A Study of Partner Accommodation Prepared for University of Wyoming (UWY)

Final Report

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Introduction

Despite effort to increase the number of women in science, technology, engineering and math (STEM) disciplines, women in these fields remain under-represented on university faculties. Female faculty in STEM disciplines are more likely than their male counterparts to be partnered with another academic and more likely than men to refuse a job offer if their partners cannot find adequate employment at the same location. In light of such facts, and in an effort to increase the proportion of female STEM faculty, many universities have adopted spousal/partner accommodation policies (throughout the document, we refer to this as "partner accommodation" and the individuals as "partners" as not all couples are married). One of the goals of our NSF project was to document the prevalence and type of partner accommodation policies in U.S. universities and their relationship to the representation, promotion, retention, and general experiences of women in STEM fields. A second goal is to evaluate quality differences among faculty recruits who are part of a dual career couple versus those that are independent hires in a sample of U.S universities.

As one step toward accomplishing these goals, we gathered survey data from faculty members at seven institutions of higher education in the U.S. in order to obtain information about university policies, in particular those related to partner accommodation. Data were collected to examine the awareness, use of, and experiences using partner accommodation policies. The data also enable us to compare the experiences with accommodation policies and other academic outcomes of women and men, academics in and out of STEM fields, and academics who were part of a dual-career hire at the time of hire in their current institution.¹

Data Collection Procedures. We developed a survey, drawing largely on preexisting surveys covering similar topics, to gather data from tenure-line, non-tenure line faculty at seven U.S. institutions of higher education. We administered the survey via the web in mid-September 2014. Around the second week of September, respondents were mailed a postal letter informing them of their potential to be included in our study. Four days after sending the postal letter, faculty received an email (with a unique URL) inviting them to participate in the study and explaining their confidentiality. Non-respondents received up to four requests to participate. Before the fourth and final request to non-respondents, a key administrator or faculty member at each of our seven institutions sent a reminder email to non-respondents and respondents alike (to preserve the confidentiality of respondents) thanking them for participating or encouraging them to respond. Data collection stopped on November 7, 2014.

"I am so delighted that [my university] made accommodations and created a position for me. We had basically given up hope that we could both find academic positions and we are so happy to both be

working [at my university]."

-Female, Assistant Professor, Social Science

With a few exceptions, all tenured, tenure-track, and non-tenure track faculty members at seven geographically disperse and organizationally diverse institutions were invited to participate.² Our institutional sample was selected with an eye toward variation in geographic location and in urban/rural location. Table 1 describes institutions in the sample, these sampling frames along with the response rates. Overall, of the 6,869 eligible faculty, 2,369 participated in the internet survey, yielding a response rate of 35.6% percent. At UWY, the response rate was 39%.

Respondent Demographics. In the multi-university sample, responding faculty members were mostly male (57%) and white (81%) followed by Asian/Pacific Islander (11%). Approximately 51% of respondents were tenured, another 21% were on the tenure track, and 23% were non-tenure line faculty. Of respondents, 64% were in a

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¹ Dual-career hiring describes the process by which universities offer academic or non-academic positions to both members of a couple. This can occur when universities recruit new employees or negotiate to retain them.

² Some institutions only agreed to participate if we surveyed a subset of faculty members.

STEM discipline (see Appendix B for a description of STEM disciplines). Fifteen percent of respondents were part of a dual-career hire at the time they were hired by their current institution.

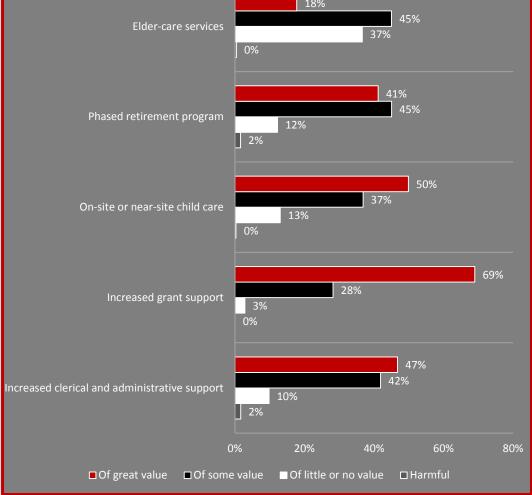
At UWY, faculty respondents were mostly male (58%) and white (89%). Approximately 53% of respondents were tenured, another 23% were on the tenure track, and 16% were non-tenure line faculty. Of respondents, 60% were in a STEM discipline. Seventeen percent of respondents were part of a dual-career hire at the time they were hired by UWY.

