

The Postdoctoral Community at Oregon State University

January, 2015

This report provides a snapshot of the postdoctoral community at OSU as of January 2015. There are five types of non-professorial appointments at OSU that require PhD's or similar advanced degrees. Three of these – Research Associate (postdoc), Postdoctoral Scholar, and Postdoctoral Fellow – fit the common description of “postdoc” (following recommendations established by the American Association of Universities, Committee on Postdoctoral Education, in 1998): temporary, non-clinical research appointments held by recent PhDs. This report focuses on these three postdoctoral appointments, but some information about Research Associates and Clinical Fellows is also included to provide perspectives on similarities and differences in the broader community. Brief descriptions of these appointments are provided in Table 1. Figure 1 shows the current distribution of postdocs among the different appointment categories at OSU.

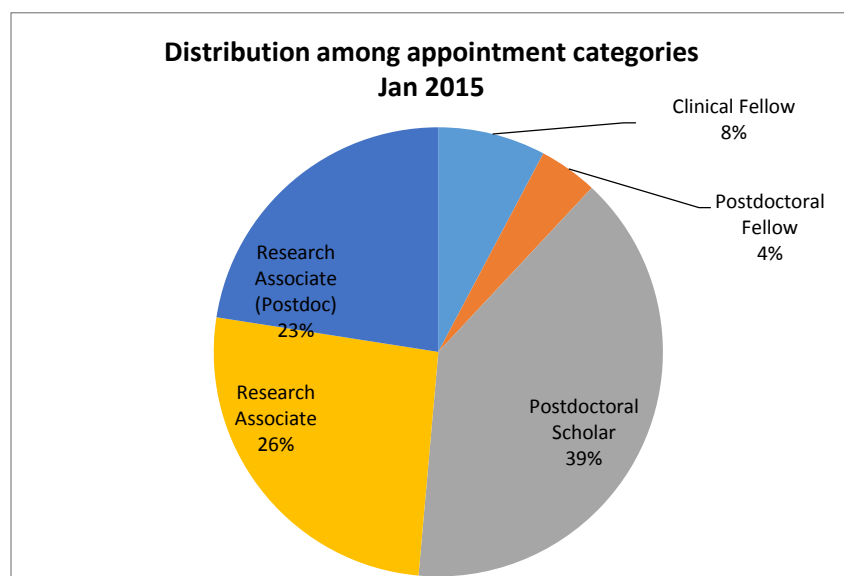


Figure 1. Distribution of postdocs across appointment categories at OSU.

Size of the population and change since last year.

Since January, 2014 the overall community of postdocs and research associates decreased by about 2% (Table 2). However, within this relatively stable overall population there are some changes among specific appointment types. For example, the number of Postdoctoral Scholars increased by 11%, yet the number of Research Associate (postdocs) stayed constant. The previous year, a 25% increase in the number of Postdoctoral Scholars, was accompanied by a 21% decrease in the number of Research Associate (postdocs). OSU has also seen a significant increase in the number of Clinical Fellows in the past year (54%). In the past, a number of Visiting Courtesy Postdoc (22) were reported, but this is not currently an approved appointment category at OSU. Figure 2 illustrates the trend among the various appointment categories over the past 3 years. The steady increase in the number of Postdoctoral Scholars (83 to 104 to 115) following the establishment of this category was at first correlated with a decrease in the number of Research Associate (postdocs), but this category appears to have stabilized somewhat.

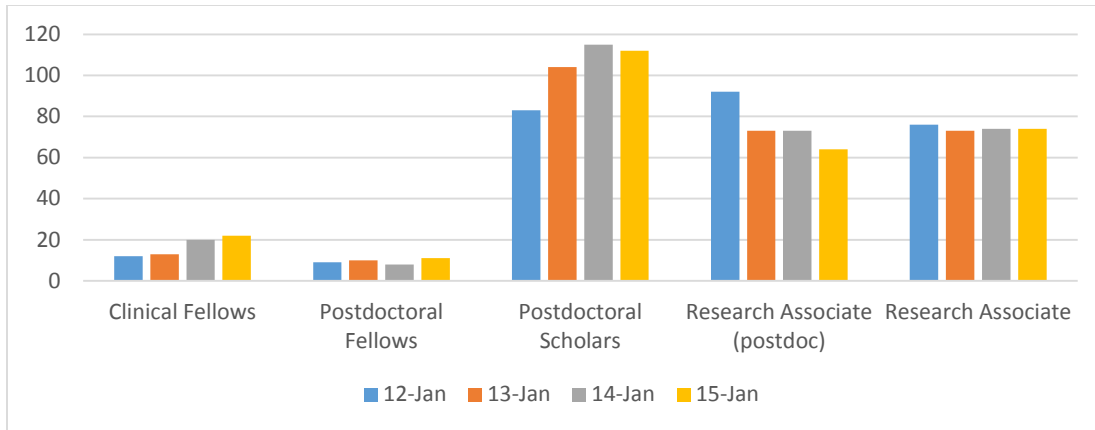


Figure 2. Variation among appointment categories over the past 3 years.

