SCIENCE HISTORY INSTITUTE

ROBERT CARPENTER

Transcript of an Interview Conducted by

Mark Jones and Cassandra Stokes

at

San Francisco, California and Boston, Massachusetts

on

10 January and 3 April 2012 and 29 January 2013

(With Subsequent Corrections and Additions)

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ROBERT CARPENTER

1945	Born in San Diego, California on 14 March			
Education				
1967 1969 1975	BS, United States Military Academy at West Point, Computer Science MS, Stanford University, Computer Science MBA, Harvard University			
	Professional Experience			
1975-1976 1976-1978 1978-1981	Baxter International Assistant to President Director of Product Planning President, Fenwal Division			
1981-1989	Integrated Genetics President and Chief Executive Officer			
1989-1991 1994-2001	Genzyme Executive Vice President Director			
1989-1991	IG Laboratories Chief Executive Officer			
1992-1993	GelTex Chief Executive Officer			
1991-2000	Hydra Biosciences Chief Executive Officer			
1995-1998	VacTex, Incorporated Chief Executive Officer			

ABSTRACT

Robert Carpenter was born in San Diego, California, in 1945. He moved to South Bend, Indiana, where his father started a family bakery when he was an infant. When Carpenter was in elementary school, the family moved to Washington, DC, when his father started working for Fannie May Candy Company. He grew up in Arlington, Virginia, attending school with his younger brother, who was in the same grade as Carpenter, because the former skipped a grade. As a high schooler, Carpenter decided he wanted to attend West Point and worked to secure an appointment from his local congressman, which he did.

At West Point, Carpenter participated in the Glee Club because it allowed him to travel off-campus his first year and did well academically. Although selected as the battalion commander of his peers around the holidays during his first year, he tired of the military aspect and planned to get out of the Army as soon as his service requirement was up. Upon graduation from West Point, Carpenter chose to attend a master's program at Stanford University for two years instead of going directly to Vietnam, an option given to graduates from West Point in the top part of the class. He was sent to Vietnam after he acquired his degree and managed the data processing operation in Da Nang and later the inventory control center in Long Binh. He returned stateside and served several years in Fort Huachuca, Arizona, and Washington, DC, before finishing his service requirement.

Carpenter then attended Harvard Business School and joined Baxter International Incorporated upon graduation. Beginning in his first summer at Baxter, he worked on the documentation and quality control team to meet the FDA's new restrictions on good manufacturing practices. Later, he began worked with Fenwal, a division of Baxter which made blood bags, as director of product planning. Carpenter rose up in the ranks and was eventually made president of Fenwal when he was in his thirties. During his work as president, he focused on improving products in the biotech industry. Although invited to continue in the company as vice president of international, Carpenter decided to accept an offer to become president of a new company called Integrated Genetics (IG), which focused on recombinant DNA.

While at Integrated Genetics, he oversaw work on fertility hormones, Factor VIII cloning, and modified tPA. He assisted in finding an M&A partner for IG and negotiated a merger with Genzyme. Remaining on for several months after the merger, Carpenter left IG to found GelTex, a company developed around the idea of using polymers as a drug. When GelTex was bought out by Genzyme, he established Boston Medical Investors with other businessmen to invest in up-and-coming biotech companies. They financed a number of companies, including VacTex. Throughout the discussion, Carpenter returns to the themes of the great work of scientists at the companies with which he was involved and developments in the biotech field.

INTERVIEWERS

Mark Jones holds a PhD in history, philosophy, and social studies of science from the University of California, San Diego. He is the former director of research at the Life Sciences Foundation and executive editor of LSF Magazine. He has served in numerous academic posts and is completing the definitive account of the origins of the biotechnology industry, entitled *Translating Life*, for Harvard University Press.

Cassandra Stokes assisted in conducting this oral history interview, but no additional information about her career history is on file.

ABOUT THIS TRANSCRIPT

Staff of the Life Sciences Foundation conducted this interview, which became a part of our collections upon the merger of the Chemical Heritage Foundation and the Life Sciences Foundation into the Science History Institute in 2018. The Center for Oral History at the Science History Institute edited and formatted this transcript to match our style guide, but, as noted, Science History Institute staff members did not conduct the interview.

