

The Postdoctoral Community at Oregon State University

January, 2016

This report provides a snapshot of the postdoctoral community at OSU as of January 2016. 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.

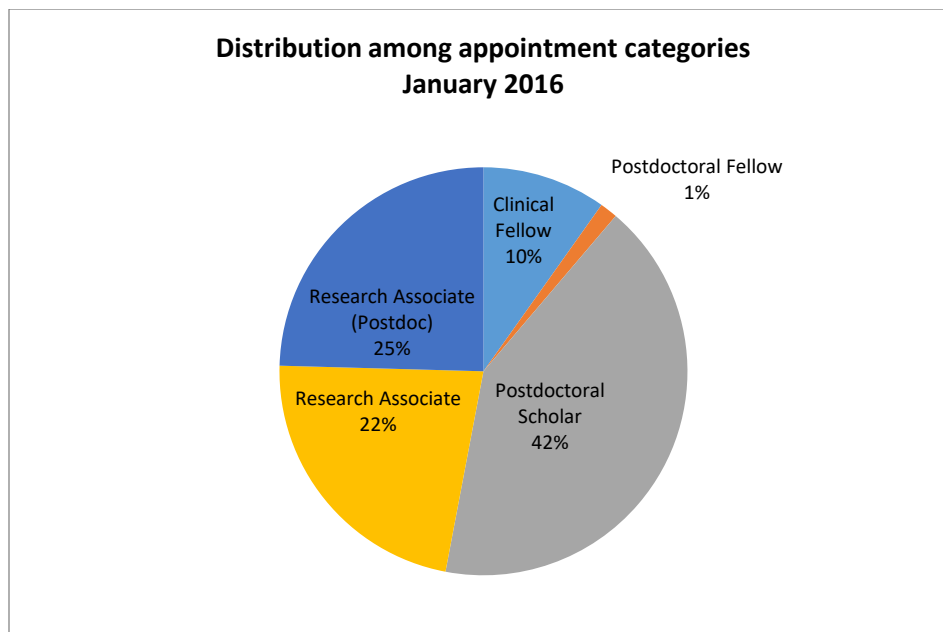


Figure 1. Distribution of postdocs across appointment categories at OSU.

Size of the population and change since last year.

Since January, 2015 the overall community of postdocs and research associates has held steady (increased by about half a percent) (Table 2). However, within this very stable overall population there are some changes among specific appointment types. For example, the number of Clinical Fellows increased by 27%, and the number of Fellows decreased by 2/3, however this category consists of a relatively small numbers (down

from 12 to currently only 4). This year, a modest increase (6%) in the number of Postdoctoral Scholars, was accompanied by a similar (5%) decrease in the number of Research Associate (postdocs), while the number of Research Associates remained constant. Figure 2 illustrates the trend among the various appointment categories over the past 5 years.

