Endocrine Society Basic Researcher Workforce Survey Report

INTRODUCTION

In 2013, Endocrine Society leadership expressed interest in developing a tool for the Society’s Basic Researcher constituency that would help researchers set expectations for salaries and facilitate negotiations with prospective employers. Towards this end, Vice President for Basic Research Dr. Ursula Kaiser worked with the Research Affairs Core Committee Basic Research Subcommittee to develop a workforce survey for the Society’s basic researcher members. The survey was designed to capture data on such topics as professional position/development, salaries and benefits, and institutional support/infrastructure. The survey was sent to all US-based basic researcher members for two weeks in July 2013, followed by an additional two weeks in October 2013. In total, the survey generated 536 responses; of these, 430 completed the entire survey. The response rate was nearly 24% of all US-based basic researcher Endocrine Society members. The following report provides a brief summary of the survey results. If you have any questions about the survey data, or wish to request any additional breakdowns of the analysis, please contact Joseph Laakso, Associate Director for Science Policy at jlaakso@endocrine.org.

Demographic Questions

Nearly all respondents were Full Members (86%) or Early Career Members (13%) (Fig. 1).

Figure 1 – Question 1: Please indicate your membership type

The majority of respondents who reported an ethnicity (Fig. 2) indicated that they were White (77%), with Asian (11%) being the second most frequent response. Fifty-nine percent of respondents were male.

Figure 2 - Question 28: Indicate your race/ethnicity

Nearly 81% of respondents were between the ages of 36 – 65; many respondents (47%) had over 20 years of professional experience (Fig. 3 - 4).
Nearly 21% of respondents were early-career investigators with less than 5 years of post-training experience.

The majority of respondents were tenured (55%) or tenure-track (16%) investigators; however there was a significant number of contract (17%) and at-will (11%) employees represented in the survey (Fig. 6). The average indicated length of contract employment was 3 years.

Basic science researchers indicate that they spend the majority of their time (64%) on...
research activities, followed by teaching (18%) and service activities (14%). While the aggregate average time spent on clinical practice was only 4%, nearly 19% of basic scientists reported spending some time (>5%) on clinical activity (Fig. 7). The average time spent on each activity was correlated with the perceived importance of the activity on the tenure decision at an institution.

Figure 7 - Question 8: Please estimate on a percentage basis the amount of work time spent on the following activities

For those respondents indicating a teaching activity, the majority taught graduate courses (72%) or medical school courses (60%) with about 33% teaching undergraduate courses (Fig. 8). Other teaching responsibilities included medical resident or fellowship programs, veterinary school courses, and pharmacy school courses.

Respondents also participate in a broad array of service activities. More than half participate in peer review (98%), faculty mentorship programs (69%) or editorial responsibilities (68%). At least 10% of respondents indicated that they participated in nearly every listed option in the survey (see question #40, on pg. 5 of the survey).

Figure 8 - Question 32: If you teach, in which of the following settings do you teach?

GRANT SUPPORT

Endocrine Society Basic Researchers indicated an unanticipated variety of grant support. The most frequent sources of grant support as a principal or key investigator were NIH R series grants (66%), institutional grant support (46%) and awards from foundations (45%). Nearly 16% of researchers indicated current or past support from NSF and/or DOD. Over 6% of researchers are or were supported by USDA (Fig. 9). There were numerous additional sources of funding reported by investigators. Commonly referenced other sources of support included the American Heart Association, the Juvenile Diabetes Research Fund, the Environmental Protection Agency, the Department of Veterans Affairs and myriad industry support arms.
Figure 9 - Question 13: In the course of your career, please indicate the type(s) of grant support you have been awarded (present inclusive). Please only include those awards where you were a PI or Key Investigator.

**SALARY AND BENEFITS**

The average salary for the entire dataset is ~$130,600/yr. Of the respondents, 298 also reported receiving a yearly salary adjustment and/or bonus (Fig. 10). The average size of the reported bonus or adjustment was ~$10,500/yr. One hundred and sixty-five respondents reported receiving additional sources of income besides a salary or bonus; on average this additional income was ~$20,200/yr.

![Graph showing the types of grant support](image_url)

**Figure 10 - Question 17:** Please indicate whether you typically receive any of the following yearly salary adjustments.