The Center for Oral History, Science History Institute, is committed both to preserving the recording of each oral history interview in our collection and to enhancing research use of the interviews by preparing carefully edited transcripts of those recordings. The preparation of interview transcripts begins with the creation of a verbatim typescript of the recording and proceeds through review and editing by staff of the Center; interviewees also review the typescript and can request additions, deletions, or that sections be sealed for specified periods of time. We have established guidelines to help us maintain fidelity to the language and meaning of each recorded interview while making minor editorial adjustments for clarity and readability. Wherever possible, we supply the full names of people, organizations, or geographical locations mentioned during the interview. We add footnotes to the transcript to provide full citations for any publications that are discussed, to point to extant oral history interviews, and to clear up misstatements or provide context for ambiguous references in the transcript. We use brackets to indicate the addition of material that was not in the audio, and bracketed ellipses to indicate the deletion of recorded material. The transcript also includes time stamps at five-minute intervals. We omit without noting most instances of verbal crutches and all instances of nonlexical utterances. We also make small grammatical corrections where necessary to communicate interview participants' meaning. Finally, staff of the Center create the abstract, chronology, and table of contents. With the availability of online full-text searching of our transcripts, the Center for Oral History opted to discontinue the practice of preparing a back-of-the-book index for each oral history transcript in 2020. The Science History Institute is committed to the responsible presentation of the history of science by addressing evidence of inequality and oppression as well as the subsequent silences in our collections. To that end, we recognize there may be language in our oral history collection, though not necessarily this oral history, that is outdated, offensive, or harmful, such as, but not limited to, the following: racist, sexist, Eurocentric, ableist, and/or homophobic language or depictions.

Due to legal or privacy concerns, some material has been redacted from both transcript and audio. Textual redactions are indicated in the transcript and the redacted audio segments have been replaced with silence.

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Born in San Diego. Move to South Bend. Father started bakery. Uncle Lee Ewbank and family worked at barkery. Move to Washington, DC. Pretty good at academics; enjoyed engineering. Competition with brother. Visits to the Senate library. Summer jobs as newspaper carrier and file clerk. Involvement in sports, especially football. Recruited by colleges to play football. Decision to join US Army. Desire to attend West Point. Enlisted in Army Reserve as a sixteen-yearold. Became first alternate for local congressman to attend West Point. Had to join Army because of glasses. Brother recruited to Michigan State. Brother tries to avoid draft. Differences from brother in high school. Summer job at rug business. Hazing at West Point. Glee Club at West Point. Focus on academics, not military at West Point.

Stanford University and Vietnam

Went straight to graduate school after West Point. Introduced to computers in college. Parents' opinion of Army service. Leadership skills at West Point. Work as apartment building manager while at Stanford. Relationship with wife. Prominent computer scientists at Stanford. Friendship with apartment building owner. Arrival in Vietnam. Management of data processing in Da Nang. Interaction with other officers in Vietnam. Concrete telephone poles. Daily schedule in Da Nang. Experiencing rocket attacks. R&R in Hawaii. Transfer to Long Bingh. Camaradarie in Da Nang.

End of Army Service and First Years at Baxter

Move to Fort Huachuca. Temporary duty in DC; work on telecommunications center proposal. Desire to run a business. Application to graduate schools and jobs after Army. Move to Arlington, Massachusetts. Classes at Harvard Business School. Job searching. Decision to work at Baxter. Vern Loucks. Father's response. FDA regulations on GMP. Work on documentation and quality control team. Parenterals plants. Hyland Laboratories. Plasma plants and blood banking. Promotion to director of product planning. History of Fenwal blood bags. Development of blood bags at Baxter. Interactions with Henri Termeer. Value pricing of Autoplex.

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Career at Baxter

Prominent blood banking reagents business. Work at Hyland. Freezing of red blood cells. Elutramatic blood machine. Work on technology for platelet transfusions. Improvement of products at Fenwal. Increasing blood shelf life. Frozen blood products. DEHP plasticizer. Becoming director of product planning. Harvard Business School graduates at Baxter. Promotion to vice president of product development. Made president of Fenwal. Hyland products sold through Fenwal salesforce. Argument with Termeer over Autoplex. Invitation to join recombinant DNA business in Boston. Gabe Schmergel leaves Baxter to go to Genetics Institute. Offered vice presidency of international at Baxter.

Career at Integrated Genetics

Offered presidency of Integrated Genetics. Work on Factor VIII. Genetics Institute gets Baxter support on Factor VIII. Comeptition with Genetics Institute. Work with Serono on fertility horomones. DNA probes. Family's opinion of moving to Integrated Genetics. John Kao. Speaking to venture capitalists. Public offering papers for Integrated Genetics.

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Career at Integrated Genetics (continued)

Board composition of Integrated Genetics. Seeking financing from Serono. Work with CHO and C127 cells. Projects at Integrated Genetics. Factor VIII cloning. Modified tPA. Work to address cystic fibrosis. Amegen's patent for EPO. Patent controversy. Competition in industry. Finding M&A partner for Integrated Genetics. Negotiating merger with Genzyme.

Career at GelTex and Beyond

Windsurfing in Aruba. Development of a company around the idea of using polymers as a drug. Founding of GelTex. Launching Renagel. Joint venture with Genzyme. Buyout of GelTex. Establishment of Boston Medical Investors. Creation of VacTex. Financing companies. Lawsuit about defibrillators at Cadent Therapeutics. Peptimmune. TRP iron channels at Hydra.

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