

# FAS/SEAS Postdoc Association Annual Survey Report 2021

## Summary

The FAS/SEAS Postdoc Association (PDA) performed a survey of the ~1300 postdocs at FAS/SEAS. We received 375 responses with demographics similar to data provided by Harvard, indicating that our sample is representative. We identified underrepresentation of Black and Native American scholars, women, and disabled scholars in the Harvard FAS postdoc community. Our survey results identify areas where Harvard FAS and SEAS could better support postdocs, especially those from historically marginalized demographics, in achieving their full potential as academic scholars. These areas include:

- (1) **Salary:** Harvard FAS sets its minimum salary lower than *all* other universities in Boston (including HMS/HSPH) and *all* of our peer institutions. We find that salaries are lowest in life sciences departments and that low salary negatively affects postdoc happiness. Additionally, postdocs funded by Harvard faculty are paid inequitably based on race and international status, with international scholars of color being paid less than white citizens/permanent residents.
- (2) **Work/Department culture:** We report that ~10% of postdocs experience bullying at Harvard, with as many as 25% of postdocs in some departments reporting having experienced bullying. 63% of these cases reported that the person engaging in bullying behavior to be faculty. We further found that ~8% of female postdocs have experienced gender discrimination or sexual harassment at Harvard.
- (3) **Support related to the COVID-19 Pandemic:** The biggest reported areas in which postdocs were impacted by the pandemic were mental health and speed of research due to the COVID-19 pandemic.
- (4) **Support for International Scholars:** We find the international scholars, especially those on J1 visas, face additional hurdles to success in their postdocs. We also gathered suggested changes to policies and procedures for interactions between the Harvard International Office (HIO) and postdocs.

Based on these findings, we make the following recommendations:

### (A) Salary

- (a) Raise Harvard FAS mandated minimum salaries to the NIH NRSA minimum salary scale (with yearly increases to account for experience) for FY 2022. Most other universities (including HMS/HSPH) use this scale to set postdoc salary minimum, and currently 46% of Harvard FAS/SEAS postdocs are paid below the NIH minimum salary scale.
- (b) Make the NIH minimum salary scale FAS's official recommended salary starting immediately, and notify postdocs being paid below this scale, as well as their faculty mentors.
- (c) Actively monitor and address inequities in salary.
- (d) Create guidelines for faculty hiring postdocs to reduce bias.

### (B) Work/Department culture

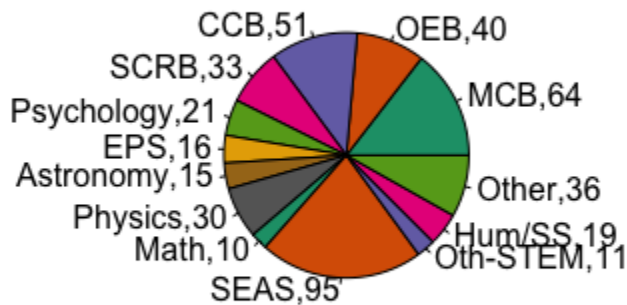
- (a) Mount an information campaign to make postdocs aware of resources available to them to aid in issues of bullying, harassment, or discrimination.
  - (b) Require management reviews and training (as necessary) for faculty that are managing postdocs.
  - (c) Provide voluntary training, specifically targeted towards working with postdocs, for faculty who wish to learn about better management practices.
  - (d) Provide supplemental mentoring resources to postdocs experiencing bullying.
- (C) Support related to the COVID-19 Pandemic
- (a) Prioritize opportunities for postdocs to build connections with their academic communities (e.g., by increasing funding for the PDA/PDO).
  - (b) Provide financial support for career development opportunities (e.g., reinstate travel grants for postdocs).
  - (c) Hold discussions between postdocs and the HIO (see below).
  - (d) Increase financial support for postdoc parents.
- (D) Support for International Scholars
- (a) Discuss FAS guidelines for H1B sponsorship.
  - (b) Offer HIO office hours during tax season.
  - (c) Increase transparency about H1B processing.
  - (d) Increase dialogue between the postdoc community and HIO.

## **Background**

Between April 7, 2021 and June 15, 2021 we conducted a survey to better understand the FAS postdoctoral community. We asked questions about issues such as salary, benefits, workload, and career development opportunities.

In total, we collected N = 375 responses: a response rate of 28.8% (there are ~1300 postdocs, research associates, and College Fellows across FAS).<sup>1</sup> We gathered responses from Postdocs affiliated with 23 different departments. The distribution of the core demographics in our sample aligns well with those in the 2018 Presidential Task force on Inclusion and Belonging, which indicates that this is a representative sample.