Postdocs and Research Associates are distributed among many departments at OSU, see Figure 3 and Table 3. As of January 2015, the College of Earth, Ocean & Atmospheric Science has the largest number of appointments across the categories, and there are also relatively large numbers (>10) in Botany and Plant Pathology; Chemistry; Forest Ecosystem & Society; Chemical, Biological and Environmental Engineering, and Pharmacy.

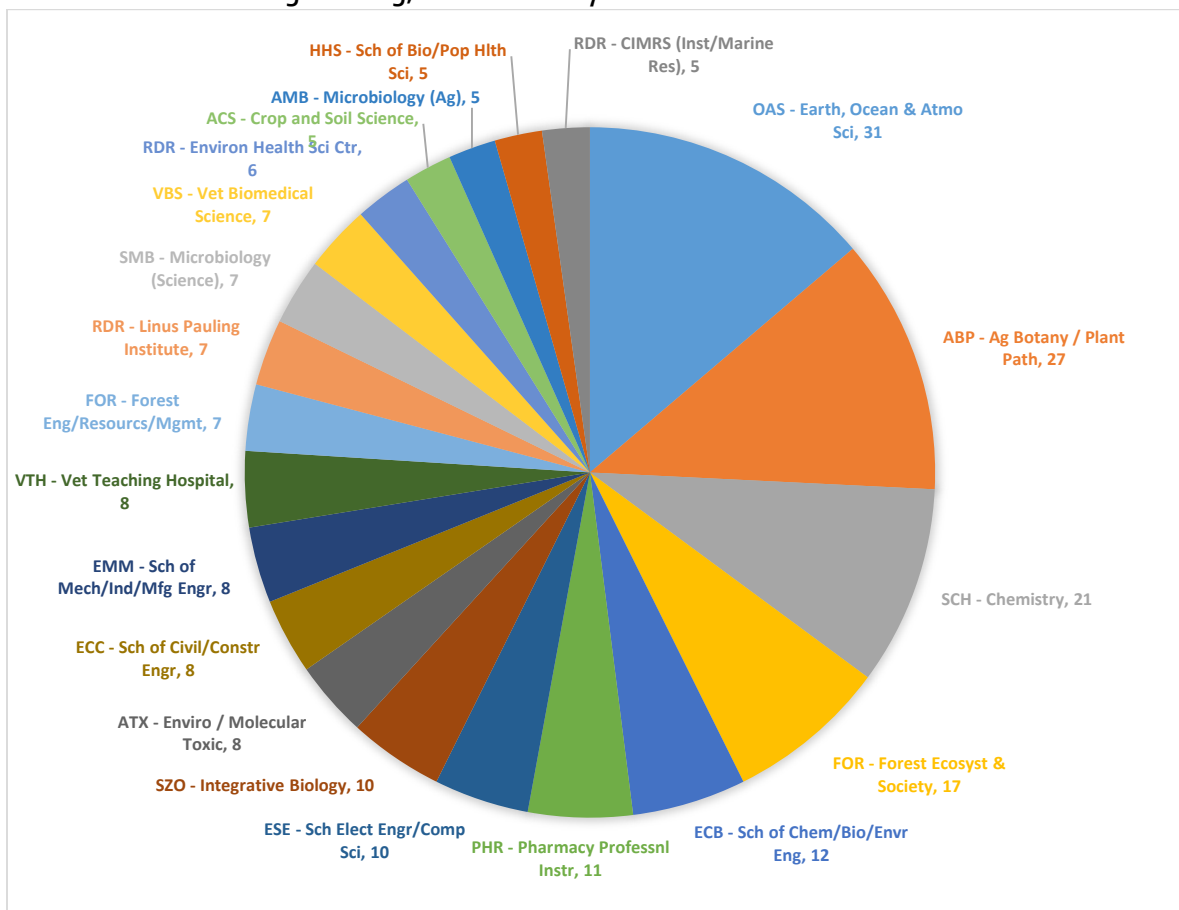


Figure 3. Distribution of postdocs and research associates among OSU departments (n > 5). However, for the relatively new Postdoctoral Scholar category, Chemistry has the largest number with 14, Botany & Plant Pathology and School of Electrical Engineering & Computer Science have

