NASA Postdoctoral Program

The NASA Postdoctoral Program (NPP) is supervised by Science Mission Directorate and managed by Oak Ridge Associated Universities (ORAU)

ORAU is a consortium of doctoral colleges and universities engaged in scientific research; the consortium includes 22 universities that comprise ORAU's Historically Black Colleges and Universities/Minority Education Institutions (HBCU/MEI) Council

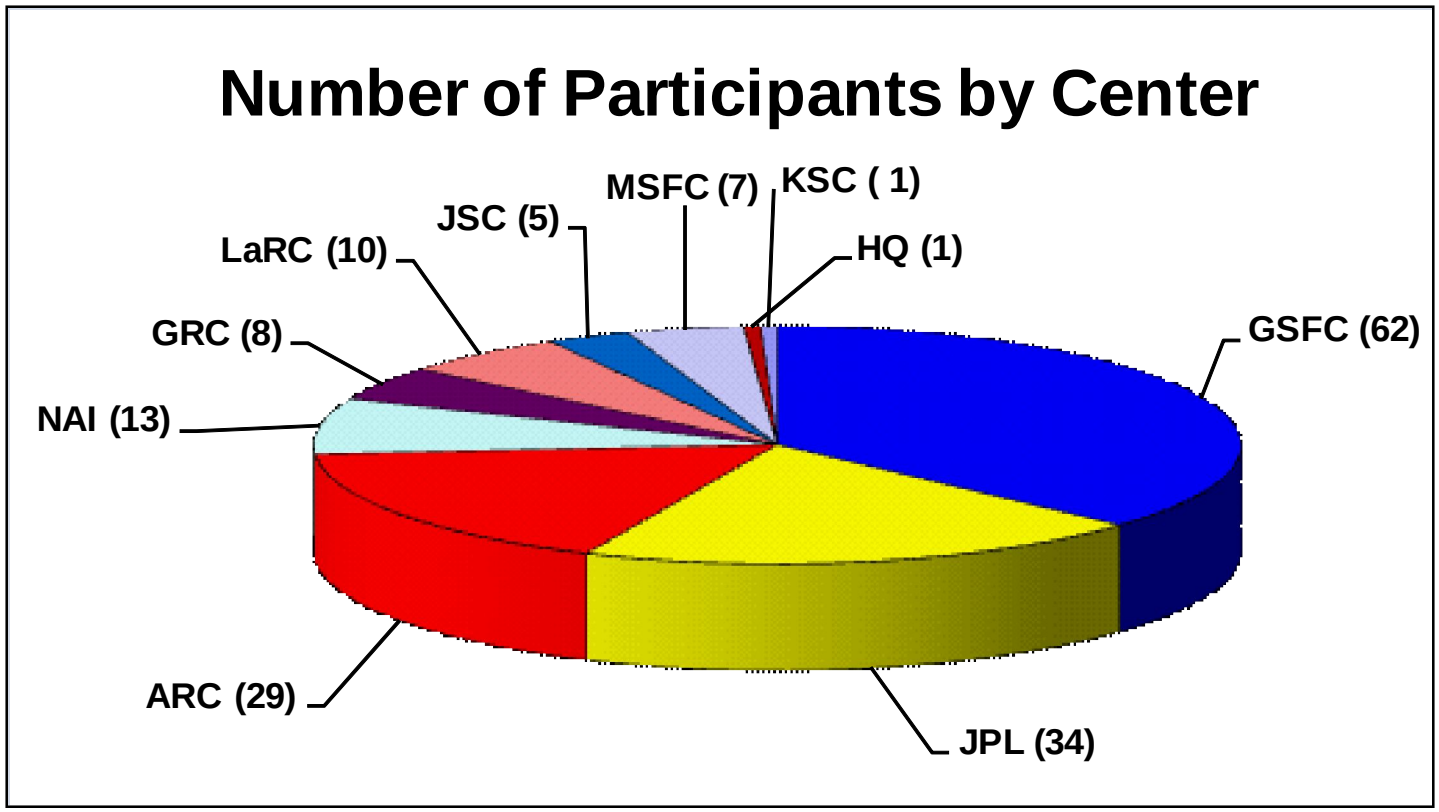
NPP Fellows work on specific research opportunities in space science, Earth science, aeronautics, space operations, exploration systems, astrobiology, and lunar science

Applicants must have a PhD before beginning the fellowship; U.S. citizens and foreign nationals eligible for a J-1 visa may apply

Once selected, NPP Fellows relocate to a NASA Center to conduct research with a NASA advisor