*Departmental Representation, number of responses:*



In this document, we draw on the results of our survey to diagnose core barriers to postdoctoral inclusion and happiness in the Harvard community, and propose solutions that we ask the administration to implement. We also build on our survey findings and recommendations from 2020. We will discuss the following issues:

1. Diversity and inclusion: within the postdoc community at FAS and by department
2. Salary discrepancies between Harvard and its peer institutions and salary equity among postdocs at Harvard
3. Postdoc experiences during COVID-19 pandemic
4. Support for international postdocs from HIO and Harvard FAS

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<sup>1</sup> We used Harvard Qualtrics. The link to the Postdoc survey was only shared using Harvard email, and could only be filled out once on each IP address. We collected responses between April 7 and June 15, 2021. We are reporting data from responses that completed at least 75% of the survey.

## Current Postdoctoral Demographics

The FAS Postdoctoral Association highly values diversity and inclusion. We designed our survey questions such that we would be able to extract data on how well Harvard promotes the diversity and inclusion of postdocs. We will address these data throughout the report, but will focus in this section on basic demographic information.

Based on our survey, we found that historically underrepresented groups are still very much underrepresented among postdocs at Harvard. There are very few postdocs who identify as races other than white or Asian (i.e., Black or Other<sup>2</sup>: only 9% of all postdocs). We note that this underrepresentation is particularly stark for Black and Indigenous scholars: only 1% of respondents to our survey identified as Black and 0 identified as Native American/Indigenous.

We also found that female postdocs are underrepresented compared to male postdocs (38% v. 60%). We note that this is in contrast to three recent worldwide, national, and Boston-area postdoc surveys, which showed roughly equal representation of men and women among postdocs<sup>3</sup>, suggesting that Harvard's underrepresentation of women may be due to Harvard-specific policies.

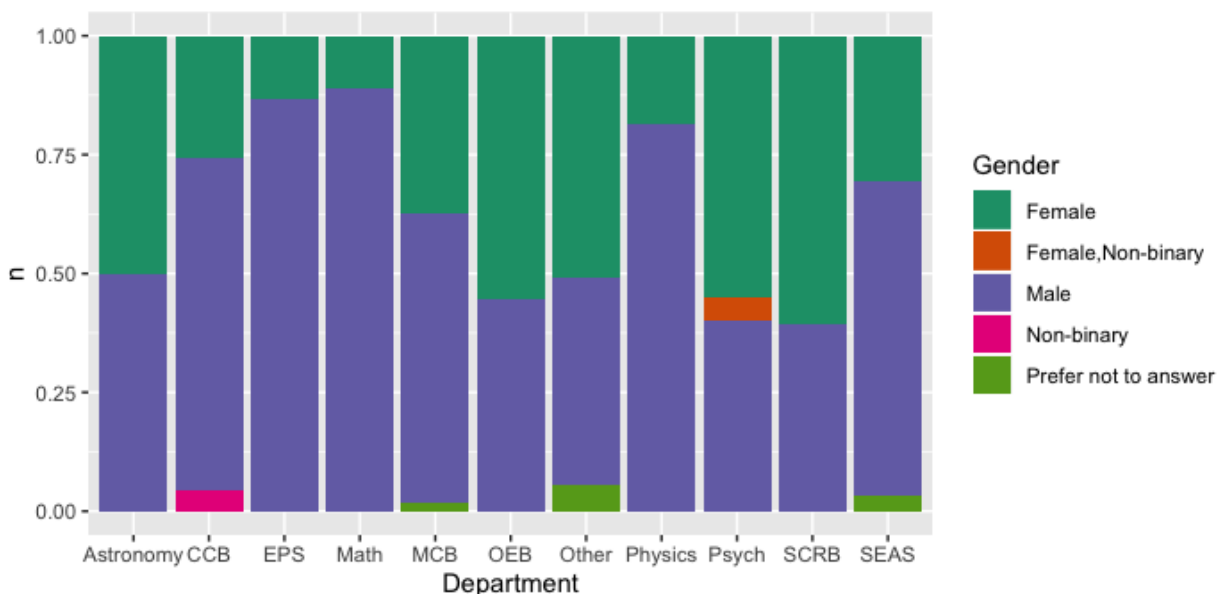
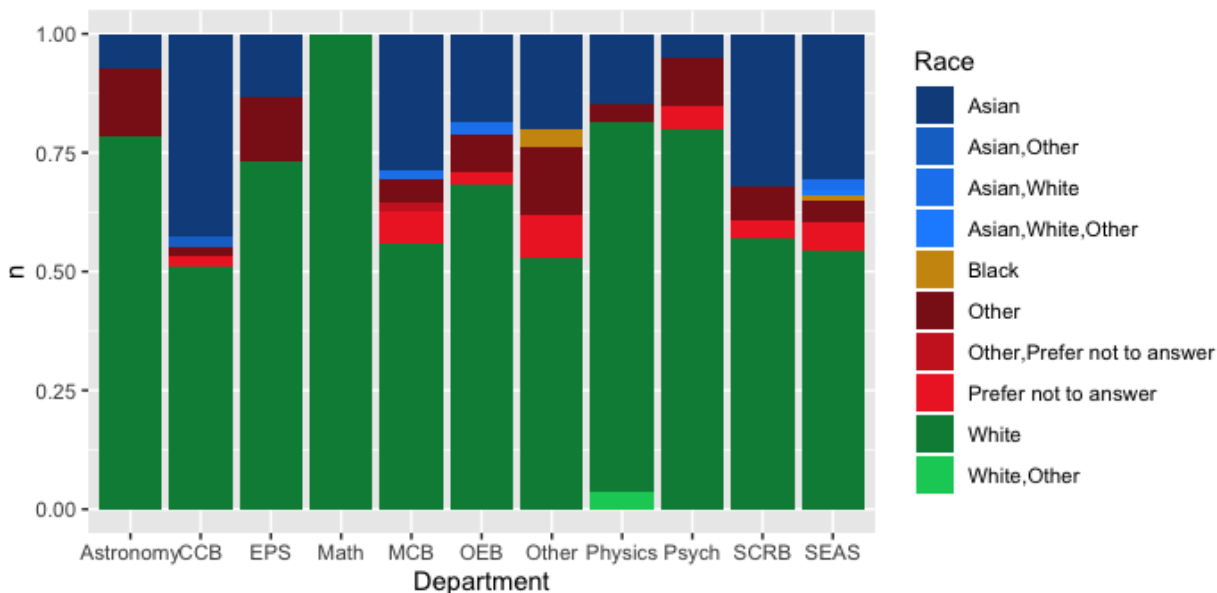
Finally, we find that only 1.3% of postdocs identify as disabled in our survey.