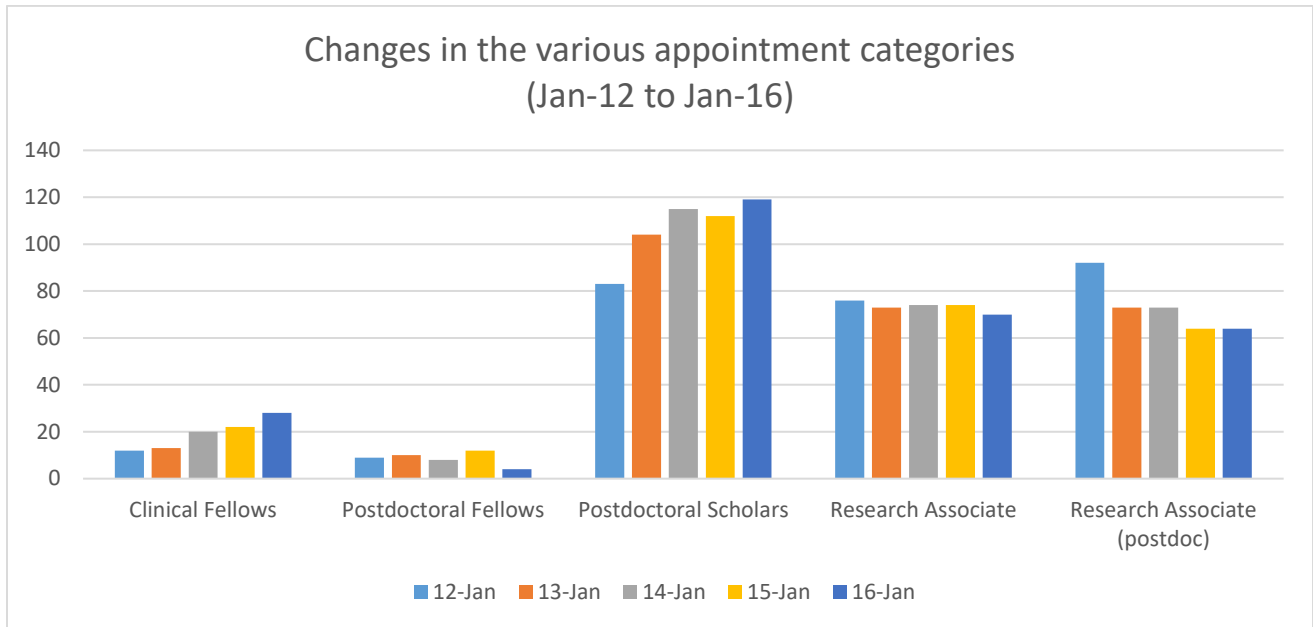


Figure 2. Variation among appointment categories over the past 5 years.

For the Postdoc Scholar category an official phase-out was started on October 13, 2015. While existing appointments are being honored such that Postdoc Scholars budgeted in pending and awarded grants are continuing through the end of the grant period, it is expected that we will see a decline in the numbers in the coming year. In the past months, since the phase-out notice was published, we have seen a modest decline in the number of Postdoc Scholars appointed each month, see Figure 3, with only 2 new appointments in January 2016. We will continue to monitor these numbers to evaluate the impact on the overall numbers of postdocs at OSU.

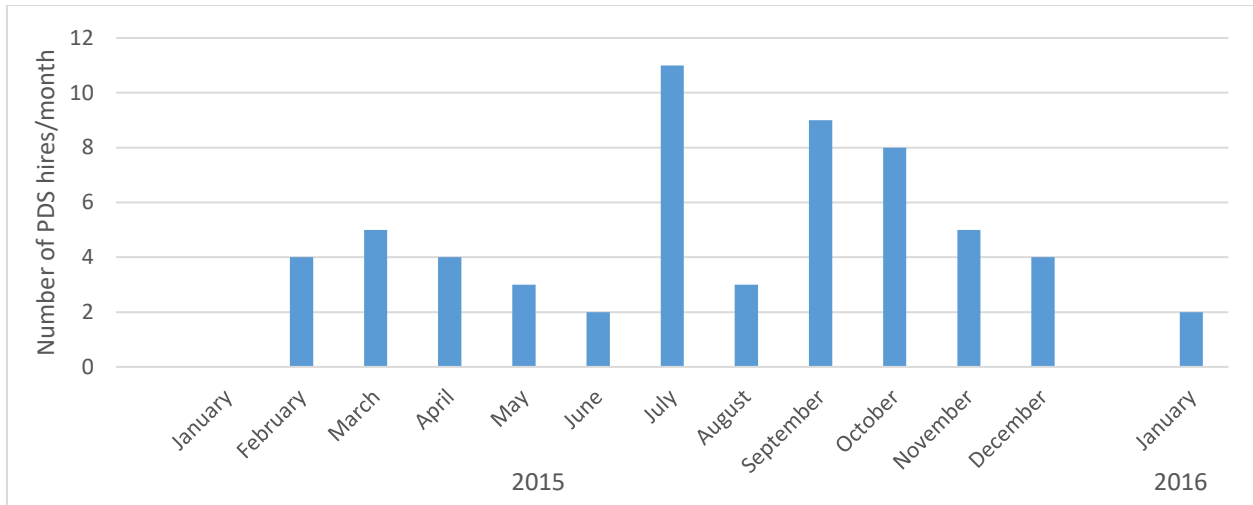


Figure 3. Monthly Postdoc Scholar appointments in 2015 (the phase-out took effect Oct 13th, 2015).

Postdocs and Research Associates are distributed among many departments at OSU, see Figure 4 and Table 3. As of January 2016, the College of Earth, Ocean & Atmospheric Science and Botany and Plant Pathology Department have the largest number of appointments across the categories and host a quarter of all postdocs at OSU. There are

also relatively large numbers (>10) in Chemistry; Forest Ecosystem & Society; Civil and Construction Engineering, and in Pharmacy.

