CHEMICAL HERITAGE FOUNDATION

ARTHUR L. BABSON

Transcript of an Interview
Conducted by

David J. Caruso and Sarah L. Hunter-Lascoskie

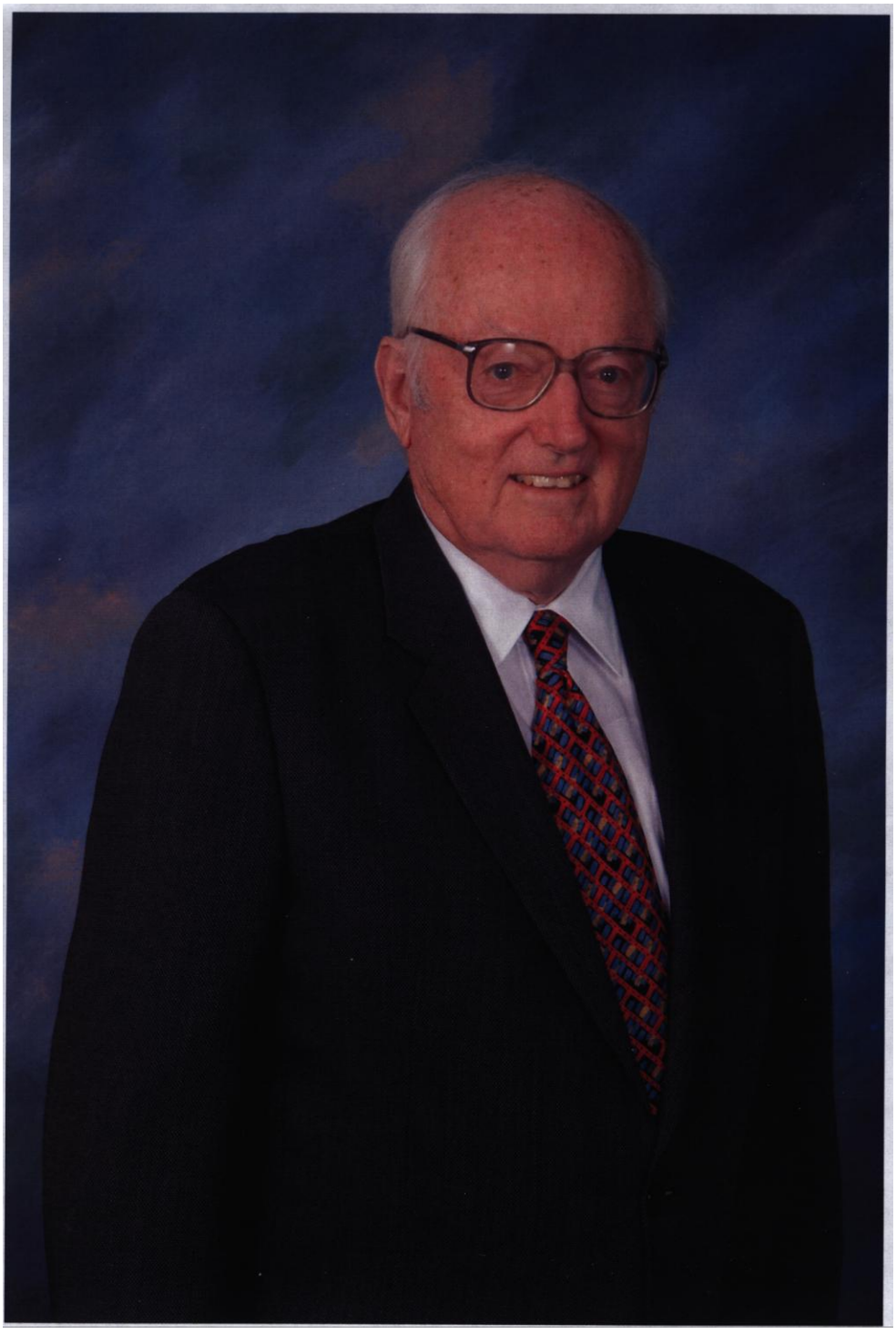
at

Siemens Healthcare Diagnostics
Flanders, New Jersey

on

6 and 8 December 2011

(With Subsequent Corrections and Additions)