<sup>2</sup> Of postdocs who identified their race as “Other”, 33% identified as Hispanic, and 23% identified as MENA. 3.7% of postdocs identified as nonwhite Hispanic.

<sup>3</sup> A 2016 survey of 7603 U.S. postdocs (McConnell et al. Research: United States National Postdoc Survey results and the interaction of gender, career choice and mentor impact. *eLife* 7, e40189 (2018)) reported 53.1% female, 46.9% male respondents; a 2020 [survey by Nature](#) of 7630 postdocs worldwide reported 52% female, 47% male postdocs; and a 2020 [Boston Postdoc Association](#) survey of 628 Boston-area reported equal representation of men and women. In these datasets, representation across racial demographics were similar to what we observed at Harvard.

Gender and racial demographics varied substantially by department<sup>4</sup>, suggesting that department-specific interventions may be necessary to achieve representation across demographic groups. With regards to race, departments with particularly low representation of postdocs identifying as a race other than white include Math, Psychology, Astronomy, and Physics, which all had <25% non-white postdocs. With regards to gender, departments with particularly low representation of women include Math, Earth and Planetary Sciences, and Physics, which all had <20% women postdocs.

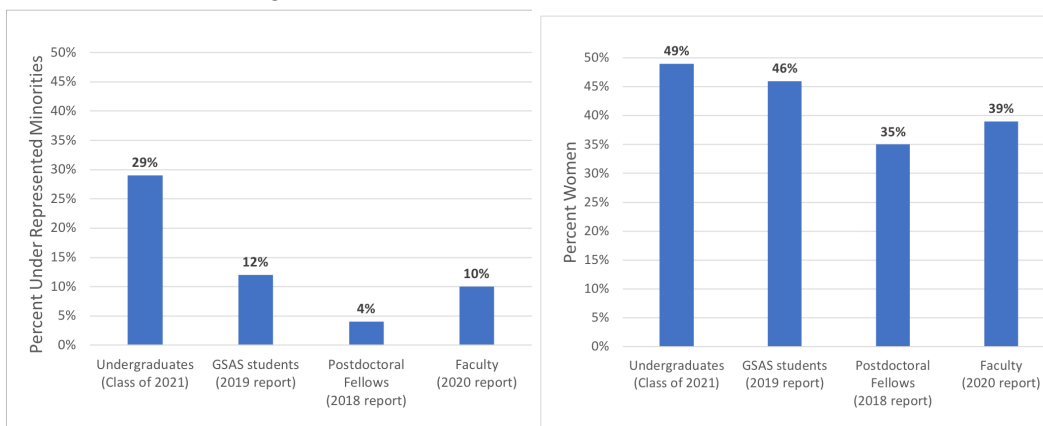


Our data indicate that the level of postdoctoral fellow may be a key step where individuals from minoritized racial/ethnic groups and women leave academia. While 46% of graduate students at

<sup>4</sup> We analyzed departments with at least 10 respondents.