8 each, while the School of Chemical, Biological & Environmental Engineering; School of Civil & Construction Engineering; and the School of Mechanical, Industrial & Manufacturing Engineering have 6 each, see Figure 4 (only units with 3 or more Postdoc Scholars are included). Worth noting is that only 2 of CEOAS's appointments are in the Postdoctoral Scholars category. Also worth noting is a consistent increase in this category relative to January 2014 in schools across the College of Engineering.

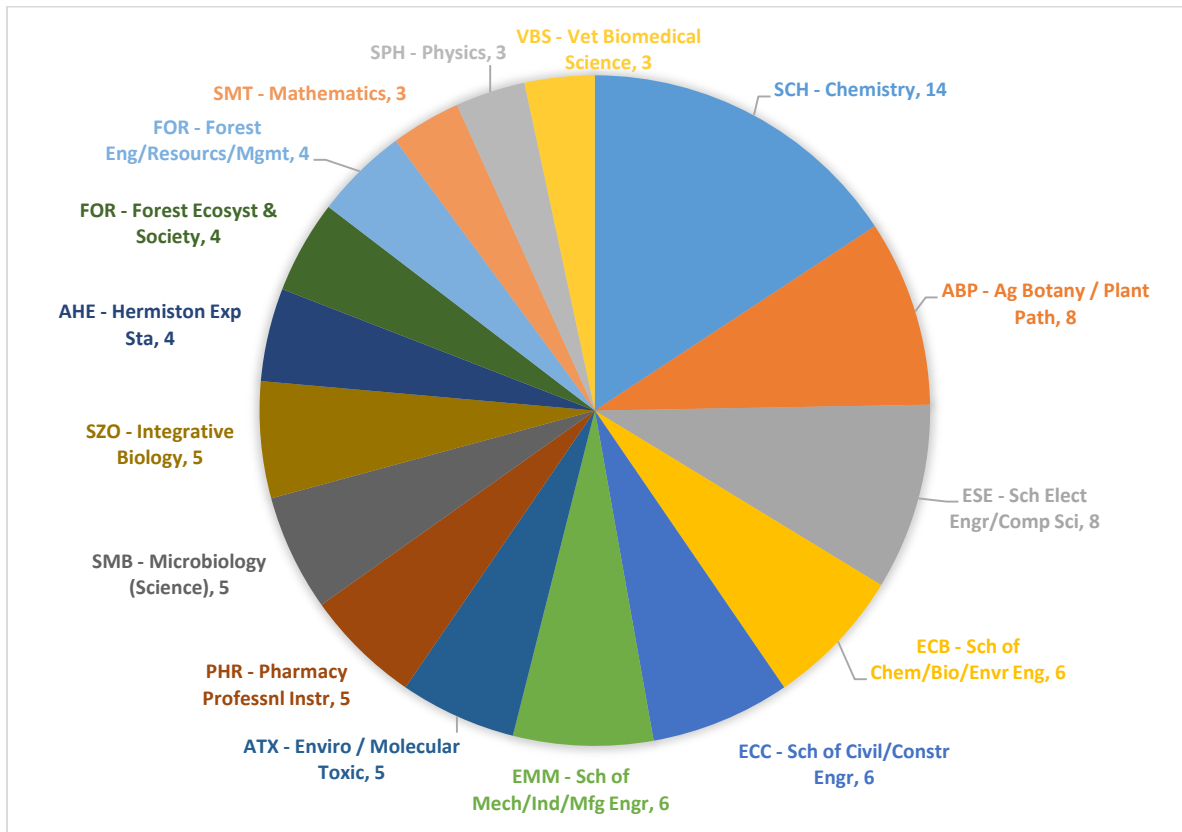


Figure 4. Distribution of Postdoc Scholar among OSU departments (n > 3).

