FACT SHEET

Mary-Dell Chilton, Ph.D. Syngenta Distinguished Science Fellow and Founder of Syngenta Biotechnology, Inc.

While on faculty at Washington University in St. Louis, Mo., during the late 1970s and early 1980s, Dr. Mary-Dell Chilton, distinguished science fellow and founder of Syngenta's biotechnology research labs, led a collaborative research study that produced the first transgenic (genetically engineered) plants. Her work pioneered the field of agricultural biotechnology and forever changed the way plant genetic research was conducted. She is recognized for her ground-breaking research and its continued impact on agriculture.

BIRTH AND CHILDHOOD

- Born Feb. 2, 1939, in Indianapolis, Ind.
- Pre-teen years lived near Southern Pines, N.C., with her grandparents. Grandfather owned a bookstore and grandmother a dress shop, spurring early interest for Chilton in business and clothing.

EARLY DISTINCTION

National Finalist, Westinghouse Science Talent Search, for project in optics that involved building a long telescope in a short tube, 1956.

EDUCATION

- B.S., chemistry, with highest distinction, University of Illinois, Urbana, Ill., 1960
- Ph.D., chemistry, University of Illinois, Urbana, Ill., 1967

EMPLOYMENT

- Research Associate, Department of Microbiology, University of Washington, Seattle, Wash., 1967-79
- Associate Professor of Biology, Washington University, St. Louis, Mo., 1979-83.
- Founding Director and Vice President, Biotech Research Center, CIBA-Geigy Corp. (Syngenta predecessor), Research Triangle Park, N.C., where primary focus was achieving transformation of corn, 1983-93.
- Distinguished Science Fellow and Principal Scientist II, Syngenta Biotechnology, Inc., Research Triangle Park, N.C., August 1, 2002.

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CAREER HIGHLIGHTS

- Led research team at University of Washington that was first to demonstrate that Agrobacterium transferred DNA into the genome of a host plant, changing it forever. The startling feat, instrumental in the eventual capacity to genetically modify plants, was published in Cell, the leading journal in molecular biology, in 1977.
- Also while at Washington University, Chilton led the team that first successfully transferred a gene of choice using Agrobacterium into tobacco plants. In collaboration with Andrew Binns of the University of Pennsylvania, the team eventually grew the transformed seeds into the first transgenic plants and showed that the trait was passed on to progeny.
- Served for a decade as the administrative head of what is now Syngenta and continued conducting research as the facility expanded and additional R&D staff were hired.
- Gained the reputation as a legendary mentor of young laboratory scientists. More than 40 of these international scientists who worked as interns or post-docs at Syngenta lived temporarily with the Chilton family in North Carolina, dubbing their home the “Chilton Hilton.”
- Worked with many others at Syngenta on the great challenge of successfully transforming corn, cotton and other crops.
- Authored more than 100 scientific publications.

HONORS

- CSSA Presidential Award, Crop Science Society of America, 2011
- Washington University, St. Louis, establishes the Mary-Dell Chilton Distinguished Professorship in Arts and Sciences, 2009.
- Benjamin Franklin Medal in Life Sciences, Franklin Institute, Philadelphia, 2002 (Previous winners include Alexander Graham Bell, Thomas Edison, Pierre and Marie Curie, Albert Einstein and Stephen Hawking).
- John Scott Award, City of Philadelphia, 2000
- Fellow, American Academy of Microbiology, 1994
- American Academy of Arts and Sciences, 1993
- Hendricks Medal, American Chemical Society, 1987
- North Carolina Board of Science and Technology, 1986
- David Gottlieb Medal, University of Illinois, 1986
- Rank Prize in Nutrition (United Kingdom), 1986
- National Academy of Sciences, 1985
- Syngenta’s new administrative and conference center in Research Triangle Park named Mary-Dell Chilton Center in her honor.

PERSONAL

- Chilton and her late husband, Scott Chilton, a botany professor at North Carolina State University, are the parents of two sons, Mark and Andrew.
- Mark is the mayor of Carrboro, N.C. and has two sons – Samuel and Alex. Andrew is an attorney in Portland, Ore.

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