University Policy Summary

University policies for improving quality of faculty careers. Respondents reported the extent to which they believed certain policies and or practices would improve the overall quality of faculty careers at UWY. These five policies/practices included: increased clerical and administrative support, increased grant support, on-site or nearsite child care, phased retirement, and elder-care services. Figure 1 displays answers to this set of questions.

Elder-care services 37%

Figure 1. Policy Impact on Faculty Career Quality, UWY



Knowledge and use of university programs. We asked faculty members to report whether UWY has a series of programs or policies related to partner accommodation. Table 1 reports this information, along with the share of respondents who indicated they have used each policy.

Table 1. Knowledge of and Use of University Programs, UWY and Multi-University Sample

	UWY			Multi-University Sample		
Program	Yes ¹	No	Used	Yes¹	No	Used
A formal, written, program providing job search assistance to partners accompanying tenure track faculty.	6%	45%	15%	15%	26%	18%
A formal, written program for hiring accompanying partners who seek/have a faculty position.	20%	80%	16%	40%	60%	18%
A formal, written program for hiring accompanying partners who seek/have a non-faculty position.	11%	89%	12%	24%	76%	12%
Informal, consistent practices for hiring accompanying partners who seek/have a non-faculty position.	65%	35%	35%	58%	42%	31%
Informal, consistent practices for hiring accompanying partners who seek/have a non-faculty position.	47%	53%	18%	45%	55%	22%
A dual-career website.	4%	96%	30%	18%	82%	33%
Easily accessible printed information on dual-career policies/programs.	7%	93%	20%	20%	80%	27%
Dual-career office or staff.	12%	88%	4%	24%	76%	15%
Funds earmarked specifically to accommodate dual-career couples.	20%	80%	15%	38%	62%	25%
Faculty members who are part of dual-career couple can share one position (e.g. job sharing).	38%	62%	13%	29%	71%	8%
A dual-career program/policy for same-sex partner accommodations.	19%	81%	15%	31%	69%	8%
A recruiter that contacts other departments in the university, other universities, local firms, or employment networks, on behalf of a partner's accommodation.	7%	93%	33%	19%	81%	26%
A program designed to facilitate the transition of partner to full time employment.	13%	87%	35%	17%	83%	22%

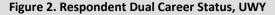
¹ NOTE[:] Here a "yes" response indicates a respondent thought their institution had the named policy/program. A "no" response indicates they thought it did not. "Use" indicates a respondent used the name policy/program.

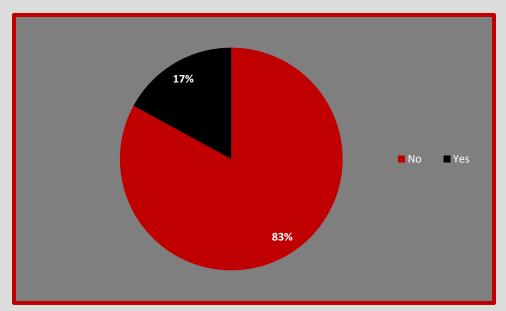
"[Partner accommodation] is a large problem for us. We have many dual career couples and do not do a good job of helping them. It is all informal and not consistent even within a given department."

—Female, Full Professor and Department Chair, Life Sciences

Dual Career Summary

Dual career status. Faculty reported whether they were part of a dual-career hire when they joined UWY. The survey defined dual-career hiring as a process by which universities offer academic or non-academic positions to both members of a couple. This can occur when universities recruit new employees or negotiate to retain them. Figure 2 indicates the share of the sample with dual-career status.





Of those in a dual-career couple at the time of hire, 73% reported that both they and their partner sought a faculty position, 20% indicated that only one part of the couple hoped to obtain a faculty position, and 3% indicated that only one in the couple sought an administrative position at the time of hire.

Experience as dual career couple. Members of a dual-career couple (at the time of their hire) answered questions about their experiences as a dual-career couple at UWY. Specifically, they were asked to rate their level of agreement regarding being part of a dual-career couple at UWY. Roughly 73% of respondents indicated that neither they nor their partners have taken appointments at less-than-desired prestigious institutions in order to accommodate their partners' employment. About 38% of the sample agreed that their research productivity is greater as a result of being part of a dual-career couple yet about 42% do not agree that their productivity is greater as a result. Slightly over half (58%) of respondents disagree that being part of a dual-career couple has enhanced their upward mobility. About 75% of respondents believe that being part of a dual career couple was not instrumental in getting their desired salary and about 80% indicated being part of a dual career couple did not

block their ability to be promoted. Finally, about 54% of respondents feel that they have changed their long-term career goals because of challenges related to being part of a dual-career couple.