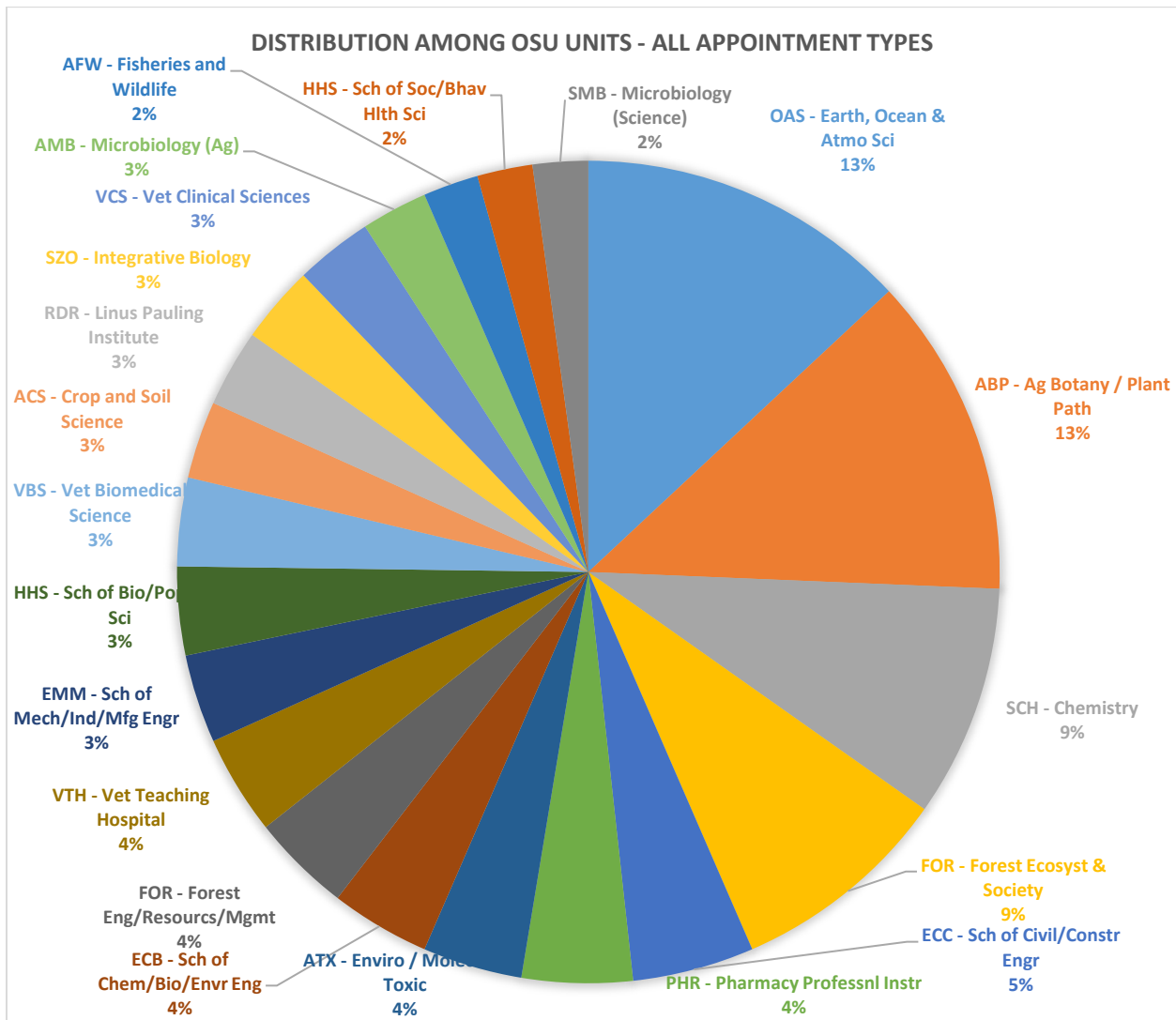


Figure 4. Distribution of postdocs and research associates among OSU departments (n > 5).

However, for the Postdoctoral Scholar category, Chemistry has the largest number with 16, School of Civil & Construction Engineering has 10; Botany & Plant Pathology have 8; while the School of Mechanical, Industrial & Manufacturing Engineering, Forest Eco Systems, and Forest Engineering and Resource Management, and Pharmacy have 7 each, see Figure 5 (only units with 3 or more Postdoc Scholars are included). It is worth noting that these are the units that are likely to be most affected by the on-going phase-out. While a consistent increase in this category was noted in 2014 and 2015 in schools across the College of Engineering, the overall numbers decreased from 28 to 22 in the past year, and have concentrated in CCE, hosting 10, and in MIME, hosting 7, of the 22 total.

