVIEWER:

Helene L. Cohen, Interviewer, UCLA Oral History Program. B.S., Nursing, UCLA; P.N.P., University of California, San Diego/UCLA; M.A., Theater, San Diego State University.

### TIME AND SETTING OF INTERVIEW:

**Place:** Gibbons' office at the Cardiovascular Research Institute.

**Dates, length of sessions:** February 20, 2001 (53 minutes); February 21, 2001 (141); February 22, 2001 (152).

**Total number of recorded hours:** 5.8

**Persons present during interview:** Gibbons and Cohen.

### CONDUCT OF INTERVIEW:

This interview is one in a series with Pew Scholars in the Biomedical Sciences conducted by the UCLA Oral History Program in conjunction with the Pew Charitable Trusts' Pew Scholars in the Biomedical Sciences Oral History and Archives Project. The project has been designed to document the backgrounds, education, and research of biomedical scientists awarded four-year Pew scholarships since 1988.

To provide an overall framework for project interviews, the director of the UCLA Oral History Program and three UCLA faculty project consultants developed a topic outline. In preparing for this interview, Cohen held a telephone preinterview conversation with Gibbons to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. She also reviewed prior Pew scholars' interviews and the documentation in Gibbons' file at the Pew Scholars Program office in San Francisco, including his proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members. For technical background, Cohen consulted J.D. Watson et al., *Molecular Biology of the Gene*. 4th ed. Menlo Park, California: Benjamin/Cummings, 1987; Bruce Alberts et al., *Molecular Biology of the Cell*. 3rd ed. New York: Garland, 1994; Horace F. Judson, *The Eighth Day of Creation*. New York: Simon and Schuster, 1979; and recent issues of *Science* and *Nature*.

The interview is organized chronologically, beginning with Gibbons' childhood in Philadelphia, Pennsylvania, and continuing through his undergraduate work at Princeton University, his medical training at Harvard University, and his internship and residency at Brigham and Women's Hospital. Major topics discussed include the issue of racial identity, his interest in public health with a special focus on the African-American community, and the types and ethics of cloning.

### ORIGINAL EDITING:

Victoria Simmons, editorial assistant, edited the interview. She checked the verbatim transcript of the interview against the original tape recordings, edited for punctuation, paragraphing, and spelling, and verified proper names. Words and phrases inserted by the editor have been bracketed.

Gibbons did not review the transcript and therefore some names and dates may not have been verified.

Jane Collings, senior editor, prepared the table of contents. Victoria Simmons assembled the biographical summary and interview history. Romi Keerbs, editorial assistant, compiled the index.

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