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### BIOCHEMISTRY

## Woman Chemist Directs Krebiozen Analysis

➤ MRS. ALMA HAYDEN, a Negro chemist who once wanted to be a nurse, directed the infrared work on the controversial drug Krebiozen, claimed to have anti-cancer properties, now reported to be the body chemical, creatine.

The Krebiozen study was a group effort, Mrs. Hayden pointed out. "I worked under the direction of Joseph Levine, who in August, when we did the work, was acting deputy director of the division of pharmaceutical chemistry. I was assigned to the infrared phase of the work."

Oscar R. Sammul, Ruth Kessler, Wilson Brannon and Stephen Seater, worked with Mrs. Hayden in the U.S. Food and Drug Administration's division of pharmaceutical chemistry. She is head of the spectrophotometry branch where the infrared work was done on Krebiozen.

Mrs. Hayden first entered South Carolina State College at Orangeburg with the idea of taking premedical work that would lead to a nursing career.

"I got so interested in chemistry that I gave up that idea," she said. "Then I went on to do graduate work at Howard University here in Washington, met my husband, who is working on his Ph.D. while he does his job at Walter Reed Army Institute of Research. We have two children, Andrea, six, and Michael, 22 months."

Dr. Lloyd N. Ferguson, now head of the chemistry department at Howard University, was Mrs. Hayden's first boss, when she was research associate at Howard.

From 1951 to 1956, Mrs. Hayden worked in chemistry research at the National Institute of Arthritis and Metabolic Diseases of the National Institutes of Health, Bethesda, Md.

Head of the branch of spectrophotometry since May of this year, the woman chemist is modest about her achievements. She first started work for FDA in 1956 as a chemist in the pharmaceutical chemistry division.

Asked about the Krebiozen producers' objection to the report that creatine was the substance FDA found, Mrs. Hayden said, "we can only report our findings. But our research was corroborated by evidence from X-ray diffraction and other work done by FDA and in universities."

• Science News Letter, 84:196 Sept. 28, 1963

### TECHNOLOGY

## Computer Prints Solution In Braille for Blind

➤ THE BLIND will be able to give instructions to computers after taking a course being planned by a special committee of the Association for Computing Machinery. Committee chairman, Dr. Theodor D. Sterling, director of the medical computing center, University of Cincinnati, said in Denver a computer can be programmed to "print out" the solution to problems in a special kind of braille that can be read by a trained blind programmer.

• Science News Letter, 84:196 Sept. 28, 1963

## Questions

**ANTHROPOLOGY**—What is the belief of the Igorot tribe regarding multiple births? p. 201.

**EPIDEMIOLOGY**—What is the most common form of bubonic plague? p. 198.

**MEDICINE**—What is the primary cause of death following accidents? p. 195.

**PSYCHOLOGY**—Electrical stimulation of what section of the brain induces sleep in animals? p. 197.

**SOCIOLOGY**—What is the cost of juvenile delinquency to the national economy? p. 202.

**TECHNOLOGY**—How many Government reports in the scientific disciplines are accumulated in the United States each year? p. 200.

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