Figure 3. Respondent Willingness to Accept Job Offer at Time of Hire, UWY

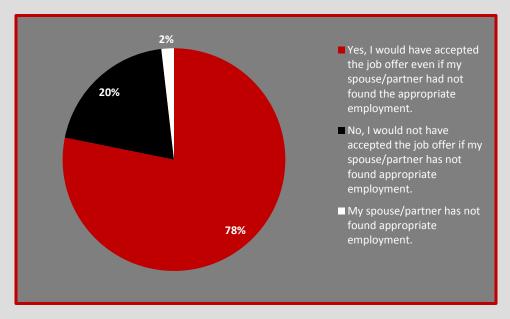
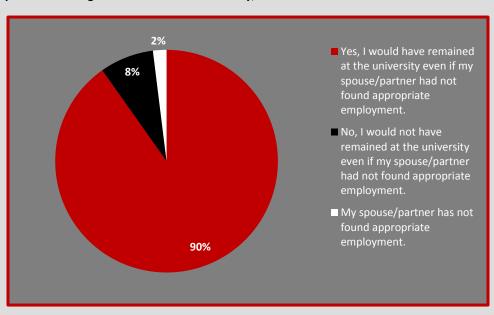


Figure 4. Respondent Willingness to Remain at University, UWY



Respondent Commitment and Intent to Leave

Commitment. Respondents were asked about their feelings of commitment to and happiness at their UWY. Overall, respondents are fairly happy at UWY. About 47% strongly or completely agree that they would be happy to spend the rest of their careers at UWY and about 65% report feeling emotionally attached to UWY. Their

commitment is not driven entirely by a lack of alternative jobs (31% disagree that a negative consequence of leaving their current institution is a scarcity of alternatives), too much disruption (31% disagree that too much of their life would be disrupted if they were to leave), or necessity (36% disagree with the statement that staying at their current institution is a matter of necessity as much as desire). However, about 35% indicate they would not leave their current university because they feel an obligation to the people in it and about 34% disagree with the statement that UWY deserves their loyalty.

Intent to leave. Respondents reported the extent to which, if at all, they had considered a list of factors to leave UWY. Table 3 presents their responses.

Table 2. Factors that Influence Faculty to Consider Leaving University (among those who indicated intent to leave in the next three years), UWY and Multi-University Sample

	UWY			Multi-University Sample			
Reason to leave	Not at all	To some extent	To a great extent	Not at all	To some extent	To a great extent	
To increase my salary.	25%	40%	35%	30%	38%	32%	
To improve my prospects for tenure.	84%	9%	7%	77%	11%	12%	
To improve my benefits (e.g. medical, retirement, vacation).	76%	18%	6%	74%	19%	7%	
To find a more supportive work environment.	45%	29%	26%	44%	30%	25%	
To increase my time available for scholarly work.	57%	27%	17%	52%	29%	20%	
To improve my research facilities (e.g. lab space, research support).	62%	21%	17%	55%	24%	21%	
To pursue a non-academic job.	66%	27%	8%	67%	26%	7%	
To address child-related issues.	82%	14%	4%	86%	11%	4%	
To improve the employment situation of my spouse/partner.	58%	25%	17%	62%	22%	16%	
To lower my cost of living.	78%	19%	3%	82%	15%	3%	
To improve my quality of life.	38%	36%	26%	39%	35%	26%	
To retire.	62%	19%	18%	65%	19%	16%	

Response by Faculty Characteristics

To describe the extent to which faculty attributes shape responses, we separated the sample by sex, race/ethnic background, status as a dual-career couple at the time of hire, and academic discipline and reported responses to select questions. The following tables describe responses to a select set of questions described above by sex and race/ethnic background (Table 3), dual career status (Table 4), and academic discipline (Table 5) for UWY.