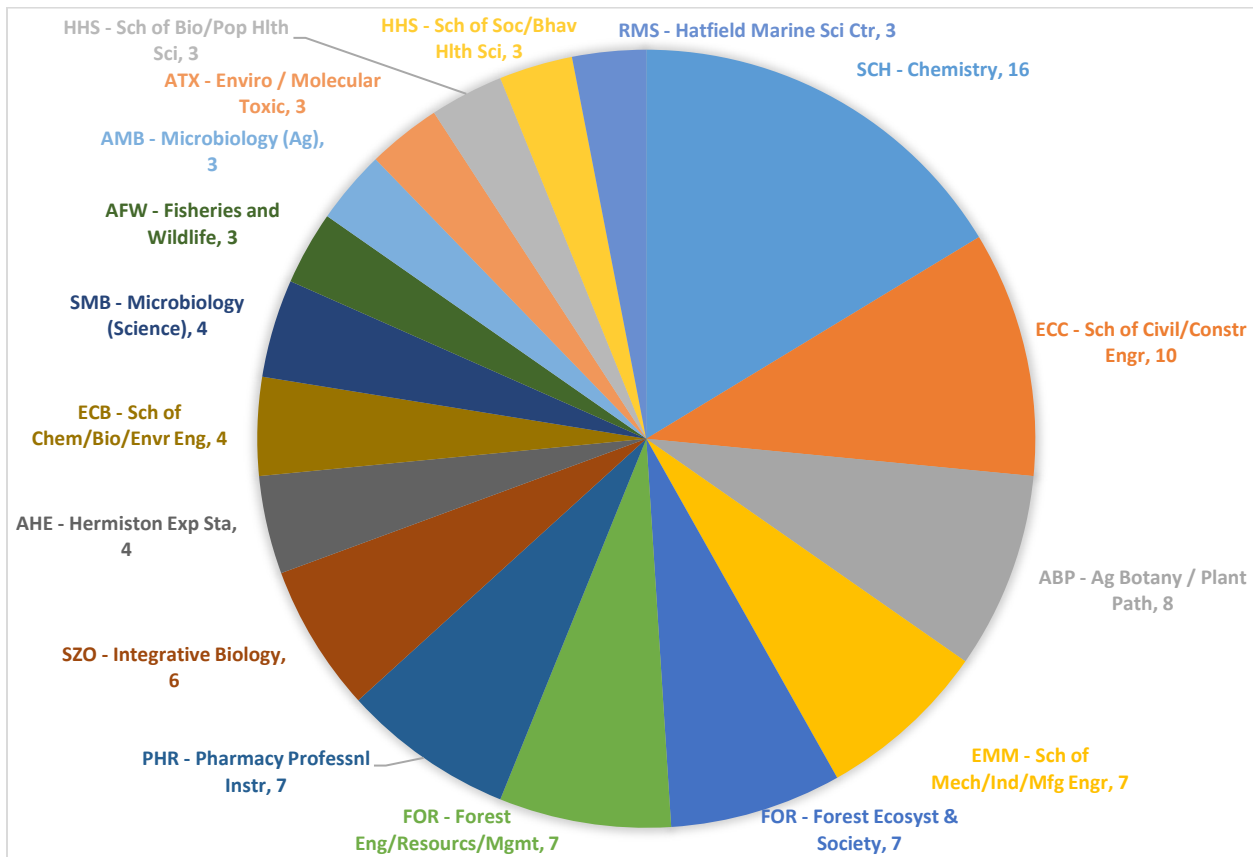


Figure 5. Distribution of Postdoc Scholars among OSU departments (n > 3).

Gender, Race and Ethnicity

Averaged over the entire community of postdocs and research associates, men outnumber women (52.3% to 47.7%). This is fairly similar to the gender distribution in the OSU undergraduate population. However, the gender distribution varies greatly among the appointment types (Figure 6 and Table 4). Close to 80% of the Clinical Fellows and more than 3/4 of Postdoctoral Fellows are female, whereas males outnumber females 60%

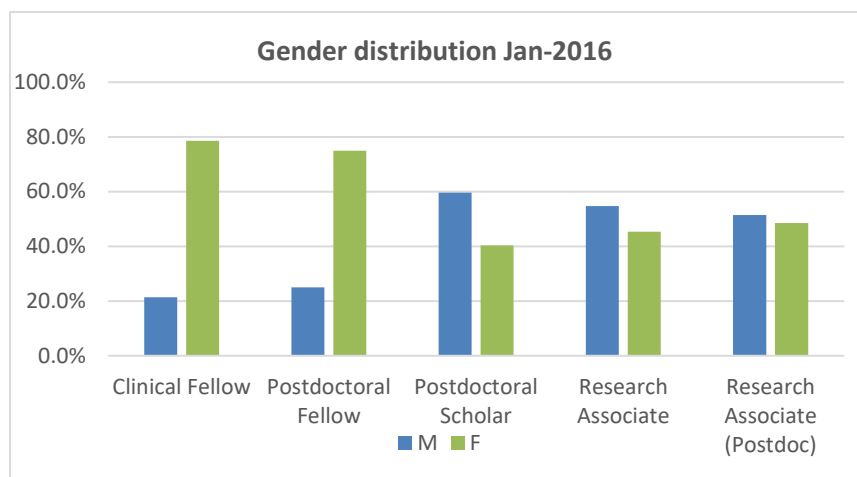


Figure 6. Gender distribution, January 2016

to 40% among Postdoctoral Scholars. There is a relatively more balanced gender distribution among Research Associate (postdocs) and Research Associates.