Gender, Race and Ethnicity

Averaged over the entire community of postdocs and research associates, men outnumber women (55.5% to 44.5%). This is fairly similar to the gender distribution in the OSU undergraduate population. However, the gender distribution varies greatly among the appointment types (Figure 5 and Table 4). Over 80% of the Clinical Fellows and more than 2/3 of

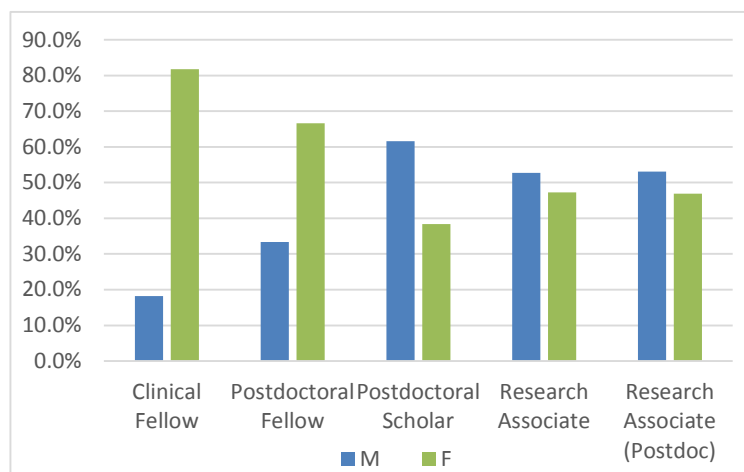


Figure 5. Gender distribution, January 2015

Postdoctoral Fellows are female, whereas males outnumber females by nearly the same proportion among Postdoctoral Scholars. There is a more balanced gender distribution among Research Associate (postdocs) and Research Associates.

Information about race is available for 92% of the overall postdoctoral community and the summary information is provided in Table 5. The Postdoctoral Fellow category has a much lower response rate, possible because of the different way they are affiliated with the university.

Slightly less than 2/3 of the general postdoc population is white/non-Hispanic. There is some variation among the different categories resulting in percentages between 54%-73% (excluding the Fellows). The second largest group totaling 29% overall is Asian, and have a higher presence among the postdoctoral scholars, where they account for nearly 35% of the population. Less than 2% of the entire postdoc/research associate population is African American or Native American, with no representation among Postdoc Fellows and Research Associates.

Over 70% of the overall group reported ethnicity (Table 6), and of those, approximately 3% self-identify as Hispanic or Latino/Latina overall, but there is better representation among Clinical Fellows (14%) and Research Associate (postdocs) (5%). This group has no representation among Postdoc Fellows and Research Associates. For both race and ethnicity it is interesting to note that self-reporting is higher (97% and 86%, respectively) among Research Associates, who generally have a longer tenure at OSU.

Rates of compensation

The average compensation rate for Postdoctoral Scholars has increased steadily since 2012, and is now above the level of both Research Associates and Research Associate (postdocs). This is partially due to a decrease in average compensation, at least for Research Associates. It could also be a natural consequence of the mandated minimum stipend which was introduced in January 2014 for OSU

Postdoctoral Scholars, and it is worth noting that the mean compensation for

Postdoc Scholars is now well above the stipend level recommend by the National Institutes of Health, see Table 8. The full-time annual compensation rate as of January 2015 was significantly