Arthur L. Babson

CHEMICAL HERITAGE FOUNDATION
Oral History Program
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Arthur L. Babson

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ARTHUR L. BABSON

1927 Born in Orange, New Jersey, on 3 March

Education

1950 B.S., Zoology, Cornell University
1953 Ph.D., Biochemistry, Rutgers University

Professional Experience

University of Iowa
1953-1954 Postdoctorate with Theodore Winnick, Radiation Research Laboratory

Warner-Chilcott (later, Warner-Lambert)
1954-1962 Senior Scientist
1962-1967 Senior Research Associate
1967-1970 Director of Diagnostics Research
1970-1977 Director of Diagnostics Research and Development
1977-1980 Vice President, Research and Development, General Diagnostics Division

Babson Research Laboratories
1980-1987 President

Cirrus Diagnostics (formerly Pegasus Technologies)
1987-1992 President, Chairman and CSO

Diagnostic Products Corporation
1992-2006 Chief Scientist

Siemens Healthcare Diagnostics
2006-Present Chief Scientist

Honors

1975 Gerulat Award, American Association for Clinical Chemistry
1997 Inventor of the Year, New Jersey Inventors Hall of Fame
1998 Van Slyke Award, American Association for Clinical Chemistry

2010 Siemens Lifetime Achievement Award

ABSTRACT

Arthur L. Babson grew up in Essex Fells, New Jersey, one of two children. His father owned a General Electric appliance store, except during World War II, when he was an expeditor in Washington, D.C. Babson's mother was a housewife. Babson says he did not like school very much, at least until his high-school chemistry class, but he did like nature, the nearby woods, birds, and animals. He also liked to cause explosions, at home and on railroad tracks. To earn money Babson and his brother delivered mail, set traps at the gun club, caddied, and had a soft-drink stand on the golf course.

Babson began college and the Army Special Training Reserve Program at Rutgers University but was expelled for missing a single class. He then worked in a laboratory at American Dyewood until he was drafted. From Camp Kilmer he ended up in Japan, shortly after the atomic bombs were dropped; there he worked as a cook and on a wire crew—adding an instrument to his truck to assist with wire deployment and re-coiling—and he served on guard duty, where he developed booby-traps to alert him to anyone's approach. When he left the service and returned to the United States, he matriculated into Cornell University, where his father and brother had gone. He majored in zoology, took biochemistry, and decided to go to graduate school. After graduation he married his first wife; then he began his master's degree in biochemistry at Rutgers. He worked on protein nutrition in cancerous rats in James Allison's lab and decided to get a PhD with Allison.

When Babson had finished his PhD Theodore Winnick offered him a postdoc at the University of Iowa. Babson knew he wanted to do science but did not know what, and Winnick's offer was his best, so Babson and his wife and daughter moved to Iowa. A year of the postdoc was enough; Babson accepted a good offer from Ulrich Solmssen to work at Warner-Chilcott Laboratories back in New Jersey. It was there that Babson's career in diagnostics was launched. Tasked with developing a serum standard, he and his assistants invented Versatol, then Versatol-E (enzyme), which were successful for years; then they invented PhosphaTabs. During these years his second child was born.

Automating clinical chemistry started to emerge as Babson's core interest, and it became a clear program at Warner-Lambert, though Warner-Lambert's Robot Chemist lost out to Technicon's AutoAnalyzer. At Warner, Babson moved up in administration, moved away from the bench, and became Vice President of Research for General Diagnostics. Susan, who would become his second wife, transferred to his group. The Food and Drug Administration promulgated more regulations. Babson was active in AACC (American Association for Clinical Chemistry); he won the first Gerulat Award. Then a new layer of administration above Babson caused a number of people to leave Warner. Babson waited until his benefits vested and then left. A few years later Babson's nemesis was fired for falsifying results.