Information about race is available for 72% of the overall postdoctoral community and the summary information is provided in Table 5. The Research Associate (postdoc) and Research Associate categories have vastly higher response rates of 95% and 90%, respectively, see Figure 7a.

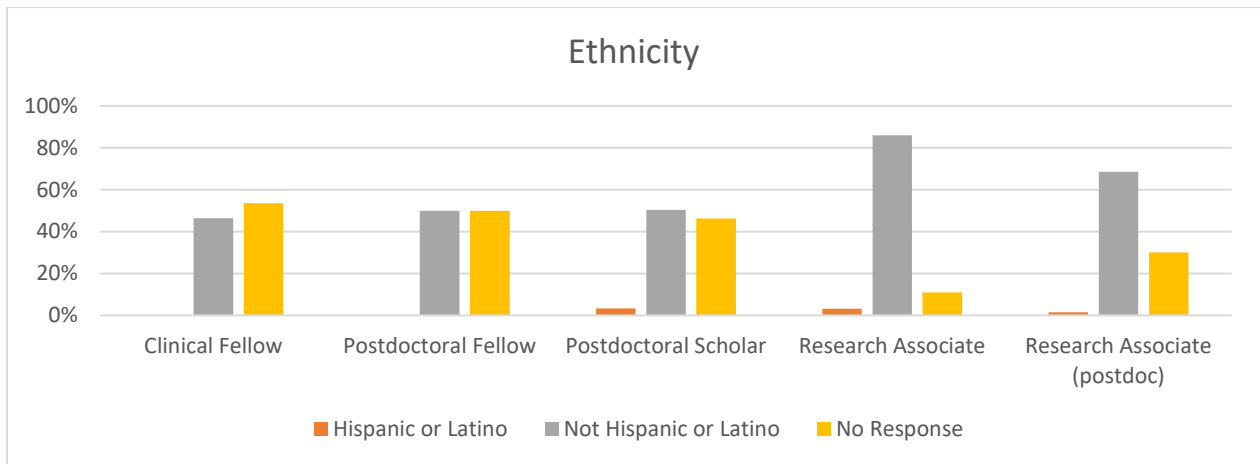


Figure 7a. Reported information about ethnicity, January 2016

Slightly less than half of the general postdoc population reports their race as white/non-Hispanic. There is some variation among the different categories resulting in percentages between 43%-66% (excluding the few Fellows). The second largest group totaling 22% overall is Asian. Less than 2% total of the entire postdoc/research associate population is African American or Native American, with no representation among Postdoc Fellows and Clinical Fellows.

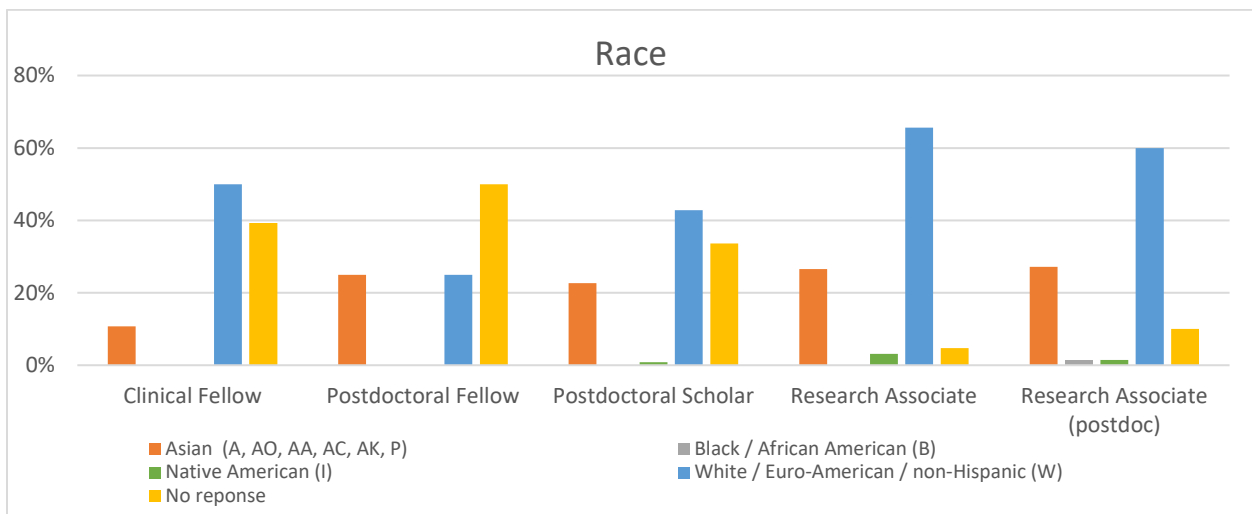


Figure 7b. Reported information about race, January 2016

Similarly, 72% of the overall group reported ethnicity (Table 6), and of those, approximately 3% self-identify as Hispanic or Latino/Latina overall, which is the same percentage as in 2015. For both race and ethnicity, it is interesting to note that self-reporting is much higher (95% and 89%, respectively) among Research Associates and Research Associate (postdocs), who generally have a longer tenure at OSU. These two groups also are the most diverse, although the numbers are still very low, see Figure 7b.

