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Author(s): Whitacre, Madeline Helene

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Women of Los Alamos (2023 Physics Summer Camp Version)

This talk briefly explores the history of women at the Laboratory and touches on the contributions of several women over the years. This spans from the Manhattan Project to the Lab Today.



Women of Los Alamos

Women's Contributions to the Laboratory

NATIONAL SECURITY



Madeline Whitacre

Historian



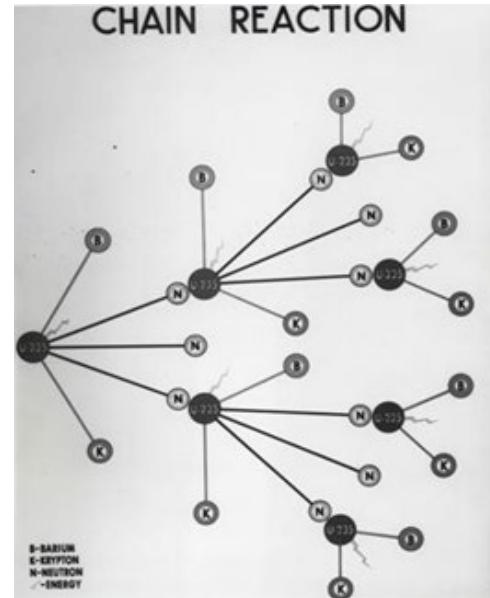
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Physics Developments



Otto Hahn and Lise Meitner



Fission chain reaction



Annexation of Poland



Japanese attack on Pearl Harbor, December 7, 1941



The Lab at Los Alamos



The Trinity Test – July 16, 1945



Little Boy



Fat Man



Women in the Wartime Workforce



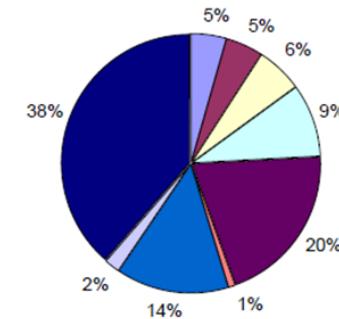
Women at Los Alamos



“Some of the wives were scientists in their own right, and they, of course, were in great demand, but with labor at a premium we could put to good use everyone we could get, whether as secretaries or as technical assistants or as teachers in the public school that we started for children.”

**General Leslie Groves
Head of the Manhattan Project**

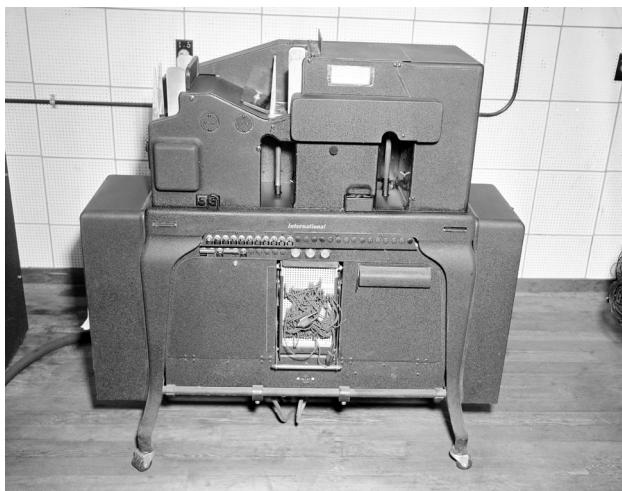
**Distribution of Worker Categories
(WACs and Women Civilians)**



- Physicists, Chemists, and Scientific Technicians
- "Computers" and Mathematicians
- Doctors, Nurses, Biochemists, and Medical Technicians
- Other Technical Workers
- Secretaries, Clerks, and Other Administrative Staff (Supply and Procurement)
- Intelligence and Security
- Personnel, Housing, and Domestic Services (Household and Laundry Workers)
- Teachers and Childcare Providers
- Unknown

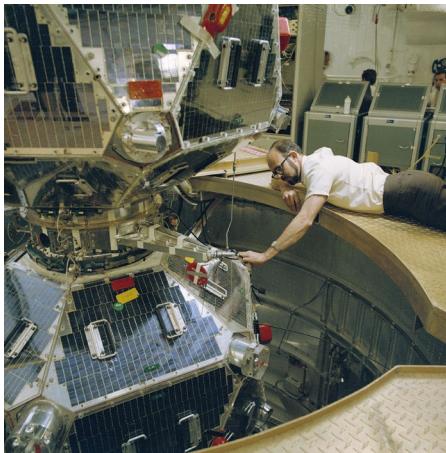


The Manhattan Project: Mary Frankel





The Early Cold War

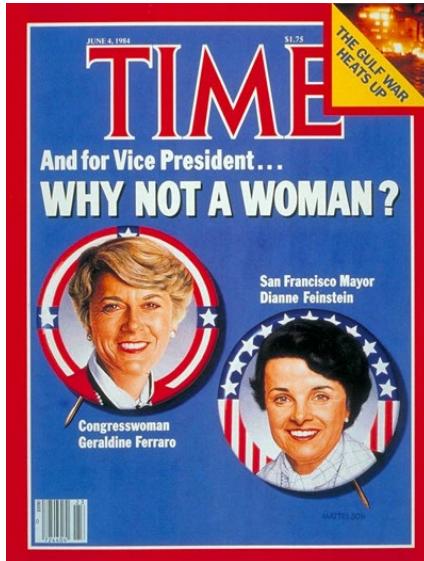


- 1963: The Equal Pay Act is passed, promising equal pay for equal work regardless of race, color, religion, national origin, or gender
- 1965: in *Weeks vs. Southern Bell* sets an important precedent and helps repeal restrictive labor laws, opening more jobs to women
- 1968: Executive Order 11246 prohibits gender discrimination by government contractors and requires affirmative action plans for hiring women