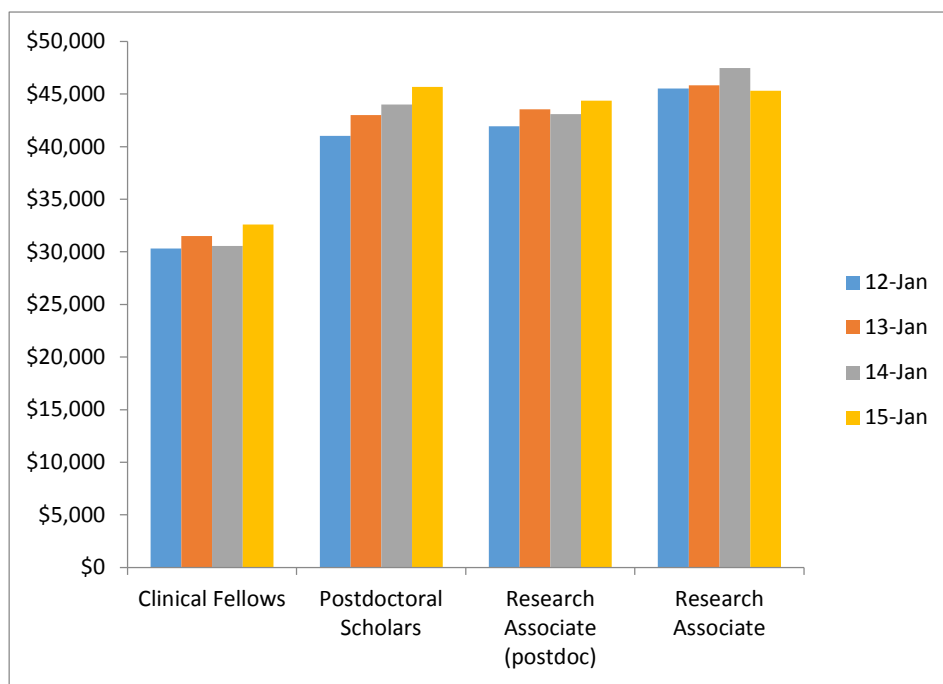


Figure 6. Mean annual compensation, January 2015

lower for Clinical Fellows than for the other types of appointments; average compensations for Postdoctoral Scholars are now the highest, followed by Research Associates, and Research Associate (postdocs) (Figure 6). Figure 6 demonstrates that there has been an increase in compensation from 2012 to 2014 for all categories, except for the recent drop in compensation for Research Associates. Postdoctoral Fellows are not included in this analysis because they are externally funded.

Figure 7 shows the changes in compensation from 2012 to 2015 among men and women; most of the categories have seen a similar increase for men and women. Figure 7 and Table 7 also show that among Clinical Fellows, women now earn 15% more than men, and Postdoctoral Scholars receive equal (within 0.5 %) compensation across gender. The situation is reversed for Research Associate (postdocs) and Research Associates, where the salary differential is skewed more drastically in favor of men (12% and 19%, respectively) and women have actually seen a decrease in their compensation levels. As a whole there is an 11% difference in compensation, in favor of men, in OSU's postdoc community, yet it is worth noting that the more rigorous policies associated with the Postdoctoral Scholar position might have contributed favorably to equality in compensation for that category.

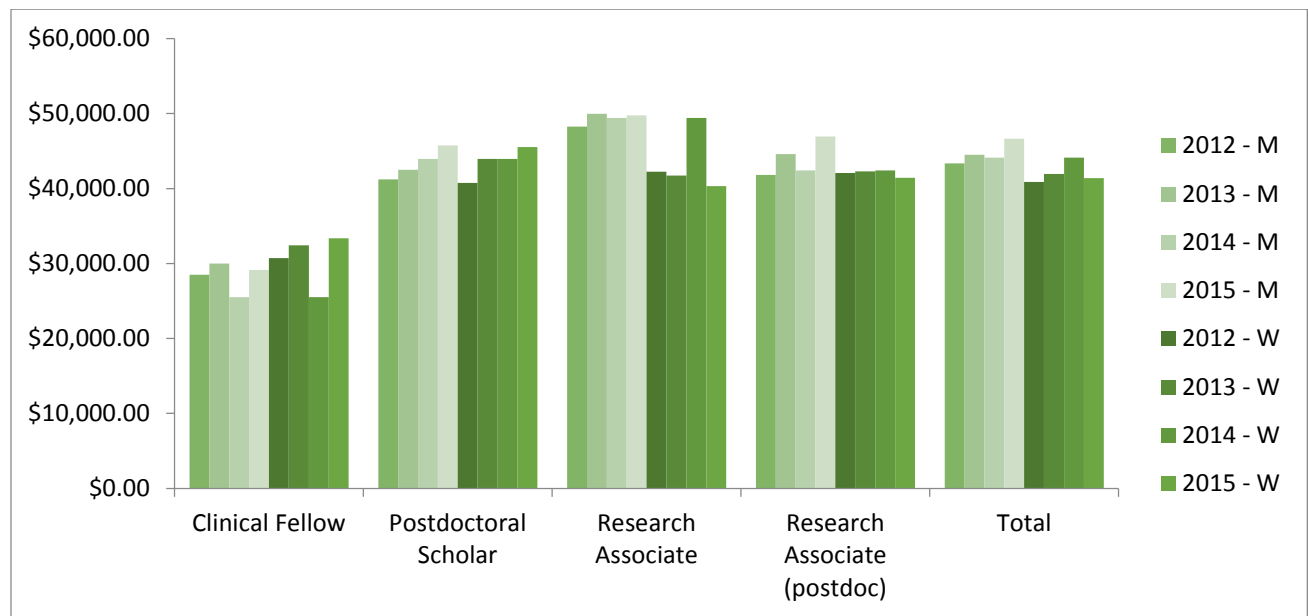


Figure 7. Mean annual compensation among women and men, January 2012-January 2015