Rates of compensation

The average compensation rate for Postdoctoral Scholars has increased steadily since 2012, and since 2015 has been above the level of both Research Associates and

Research Associate (postdocs). This is partially due to a decrease in average compensation starting in 2015, at least for Research Associates. It is more likely a consequence of the mandated

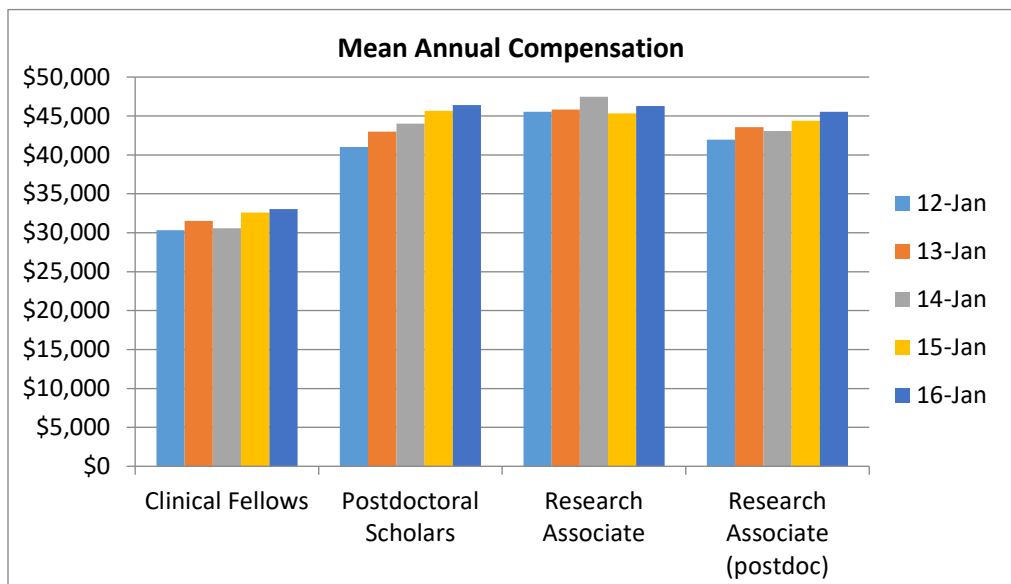


Figure 8. Mean annual compensation, January 2016

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 2016 was significantly lower for Clinical Fellows than for the other types of appointments; average compensation for Postdoctoral Scholars are now the highest, followed by Research Associates, and Research Associate (postdocs) (Figure 8). Figure 8 demonstrates that there has been an increase in compensation from 2012 to 2016 for all categories, except for the slight decrease in compensation for Research Associates. Postdoctoral Fellows are not included in this analysis because they are externally funded.

Figure 9 shows the changes in compensation from 2012 to 2016 among men and women; most of the categories have seen a similar increase for men and women. Figure 9 and Table 7 also show that among Clinical Fellows, women now again earn less than men (by 5%), after a brief year in 2015 where they were earning significantly more than men (by 15%). However, across all categories, women continue to be compensated at lower rates (by 5-15%). The under-compensation is most significant for Research Associate (postdocs) and Research Associates in 2016, where the salary differential is skewed more drastically in favor of men (15% and 14%, respectively). Even among Postdoctoral Scholars, where the rigorous policies around minimum stipends is expected to contribute favorably to equality in compensation, we now see a 5% difference in compensation across gender (in favor of men).