The Early Cold War: Jane Hall

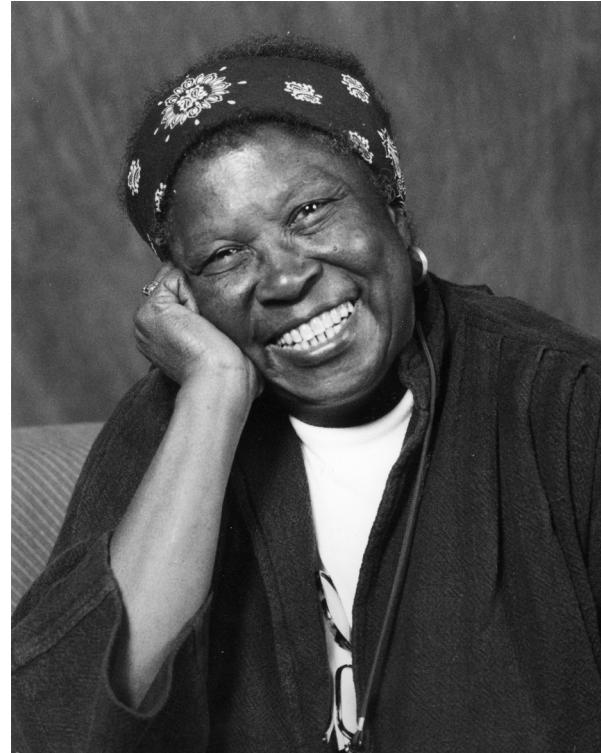
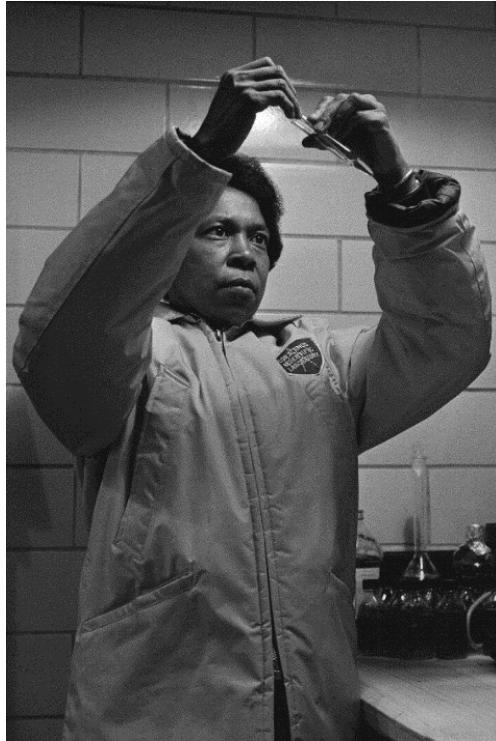




- 1972: Title IX prohibits discrimination based on gender in academic programs that receive federal support
- 1978: the Pregnancy Discrimination Act prohibits discrimination against pregnant women in the workforce
- 1984: in *Roberts vs. Jaycees* the supreme court forbids gender-based discrimination for membership to organizations
- 1994: the Gender Equity in Education Act is passed to train teachers in gender equity

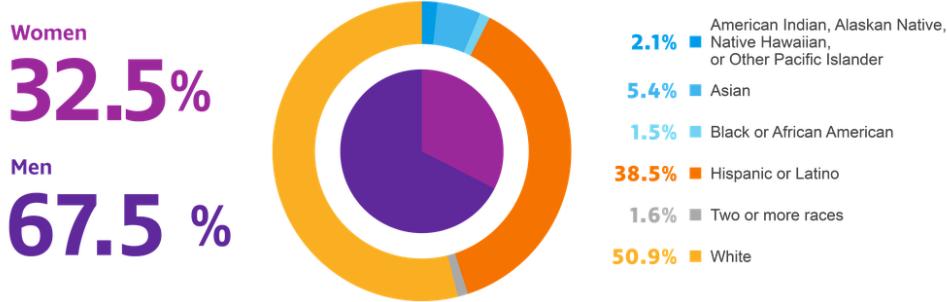


The Late Cold War: Julia Hardin





The Lab Today



Types of jobs	% Women	% URM	% OPC
Senior Leadership Director/President, Deputy Director/Vice President, Associate Lab Director	30.00%	6.67%	0.00%
Research/Technical Management (First-line and Mid-level) Engineering Management, Research Management, Technical Management	25.00%	17.11%	5.00%
Operations (or Research Support) Management Business Management, Computer Systems, Communications, ESHQ, Facilities Ops, HR, Legal, Tech Transfer, Strategic Planning	33.12%	44.20%	1.16%
Technical Research Staff Non-management: Researchers, Scientists, or Engineers	25.07%	17.86%	7.90%
Operations Support Staff Non-management: Support Roles	40.97%	54.11%	2.11%
Post Doctoral (Post-doc employees)	25.67%	8.56%	34.72%
Graduate Students (Funded by Lab)	34.07%	23.49%	18.94%
Undergraduate Students (Funded by Lab, do not include undergrad student funded by DOE directly (i.e. SULI))	41.85%	41.34%	7.45%

*URM = Under Represented Minorities

*OPC = Other People of Color



Questions?