Since 2005, NPP has received 1,054 applications (74% from men; 26% from women)

Currently, NPP has 171 participants at 8 NASA Centers and various NASA Astrobiology Program sites



NPP Demographics Since 2005

Since 2005 . . .	Number	Comments
Fellowships Awarded	**574**	**46% were U.S. citizens**
Number of those 574 who were women	156	27% of all Fellows
Number of women who were U.S. citizens	94	59% of all women
Number of women who were ethnic minorities	31	20% (but 17 women reported no data)
Number of men who were ethnic minorities	99	24% (but 66 men reported no data)

Current NPP Fellows: Cross Section of Majors and Universities

Segayle Thompson	Atmospheric Science	Howard University
Morgan Cable	Inorganic Chemistry	Cal Tech
Leila Mays	Plasma Physics	University of Texas
Dina Bower	Geological Science	Old Dominion
Tonia Venters	Astrophysics	University of Chicago
Gioia Massa	Plant Biology	Penn State
Afusat Dirisu	Electrical Engineering	Princeton
Angela Kong	Biogeochemistry	U of California, Davis
Serina Diniega	Applied Mathematics	University of Arizona
Antara Basu-Zych	Astronomy	Columbia University
Karina Yager	Anthropology	Yale University
Felisa Wolfe-Simon	Oceanography	Rutgers
Evgenia Polyakova	Geological Science	Stanford
Christina Stam	Food Science	North Carolina State
Catherine Bailey	Physics	Case Western Reserve
Julie Chittenden	Chemistry	University of Arkansas
Eliza Montgomery	Materials Engineering	Penn State
Nancy Ackerman	Earth Science	Washington University

NPP Supports NASA's Workforce: Last Year's NPP Exit Survey Data

Indicator of Success	Number (n=85)	Comments
Number of NPP Fellows who accepted employment at a NASA Center	42	49% of all respondents
Number who were hired by colleges or universities	17	20%
Number whose new employment is identical to or an extension of their NPP research	73	86%
Number who believe that NPP enhanced their development as a scientist	83	98%

Dr. Amber Straughn, an NPP Fellow at NASA Goddard Space Flight Center (and an alumnus of the Harriet Jenkins Fellowship Program), is the lead scientist for the James Webb Space Telescope Education and Public Outreach Program.

Here Dr. Straughn appears on live national TV, promoting NASA science.

C-2010-840

National Aeronautics and Space Administration
Glenn Research Center at Lewis Field

Dr. Heather Oravec, a mechanical engineer and former NPP Fellow at NASA Glenn Research Center, tests the properties of lunar soil.

Dr. Oravec recently accepted a faculty position at the University of Akron; she reflects on her NPP experience:

"NPP has been extremely valuable to my career development. The opportunities presented to me while at NASA were exceptional not only with respect to research, but with respect to networking as well. I was engaged in state of the art research and was able to attend many conferences and professional meetings to network with experts in the field."

Dr. Segayle Thompson, an atmospheric scientist at NASA Goddard Space Flight Center, studies the properties of cloud systems.

"NPP has provided me the opportunity to improve and develop a number of skills that are critical in my professional career.

Additionally, because of this experience, I have forged relationships with leading experts in my field."

Female Hires at NASA

- NASA hiring initiatives have focused on hiring diverse populations but have not specifically focused on females as a demographic group.
- The Early Career Hiring Initiative (ECHI) pilot program implemented in 2009 brought nearly 200 early career hires into the agency. These new employees had received degrees within three years of the hire date. This program did not target female hires per se and the results reflected the historical trends in hiring ratios by gender.
- Across NASA the ratio of males to females differs by function (S&E, Professional/Admin, & Other).
  - The largest proportion of females is found in the Professional/Admin functional category.
- The proportion of all female hires in fiscal years 2009 & 2010 included a larger number of female hires at lower age ranges.

Total Number of Women at NASA

Current On-Board Staff				
	Total	S & E	Prof'l Admin	Other
Total	18766	11622	5186	1958
Female	6606	2553	3185	868
Females as a Percent of the Total	35%	22%	61%	44%