Oregon State University established the Postdoctoral Scholar position in 2009, but it was not until January 2014 that expectations for minimum levels of compensation were firmly established. These minimum levels are tied to the Kirschstein-National Research Service Awards set by the National Institutes of Health. For 2015 the minimum Kirschstein-NRSA stipend for an entry-level postdoc is \$42,840, and the levels increase with years of service (Table 8). At this point, 27 Postdoctoral Scholars at OSU are paid less than the entry-level minimum set by NIH, a significant improvement since 2014 when the number was 40. And only 4 units are currently paying average stipends below the required minimum (Table 9) against 7 in 2014. Importantly, the gap is becoming much smaller, and can likely be attributed to the new policy implemented in 2014. It should also be noted that the stipend minimum is published at the beginning of each year,

meaning that stipend levels in the units may not have caught up with the NIH levels at the time the data was generated for this report.

Compensation rates across different visa categories are listed in Table 10. It is apparent that those with Legal Permanent Resident (LPR) status are being compensated at a significantly higher level than most other categories. Among the remaining categories, those on F-1 OPT are compensated at the lowest rates (20% below the LPR group), closely followed by the J-1 group (18 % below LPR compensation levels). Looking more closely at the J-1 category for Postdoc Scholars only, an apparent trend appears with the home country's economic status, see Figure 8. It should be noted that the trend in Figure 8 is based on relatively small numbers and should be interpreted accordingly. We will continue to monitor this situation.

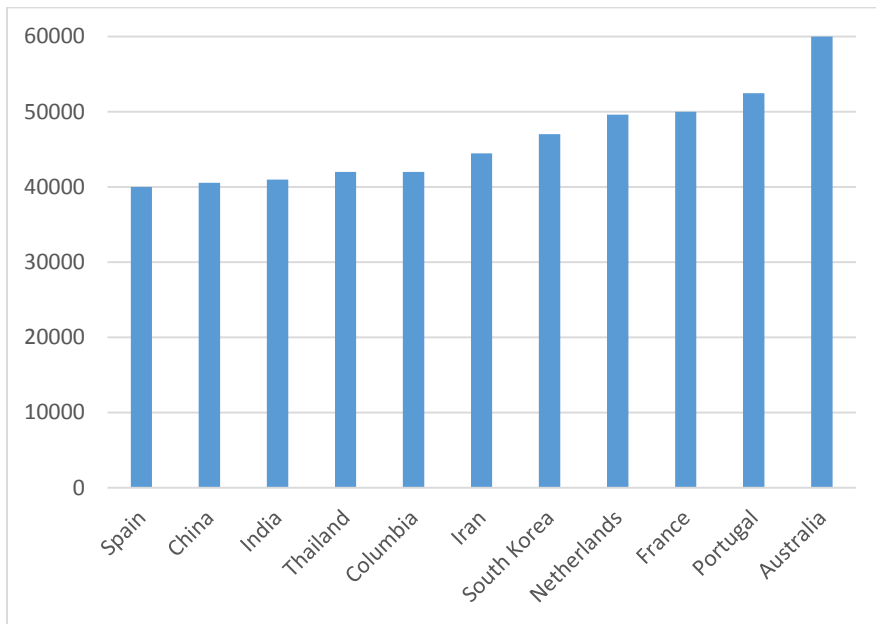


Figure 8. Mean annual compensation for Postdoc Scholars on J-1 visa

DATA TABLES

Table 1. Brief Descriptions of Appointment types. All are “non-professorial” appointments requiring a PhD or similar advanced degree

Clinical Fellow: Typically funded by an agency or clinic. Short-term appointments (typically two to three years maximum) for advanced clinical training in counseling, pharmacy, veterinary medicine, etc. Most Clinical Fellows have earned their terminal professional degree within less than five years, but any restrictions limiting these appointments to recent graduates are set by the funding organization, not OSU. Health insurance required and provided by OSU, but paid by the Fellow or funding agency; family insurance available, but must be paid by fellow. No retirement benefits.

Postdoctoral Fellow: Funded independently, typically by a federal agency. Short-term research appointments (typically two to three years maximum) under supervision of an OSU faculty member. Most Postdoc Fellows have earned PhDs within less than five years, but any restrictions limiting these appointments to recent graduates are set by the funding agency, not OSU. Health insurance required and provided by OSU, but paid by the Fellow or funding agency; family insurance available, but must be paid by fellow. No retirement benefits.

Postdoctoral Scholar: Trainees who are typically funded by grants to OSU faculty and paid a monthly stipend. OSU policy stipulates that these are short-term research/trainee appointments limited to a maximum of three years and individuals must have earned a PhD within less than five years. The position combines professional development and research training. Health insurance similar to insurance provided to graduate students paid from the grant that pays the stipend. No retirement benefits.