Table 3. Differences by Respondent Sex and Race/Ethnic Background, UWY ^a

	Women (n=179)	Men (n=244)	Whites (n=380)	Non-Whites (n=59)
STEM Discipline	33%	67%	85%	15%
Part of a Dual Career Hire at University	47%	53%	86%	14%
STEM Discipline & Part of a Dual Career Hire	44%	56%	91%	9%
Formal, written program for hiring accompanying partners who seek/have a faculty position.	8%	11%	11%	7%
Formal, written program for hiring accompanying partners who seek/have a non-faculty position.	5%	5%	5%	8%
Informal, consistent practices for hiring accompanying partners who seek/have a faculty position.	36%	48%	41%	46%
Informal, consistent practices for hiring accompanying partners who seek/have a non-faculty position.	23%	31%	26%	32%
A dual-career website.	2%	2%	2%	2%
Easily accessible printed information on dual-career policies/programs.	3%	4%	3%	5%
A dual-career office or staff.	7%	6%	7%	3%
Funds earmarked specifically to acc. dual-career couples.	8%	10%	10%	5%
A dual-career program/policy for same-sex partner accommodations.	10%	5%	8%	7%
A recruiter who contacts other departments in the university, other universities, local firms, or employment networks, on behalf of a partner's accommodation.	3%	3%	3%	7%
A program designed to facilitate the transition of partner to full-time employment.	6%	6%	6%	8%
% that completely or strongly agree with the following:				
I would be happy to spend the rest of my career here.	100%	99%	99%	90%
My university deserves my loyalty.	99%	99%	99%	88%
Among those who expressed chance of leaving current institution extent, a reason to leave:	on in the next 3 y	ears, % who sai	d following wa	s, to a great
To improve the employment situation of my partner.	99%	98%	99%	83%

^a Approximately 86% of respondents are white, 1% black, 6% Asian/Pacific Islander, 2% Native American/Alaskan,3% Hispanic, and 2% belong to another race/ethnic category.

Table 4. Differences by Dual Career Status, UWY

	Dual Career Hire	Independent Hire			
	(n=64)	(n=305)			
STEM Discipline	16%	84%			
Female	19%	81%			
STEM Discipline & Female	21%	79%			
% who used the following at their current institution:					
Formal, written program for hiring accompanying partners who seek/have a faculty position.	11%	11%			
Formal, written program for hiring accompanying partners who seek/have a non-faculty position.	8%	6%			
Informal, consistent practices for hiring accompanying partners who seek/have a faculty position.	67%	39%			
Informal, consistent practices for hiring accompanying partners who seek/have a non-faculty position.	39%	25%			
A dual-career website.	2%	3%			
Easily accessible printed information on dual-career policies/programs.	3%	4%			
A dual-career office or staff.	6%	6%			
Funds earmarked specifically to acc. dual-career couples.	16%	8%			
A dual-career program/policy for same-sex partner accommodations.	14%	6%			
A recruiter who contacts other departments in the university, other universities, local firms, or employment networks, on behalf of a partner's accommodation.	5%	3%			
A program designed to facilitate the transition of partner to full-time employment.	9%	5%			
% that completely or strongly agree with the following:					
I would be happy to spend the rest of my career here.	94%	98%			
My university deserves my loyalty.	92%	98%			
Among those who expressed chance of leaving current institution in the next 3 years, % who said following was, to a great extent, a reason to leave:					
To improve the employment situation of my partner.	94%	97%			

Table 5. STEM and non-STEM Faculty Comparisons, UWY

	STEM ^a	non-STEM
	(n=252)	non-STEWI (n=167)
Female	47%	53%
Dual career hire	59%	41%
		·
Dual career hire & female	56%	44%
% who used the following at their current institution:		
Formal, written program for hiring accompanying partners who seek/have a faculty position.	10%	11%
Formal, written program for hiring accompanying partners who seek/have a non-faculty position.	6%	5%
Informal, consistent practices for hiring accompanying partners who seek/have a faculty position.	46%	38%
Informal, consistent practices for hiring accompanying partners who seek/have a non-faculty position.	30%	25%
A dual-career website.	2%	2%
Easily accessible printed information on dual-career policies/programs.	3%	3%
A dual-career office or staff.	7%	6%
Funds earmarked specifically to acc. dual-career couples.	7%	13%
A dual-career program/policy for same-sex partner accommodations.	6%	9%
A recruiter who contacts other departments in the university, other universities, local firms, or employment networks, on behalf of a partner's accommodation.	2%	5%
A program designed to facilitate the transition of partner to full-time employment.	7%	5%
% that completely or strongly agree with the following:		
I would be happy to spend the rest of my career here.	100%	99%
My university deserves my loyalty.	99%	99%
Among those who expressed chance of leaving current institution in the next 3 ye extent, a reason to leave:	ars, % who sai	d following was, to a great
To improve the employment situation of my partner.	98%	99%

^a See Appendix B for a definition of STEM disciplines.