Of the 198 respondents who reported additional sources of income other than a salary or bonus, 57% reported that they derived additional income through consulting (Fig. 11). Nearly 19% of respondents reported receiving income through summer salary support. The percentage of respondents reporting income from summer salary support was higher for those respondents who indicated that they were on a 9 month contract.

![Bar chart showing types of income](image_url)

In addition to income from clinical work (~6%), other common sources of support indicated by respondents were administrative supplements, editorial responsibilities (e.g., for journals) and honoraria (e.g., for invited presentations).
Figure 11 - Question 18: Please indicate if you have any additional sources of compensation derived through professional activities that are not part of your base salary.

Taken together, the average total compensation of survey respondents is on par with the total compensation of a US university full professor in the life sciences according to *The Scientist*. However, the average base salary is highly dependent on career stage (associate, assistant, or full professor) and on the number of years post-training (Fig. 12).

Figure 12 - Question 16: Please estimate to the nearest US $1,000 your current total annual base salary.

**Variables Potentially Affecting Base Salary**

Nearly half of respondents report that they had the opportunity to negotiate terms in their job package, such as salary and benefits. Eleven percent of respondents did not know whether or not they had this opportunity (Fig. 13). The remaining respondents indicated that they did not have the opportunity to negotiate. This may indicate a need for mentoring or educational programming that makes trainees aware of opportunities to negotiate terms of a job package.

Commonly negotiated items included base salary (80%), research support (68%) and lab/office space (64%). Respondents less frequently indicated the ability to negotiate a signing bonus (16%) or annual bonus (8%).

Salaries varied somewhat depending on the sex of the respondent; however the differences were not statistically significant.

![Graph showing variables potentially affecting base salary](http://www.the-scientist.com/?articles.view/articleNo/38033/title/2013-Life-Sciences-Salary-Survey/)
Please note that the data for adjunct faculty were limited (n = 11 total, Fig. 14).

Figure 14 - Question 16: Please estimate to the nearest US $1,000 your current total annual base salary (breakdown by gender).

We also attempted to assess regional variation in the collected data (data below in Fig. 15 represent full professors only; other data are available upon request).

LAB SPACE, MANAGEMENT, AND ANIMAL FACILITIES

Survey respondents reported an average individual lab size of ~1100 net accessible square feet. The size of individual labs ranged from less than 100 net accessible square feet to nearly 6,500 net accessible square feet (blue stacked bars in Fig. 16 represent averages). The average reported shared lab space was ~1,500 net accessible square feet (red stacked bars); however, the reported range was highly variable, with some respondents indicating up to ~15,000 net accessible square feet of total shared lab space.

Figure 16 - Question 20: Please estimate the amount of personal lab space under your direct management / Question 21: Please estimate the amount of shared lab space where you have regular access

Respondents managed an average of 5.8 staff members in their laboratories, which includes students (graduate and undergraduate), technicians, postdocs, and research scientists. There were, on average, 1.5 graduate students and 1.2 postdocs per laboratory.

Most survey respondents have access to animal facilities and make regular use of them (73%). Nearly all remaining respondents did not indicate that they needed access to animal facilities. The number of animal cages used and the cost associated with the use of animal facilities were highly variable (Fig. 17).
Figure 17 - Question 38: If you make use of an animal facility for mice and/or rats, please estimate the number of cages you or your lab manages.

Reported per diem costs ranged from $0.35 to over $1.25 per cage per day; however, the total average cost for all respondents who used animal facilities came to ~$3,000 per month. The use of animal facilities therefore represents a significant total cost to many Endocrine Society basic researchers.

**ADDITIONAL SERVICES THE ENDOCRINE SOCIETY COULD PROVIDE**

Of the prepared responses that survey respondents could choose from, 70% indicated that an online research networking tool would be useful. Slightly over half of respondents (~51%) reported that a listserv for basic scientists would be useful (Fig 18). Twenty percent of respondents thought that an online message board would be useful.

Figure 18 - Question 30: Please indicate if there are any services that the Endocrine Society could provide that you would find useful.

In space for ‘other’ responses, respondents indicated a variety of potential services that the Society could provide for basic researchers, including: workshops on new tools and approaches to translational science, a “trainee search feature”, sources of collaborative or bridge grant funding, increasing endocrine representation on study sections, and job postings for basic scientists.