Research Associate: Fixed-term employees who are typically funded by grants to OSU faculty to support research and paid a monthly salary with benefits the same as all other non-classified employees at OSU. No expectations for professional development. No time limits on years since PhD or years in the position.

Research Associate (postdoc): Exactly the same as the Research Associate position from the University’s perspective, although some colleges have internal policies and expectations for term limits and a recently-earned PhD.

Table 2. The postdoc and research associate populations at OSU and change since last year

	Number		% Change
	14-Jan	15-Jan	
Clinical Fellows	20	22	10%
Postdoctoral Fellows	8	12	50%
Postdoctoral Scholars	115	112	-3%
Research Associate (postdoc)	73	64	-12%
Research Associate	74	74	0%
Total	290	284	-2%

Table 3. Distribution of postdocs and research associates among departments

	Clinical Fellow	Postdoctoral Fellow	Postdoctoral Scholar	Research Associate	Research Associate (Postdoc)	Total
OAS - Earth, Ocean & Atmo Sci	0	3	2	12	14	31
ABP - Ag Botany / Plant Path	0	1	8	8	10	27
SCH - Chemistry	0	0	14	2	5	21
FOR - Forest Ecosyst & Society	0	0	4	7	6	17
ECB - Sch of Chem/Bio/Envr Eng	0	1	6	2	3	12
PHR - Pharmacy Professnl Instr	4	0	5	1	1	11
ESE - Sch Elect Engr/Comp Sci	0	1	8	1	0	10
SZO - Integrative Biology	0	0	5	3	2	10
ATX - Enviro / Molecular Toxic	0	0	5	2	1	8
ECC - Sch of Civil/Constr Engr	0	0	6	1	1	8
EMM - Sch of Mech/Ind/Mfg Engr	0	0	6	2	0	8
VTH - Vet Teaching Hospital	8	0	0	0	0	8
FOR - Forest Eng/Resources/Mgmt	0	0	4	1	2	7
RDR - Linus Pauling Institute	0	0	0	6	1	7
SMB - Microbiology (Science)	0	0	5	0	2	7
VBS - Vet Biomedical Science	3	0	3	1	0	7
RDR - Environ Health Sci Ctr	0	6	0	0	0	6
ACS - Crop and Soil Science	0	0	1	3	1	5
AMB - Microbiology (Ag)	0	0	2	3	0	5
HHS - Sch of Bio/Pop Hlth Sci	0	0	2	1	2	5
RDR - CIMRS (Inst/Marine Res)	0	0	0	3	2	5
AFW - Fisheries and Wildlife	0	0	2	1	1	4
AHE - Hermiston Exp Sta	0	0	4	0	0	4
AHT - Horticulture	0	0	1	2	1	4
MSA - Counseling Center	4	0	0	0	0	4
AAR - Applied Economics	0	0	2	1	0	3
ABE - Biol & Ecol Engineering	0	0	1	1	1	3
AMC - Mid-Columbia Exp Sta	0	0	1	0	2	3
HHS - Sch of Soc/Bhav Hlth Sci	0	0	2	1	0	3
SMT - Mathematics	0	0	3	0	0	3
SPH - Physics	0	0	3	0	0	3
VCS - Vet Clinical Sciences	3	0	0	0	0	3
ACB - Columbia Basin Exp Sta	0	0	2	0	0	2
AFS - Food Science and Techno	0	0	0	1	1	2
ASC - Animal & Rnglnd Sciences	0	0	2	0	0	2
FOR - Wood Science / Engr	0	0	1	0	1	2
RMS - Hatfield Marine Sci Ctr	0	0	1	0	1	2
RNR - INR-Or Biodvrsty InfoCtr	0	0	0	2	0	2
SBB - Biochem / Biophysics	0	0	0	1	1	2
AEU - EOARC - Union Exp Sta	0	0	1	0	0	1
ASF - COMES - Newport Exp Sta	0	0	0	0	1	1
AST - Statistics (Ag)	0	0	0	1	0	1
AWR - Oregon Wine Res Institut	0	0	0	1	0	1
ENE - Nuclear Engineering	0	0	0	0	1	1
KED - College of Education	0	0	0	1	0	1
LCB - Acad Prog / Student Aff	0	0	0	1	0	1
RNR - Institute Natrl Res Dir	0	0	0	1	0	1
Total	22	12	112	74	64	284

Table 4. Gender distribution among appointment types.