APPENDIX A. Description of Institutions, Sampling Frame, and Response Rates

Basic Carnegie Classification ^a	Geographic region & Carnegie urbanization classification ^a	Sampling Frame	Eligible Faculty ^b	Final Sample	Response Rate
Research University, very high research activity	Midwest/ City Large	Randomly drawn sample of tenured, tenure-track (tt), non-tt faculty (research faculty, clinical faculty, lecturers, teaching specialists) on main campus.	800 (sample)	186	24%
Research University, very high research activity	Northwest Town Distant/	All tenured, tt, and non-tt faculty (research faculty, clinical faculty, instructors).	2,000	940	48%
Research university, very high research activity	Midwest/ City Large	Stratified sample of 500 tenured, tt, non-tt faculty (research faculty, clinical faculty, instructors), 250 who used an acc. policy & 250 who did not.	500 (sample)	138	28%
Research University, very high research activity	Northwest/ City Small	All tenured, tt, non-tt faculty (research faculty, clinical faculty, instructors).	900	275	32%
Research University, high research activity	Mountain West/ Town Remote	All tenured, tt, non-tt faculty (research faculty, clinical faculty, instructors).	1,100	427	39%
Doctoral/Research University	Southeast/ City Large	All tenured, tt, non-tt faculty (research faculty, clinical faculty, instructors).	1,000	282	27%
Master's College /University (larger programs)	Northeast/ City Midsize	All tenured, tt, non-tt faculty (research faculty, clinical faculty, instructors).	400	121	28%

NOTES: ^a SOURCE: Carnegie Foundation for the Advancement of Teaching, Carnegie Classifications Data File, February 2012. ^b Eligible faculty data rounded to nearest thousand to protect school identity.

Appendix B: STEM Disciplines (as defined by NSF)

CHEMISTRY Analytical Bio-inorganic

Bio-organic Biophysical Environmental Inorganic Materials

Physical Polymer Theoretical

Organic

COMPUTER AND INFORMATION SCIENCE AND ENGINEERING Artificial Intelligence (including Robotics, Computer Vision, and

Human Language Processing)
Computer Architecture and Grids

Computer Science - Languages and Systems Computer Science - Theoretical Foundations

Computer Systems Design (including Signal Processing) Databases, Information Retrieval, and Web Search

Graphics and Visualization Human Computer Interaction Information Security and Assurance Information Technology and Organizations

Networks and Communications Operating Systems and Middleware Scientific Computing and Informatics

Software Engineering

ENGINEERING

Aeronautical and Aerospace

Agricultural Bioengineering Biomedical

Chemical Engineering Civil Engineering Computer Engineering Electrical and Electronic

Energy

Engineering Mechanics Engineering Science Environmental Industrial Engineering

Materials Mechanical Metallurgical Nuclear Ocean Petroleum Polymer

Systems Engineering

GEOSCIENCES Aeronomy

Atmospheric Chemistry Chemical Oceanography Climate Dynamics Geochemistry Geology Geophysics Hydrologic Sciences

Large-scale Dynamics Meteorology Magnetospheric Physics

Marine Geology and Geophysics Mesoscale Dynamic Meteorology

Paleoclimate
Paleontology
Physical Meteorology
Physical Oceanography
Solar - Terrestrial

LIFE SCIENCES
Agriculture
Agronomy
Anatomy
Animal Behavior
Animal Science

Biological Oceanography

Biophysics

Biochemistry

Botany (including Plant Physiology)

Cell Biology

Computational Biology Developmental Biology

Ecology

Population and community ecology

Ecosystem ecology Entomology

Environmental Sciences Evolutionary Biology Fish and Wildlife Forestry Genetics

Horticulture
Immunology
Marine Biology
Microbiology
Molecular Biology
Neurosciences
Nutrition
Pharmacology
Physiology
Plant Pathology
Soil Science
Structural Biology

Virology Zoology

Appendix B: STEM Disciplines, continued

MATHEMATICAL SCIENCES

Algebra or Number Theory

Analysis

Applications of Mathematics (including Biometrics and Biostatistics)

Geometry

Logic or Foundations of Mathematics

Operations Research Probability and Statistics

Topology

PHYSICS AND ASTRONOMY

Astronomy Astrophysics

Atomic and Molecular Condensed Matter Physics

Nuclear Optics Particle Physics Physics of Fluids Plasma Solid State Theoretical Physics

PSYCHOLOGY Cognitive

Cognitive Neuroscience

Computational Psychology

Developmental

Experimental or Comparative Industrial/Organizational

Neuropsychology

Perception and Psychophysics Personality and Individual Differences

Psycholinguistics Physiological Quantitative Social SOCIAL SCIENCES

Cultural Anthropology Linguistic Anthropology Medical Anthropology

Physical Anthropology Archaeology Cliometric History Communications Decision Making Demography

Econometrics

Economics (except Business Administration)

Geography History of Science International Relations Law and Social Science

Linguistics

Philosophy of Science Political Science Public Policy Risk Analysis Science Policy

Sociology (except Social Work) Urban and Regional Planning

STEM EDUCATION AND LEARNING RESEARCH

Science Education Technology Education Engineering Education Mathematics Education