Meanwhile, Babson started his own company, Babson Research Laboratories, in his home. He patented a refinement of Blood Gas Control. He consulted for Ortho Diagnostics. Then he began work on a device to automate immunoassays (later named IMMULITE). John Underwood introduced him and his homemade demonstration model to Arthur Kydd, a venture capitalist, and the three established Pegasus Technologies, later changing the name to Cirrus Diagnostics. (Meanwhile, Babson Research Labs continued out of Babson's home for a few years, then shut down.) Cirrus started in a school classroom, rather a deterrent to hiring others, but Babson persuaded first Tom Palmieri, a mechanical engineer, and then Arthur Ross, an

electrical engineer, to join him. The business grew quickly, and by the time that Cirrus began manufacturing IMMULITE, it had taken over almost the entire schoolhouse. After building three prototypes (the A units), they moved on to building twelve production models (the B units); they sold their first production model (B1) to Morristown Memorial Hospital. Subsequently, Cirrus contracted with Lydo Manufacturing to build twenty-five more production models (the C units). Still interested in blood, Babson designed the Cardiac Risk Profiler to automate lipid profile diagnosis, but he was never able to sell it. From Babson's perspective, the Clinical Laboratory Improvement Act ended any hope for the CRP due to greater regulations for laboratories.

But IMMULITE withstood all its competition; it is the only such instrument still being sold of the twelve competitive systems that were available in 1992 when IMMULITE was introduced. Sigi Ziering, president of Diagnostic Products Corporation (DPC), bought Cirrus, and the joint company became DPC Cirrus. The second generation of IMMULITE, the 2000, automated sample loading. Babson received the Inventor of the Year Award from the New Jersey Inventors Hall of Fame. Next the company built IMMULITE 2000 XPi, for continuous flow instead of batch processing. Not yet satisfied, Babson and others then invented VersaCell, which automated sample selection completely. DPC Cirrus attracted the attention of Siemens Healthcare Diagnostics, which bought it and two other companies and combined them. Babson says the organizational structure is different, but the collegial atmosphere remains.

Babson likes to write essays, mostly with himself in mind as audience, and has written a whole book of them. He and his second wife, Susan, built their own house, taking three years to do it. The couple has taken a number of trips to Africa, especially East Africa. They are very involved in the Cheetah Conservation Fund. They have cats and dogs, but they have also raised two sets of raccoons. Babson points out that he has also won the Van Slyke Award from the AACC, and that he has just received the Lifetime Achievement Award from Siemens.

INTERVIEWERS

David J. Caruso earned a B.A. in the History of Science, Medicine, and Technology from the Johns Hopkins University in 2001 and a Ph.D. in Science and Technology Studies from Cornell University in 2008. His graduate work focused on the interaction of American military and medical personnel from the Spanish-American War through World War I and the institutional transformations that resulted in the development of American military medicine as a unique form of knowledge and practice. David is currently the Program Manager for Oral History at the CHF. His current research interest focuses on the discipline formation of biomedical science in 20th-century America and the organizational structures that have contributed to such formation. David is currently the president of Oral History in the Mid-Atlantic Region

Sarah L. Hunter-Lascoskie earned a B.A. in history at the University of Pennsylvania and a M.A. in public history at Temple University. Her research has focused on the ways in which historical narratives are created, shaped, and presented to diverse groups. Before Sarah joined CHF, she was the Peregrine Arts Samuel S. Fels research intern and Hidden City project coordinator. Sarah is currently a Program Associate for the Oral History Program at CHF and

leads projects that connect oral history and public history, including the oral history program's online exhibits. She also contributes to CHF's Periodic Tabloid and Distillations.

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