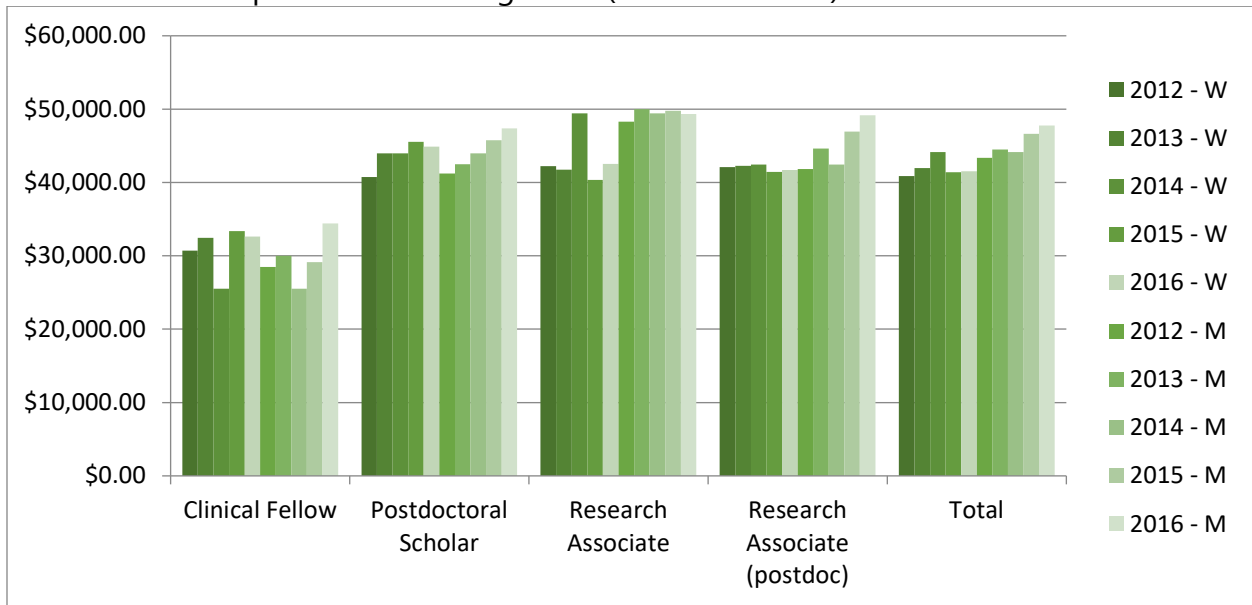


Figure 9. Mean annual compensation among women and men, January 2012-January 2016 (women are represented by the leftmost bars, men on the right, for each category)

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 2016 the minimum Kirschstein-NRSA stipend for an entry-level postdoc is \$43,692, and the levels increase with years of service (Table 8). At this point, only 16 Postdoctoral Scholars at OSU are paid less than the entry-level minimum set by NIH, a significant improvement since 2015 when the number was 27, and since 2014 when the number was 40. And only 3 units are currently paying average stipends below the required minimum (Table 9) against 7 in 2014, and only two units are more than \$3000 below the minimum. Importantly, the gap is decreasing significantly, 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.

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 unclassified 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 (15-16)
	14-Jan	15-Jan	16-Jan	
Clinical Fellows	20	22	28	27.3
Postdoctoral Fellows	8	12	4	-66.7
Postdoctoral Scholars	115	112	119	6.3
Research Associate (postdoc)	73	64	64	0.0
Research Associate	74	74	70	-5.4
Total	290	284	285	0.4

Table 3. Distribution of postdocs and research associates among departments

January 2016	Clinical Fellow	Postdoctoral Fellow	Postdoctoral Scholar	Research Associate	Research Associate (Postdoc)	Total
OAS - Earth, Ocean & Atmo Sci	0	2	2	7	19	30
ABP - Ag Botany / Plant Path	0	0	8	9	12	29
SCH - Chemistry	0	0	16	2	3	21
FOR - Forest Ecosyst & Society	0	0	7	7	6	20
ECC - Sch of Civil/Constr Engr	0	0	10	1	0	11
PHR - Pharmacy Professnl Instr	3	0	7	0	0	10
ATX - Enviro / Molecular Toxic	0	0	3	2	4	9
ECB - Sch of Chem/Bio/Envr Eng	0	1	4	3	1	9
FOR - Forest Eng/Resources/Mgmt	0	0	7	1	1	9
VTH - Vet Teaching Hospital	9	0	0	0	0	9
EMM - Sch of Mech/Ind/Mfg Engr	0	0	7	1	0	8
HHS - Sch of Bio/Pop Hlth Sci	0	0	3	1	4	8
VBS - Vet Biomedical Science	4	0	2	1	1	8
ACS - Crop and Soil Science	0	0	2	4	1	7
RDR - Linus Pauling Institute	0	0	1	5	1	7
SZO - Integrative Biology	0	0	6	1	0	7
VCS - Vet Clinical Sciences	7	0	0	0	0	7
AMB - Microbiology (Ag)	0	0	3	3	0	6
AFW - Fisheries and Wildlife	0	0	3	1	1	5
HHS - Sch of Soc/Bhav Hlth Sci	0	0	3	1	1	5
SMB - Microbiology (Science)	0	0	4	0	1	5
AHE - Hermiston Exp Sta	0	0	4	0	0	4
MSA - Counseling Center	4	0	0	0	0	4
RMS - Hatfield Marine Sci Ctr	0	0	3	0	1	4
AAR - Applied Economics	0	0	2	1	0	3
ABE - Biol & Ecol Engineering	0	0	1	1	1	3
AHT - Horticulture	0	0	0	3	0	3
ESE - Sch Elect Engr/Comp Sci	0	0	2	1	0	3
RNR - INR-Or Biodvrsty InfoCtr	0	0	1	2	0	3