	M	%	F	%
Clinical Fellow	4	18.2%	18	81.8%
Postdoctoral Fellow	4	33.3%	8	66.7%
Postdoctoral Scholar	69	61.6%	43	38.4%
Research Associate	39	52.7%	35	47.3%
Research Associate (Post Doc)	34	53.1%	30	46.9%
Total	150	52.8%	134	47.2%

Table 5. Information about race (note that this information was only available for slightly over half of the overall group, so these calculations should be interpreted cautiously). Values for each group are percentages of those reported.

2015		Race					
	Total	Asian (A, AO, AA, AC, AK, P)	Black / African American (B)	Native American (I)	White / Euro- American / non-Hispanic (W)	No Response	Total Reported
Clinical Fellow	22	23%	5%	0%	68%	5%	95%
Postdoctoral Fellow	12	8%	0%	0%	33%	58%	42%
Postdoctoral Scholar	112	35%	2%	1%	54%	8%	92%
Research Associate	74	24%	0%	0%	73%	3%	97%
Research Associate (postdoc)	64	31%	0%	2%	63%	5%	95%
Total	284	29%	1%	1%	61%	8%	92%

Table 6. Information about ethnicity (note that this information was only available for slightly more than 2/3 of the overall group, so these calculations should also be interpreted cautiously).

2015		Ethnicity			
	Total	Hispanic or Latino	Not Hispanic or Latino	No Response	Total Reported
Clinical Fellow	22	14%	59%	27%	73%
Postdoctoral Fellow	12	0%	33%	67%	33%
Postdoctoral Scholar	112	2%	66%	32%	68%
Research Associate	74	0%	86%	14%	86%
Research Associate (postdoc)	64	5%	64%	31%	69%
Total	284	3%	69%	28%	72%

Table 7. Mean annual compensation in 2015 by gender

	2015 - M	2015 - W	% difference W to M
Clinical Fellow	\$29,127.00	\$33,371.33	15%
Postdoctoral Scholar	\$45,757.19	\$45,538.60	0%
Research Associate	\$49,776.30	\$40,340.16	-19%
Research Associate (postdoc)	\$46,953.16	\$41,447.48	-12%
Total	\$46,653.68	\$41,382.33	-11%

* Postdoc fellows not included as they are externally funded.

Table 8. Stipends established for 2015 by the National Institutes of Health for postdoc-level Kirschstein-National Research Service awards

Years of Experience	Stipend for FY 2015	Monthly Stipend
0	\$42,840	\$3,570
1	\$44,556	\$3,713
2	\$46,344	\$3,862
3	\$48,192	\$4,016
4	\$50,112	\$4,176
5	\$52,116	\$4,343
6	\$54,216	\$4,518
7 or More	\$56,376	\$4,698

See more at: <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-14-046.html#sthash.d4oMca8Z.dpuf>

Table 9. Mean Postdoctoral Scholar stipends by department/unit for departments/units who have at least three Postdoctoral Scholars

	Average annual stipend	Number of postdocs (>3)
SCH - Chemistry	\$41,076.00	14
SPH - Physics	\$41,108.00	3
ATX - Enviro / Molecular Toxic	\$41,459.67	5
SZO - Integrative Biology	\$42,256.80	5
AHE - Hermiston Exp Sta	\$43,500.00	4
ESE - Sch Elect Engr/Comp Sci	\$43,765.50	8
VBS - Vet Biomedical Science	\$44,552.00	3
ECB - Sch of Chem/Bio/Envr Eng	\$44,582.00	6
PHR - Pharmacy Professnl Instr	\$44,644.80	5
ABP - Ag Botany / Plant Path	\$45,789.00	8
ECC - Sch of Civil/Constr Engr	\$46,336.00	6
SMT - Mathematics	\$47,268.00	3
SMB - Microbiology (Science)	\$48,888.00	5
FOR - Forest Ecosyst & Society	\$49,551.00	4
FOR - Forest Eng/Resources/Mgmt	\$53,213.25	4
EMM - Sch of Mech/Ind/Mfg Engr	\$55,334.00	6

Table 10. Mean annual compensation as of January 2015 by visa/residency status. Explanation of the various categories can be found at the [State Dept. web site](#).

Non-immigrant visa status	Average annual salary or stipend	number of postdocs	difference from LPR compensation
F1	45580	18	-15%
F-I OPT	42402	6	-20%
H-1B	46151	34	-13%
J-1	43557	38	-18%
TN	46830	4	-12%
LPR	53318	9	0%