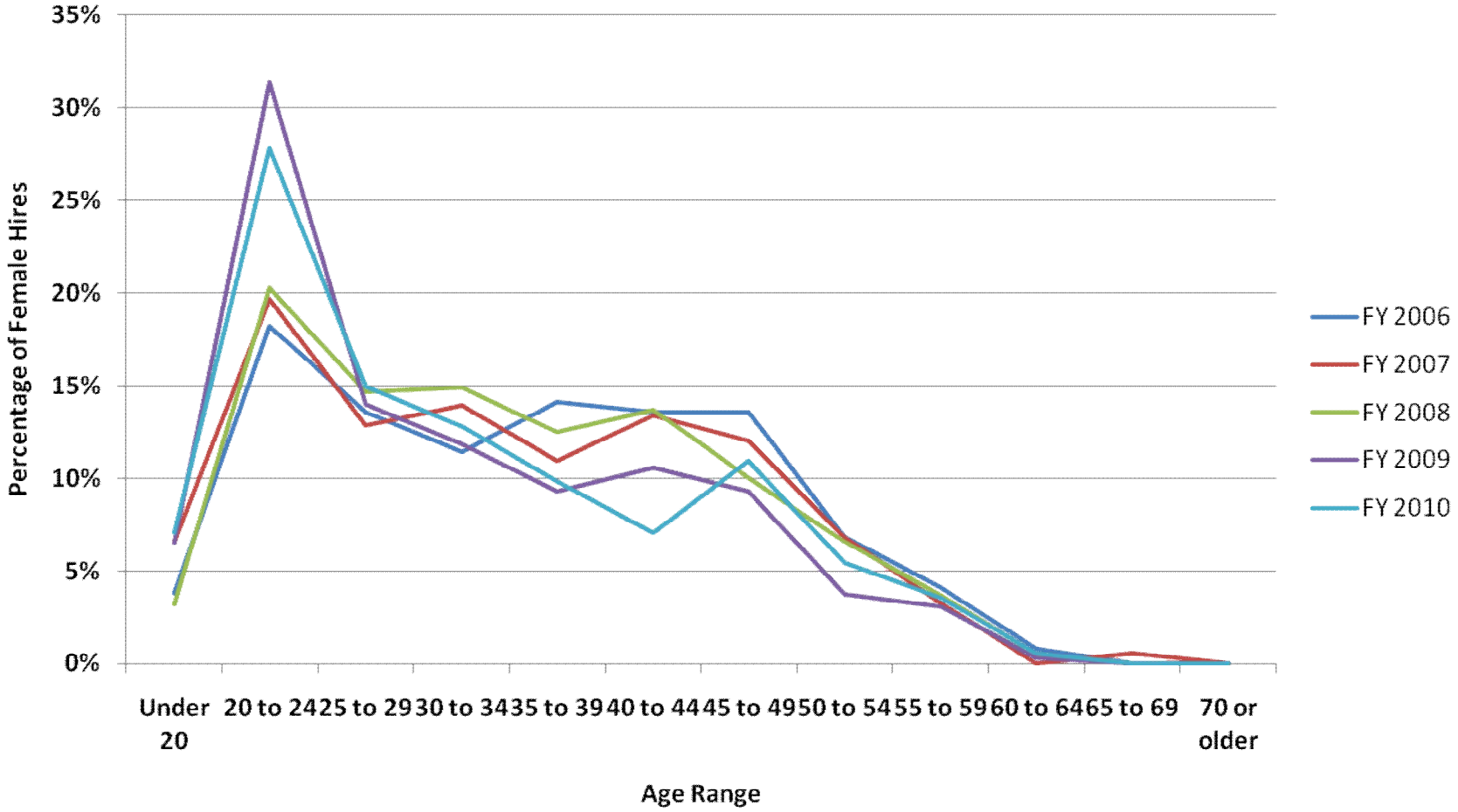
Female workforce representation varies as a percentage with based on function.

Total Number of Women External Hires At NASA

Fiscal Year	Annual Total	ARC	DFR	GRC	GSFC	JSC	KSC	LARC	MSFC	SSC	HQ	NSSC	OIG
2006	39%	41%	27%	50%	51%	29%	35%	47%	58%	41%	47%	71%	27%
2007	36%	26%	20%	43%	50%	40%	33%	29%	35%	46%	47%	59%	51%
2008	37%	38%	22%	25%	40%	37%	36%	23%	34%	67%	49%	69%	38%
2009	37%	57%	40%	26%	40%	36%	40%	28%	29%	59%	33%	50%	50%
2010	38%	55%	39%	33%	38%	27%	42%	32%	37%	44%	60%	50%	24%

There do not appear to be trends in women hires over time.
Annually, the total percentage of woman hires has been consistent across the agency around, 37%.
As a percentage of total hires, woman hires vary by Center over multiple years.

NASA Woman Hires by Age & Fiscal Year



In 2009 and 2010 there was a marked increase in the proportion of woman hires at lower age ranges.