ACB - Columbia Basin Exp Sta	0	0	2	0	0	2
AFS - Food Science and Techno	0	0	0	0	2	2
AMC - Mid-Columbia Exp Sta	0	0	1	0	1	2
ASC - Animal & Rnglnd Sciences	0	0	2	0	0	2
ASF - COMES - Newport Exp Sta	0	0	0	0	2	2
KED - College of Education	0	0	1	1	0	2
RDR - CIMRS (Inst/Marine Res)	0	0	0	2	0	2
RNR - Institute Natrl Res Dir	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
BUS - College of Business Dept	0	0	0	0	1	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
All	28	4	119	64	70	285

Table 4. Gender distribution among appointment types.

2016	M	%	F	%
Clinical Fellow	6	21.4	22	78.6
Postdoctoral Fellow	1	25.0	3	75.0
Postdoctoral Scholar	71	59.7	48	40.3
Research Associate	35	54.7	29	45.3
Research Associate (Post Doc)	36	51.4	34	48.6
Total	149	52.3	136	47.7

Table 5. Reported information about race.

2016	Race					
	Total	Asian (A, AO, AA, AC, AK, P)	Black / African American (B)	Native American (I)	White / Euro- American / non- Hispanic (W)	No Response
Clinical Fellow	28	11%	0%	0%	50%	39%
Postdoctoral Fellow	4	25%	0%	0%	425	50%
Postdoctoral Scholar	119	23%	0%	1%	43%	34%
Research Associate	64	27%	0%	3%	66%	5%

Research Associate (postdoc)	70	27%	1%	1%	60%	10%
Total	285	22.4%	0.3%	1.1%	49.%	28%

Table 6. Reported information about ethnicity.

2016		Ethnicity		
	Total	Hispanic or Latino	Not Hispanic or Latino	No Response
Clinical Fellow	28	0%	46%	54%
Postdoctoral Fellow	4	0%	50%	50%
Postdoctoral Scholar	119	3%	50%	46%
Research Associate	64	3%	86%	11%
Research Associate (postdoc)	70	1%	69%	30%
Total	285	3%	69%	28%

Table 7. Mean annual compensation in 2016 by gender

	2016 - M	2016 - W	% difference W to M
Clinical Fellow	\$34,420.00	\$32,641.09	-5%
Postdoctoral Scholar	\$47,395.52	\$44,904.07	-5%

Research Associate	\$49,339.22	\$42,547.58	-14%
Research Associate (postdoc)	\$49,170.40	\$41,705.83	-15%
Total	\$47,760.87	\$41,544.19	-13%

* Postdoc fellows not included as they are externally funded.

Table 8. Stipends established for 2016 by the National Institutes of Health for postdoc-level Kirschstein-National Research Service awards

Years of Experience	Stipend for FY 2016	Monthly Stipend
0	\$43,692	\$3,957
1	\$45,444	\$3,987
2	\$47,268	\$4,018
3	\$49,152	\$4,193
4	\$51,120	\$4,345
5	\$53,160	\$4,519
6	\$55,296	\$4,700
7 or More	\$57,504	\$4,880

See more at: <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-003.html>

Table 9. Mean Postdoctoral Scholar stipends for 2016 by department/unit for departments/units who have at least 3 Postdoctoral Scholars

SZO - Integrative Biology	\$39,781.00	6
AMB - Microbiology (Ag)	\$40,536.00	3
PHR - Pharmacy Professnl Instr	\$43,170.86	7
ATX - Enviro / Molecular Toxic	\$43,728.00	3
SCH – Chemistry	\$44,268.75	16
ECC - Sch of Civil/Constr Engr	\$44,460.00	10
HHS - Sch of Bio/Pop Hlth Sci	\$44,580.00	3
HHS - Sch of Soc/Bhav Hlth Sci	\$44,580.00	3
ABP - Ag Botany / Plant Path	\$45,609.00	8
ECB - Sch of Chem/Bio/Envr Eng	\$48,519.00	4
FOR - Forest Ecosyst & Society	\$48,546.86	7
RMS - Hatfield Marine Sci Ctr	\$49,452.00	3
FOR - Forest Eng/Resources/Mgmt	\$49,762.29	7

SMB - Microbiology (Science)	\$50,829.00	4
AFW - Fisheries and Wildlife	\$53,832.00	3
AHE - Hermiston Exp Sta	\$54,141.00	4
EMM - Sch of Mech/Ind/Mfg Engr	\$54,406.29	7