FAS are women, only 38% of FAS Postdocs are women: a decline in gender representation that persists throughout the faculty level. We find a similar pattern for minoritized racial/ethnic groups (here defined as Black, Native American/Indigenous, non-white Hispanic), as 12% of graduate students identify as part of these groups, while only 4.8% of postdocs do (a 67% decrease). One possible explanation for this data is that fields in which women and underrepresented minorities have higher representation are less likely to require postdocs (e.g., humanities vs STEM). However, these data also support the idea, which has been studied elsewhere, that individuals--in this case, specifically postdocs--from underrepresented groups in academia face challenges that keep them from remaining on the academic career track: challenges that we believe are impacted by how Harvard supports its postdocs through salary, benefits, and more intangible support such as mentorship, career training, and inclusion on campus.

### Harvard Wide Demographics

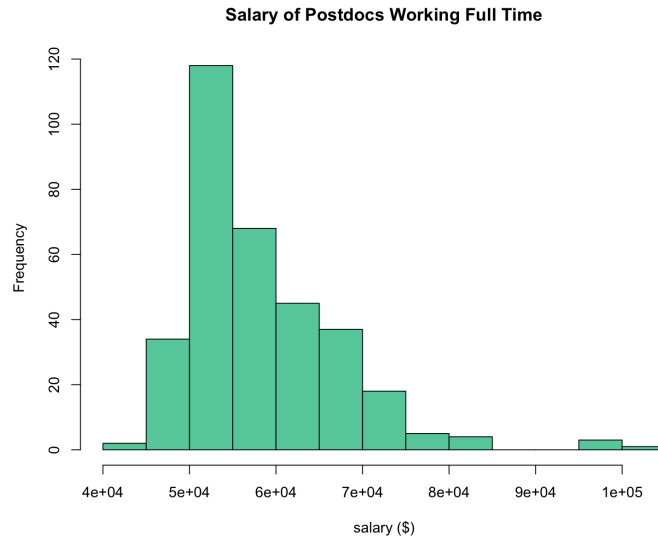


*Data from the 2018 Presidential Task Force on Inclusion and Belonging.*

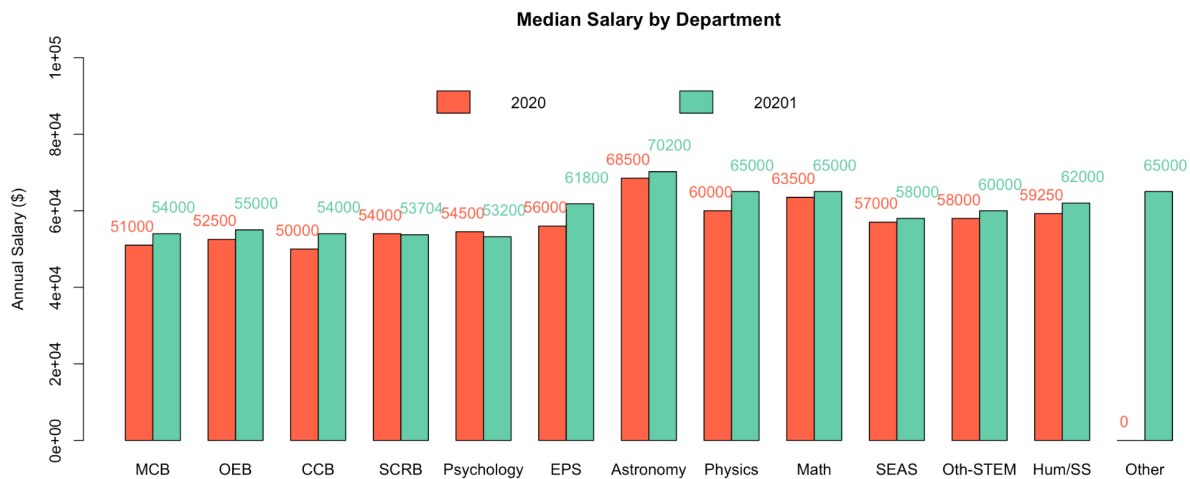
## Postdoctoral Salary

### Overview

We assessed the self-reported salary of postdocs at Harvard FAS. Postdocs were asked whether they are hired to work full-time, and only salaries of those hired to work full-time are analyzed here. We found that the median self-reported salary of FAS postdocs is \$56,417, but this varies substantially by department, with life science departments, generally, having the lowest salary.



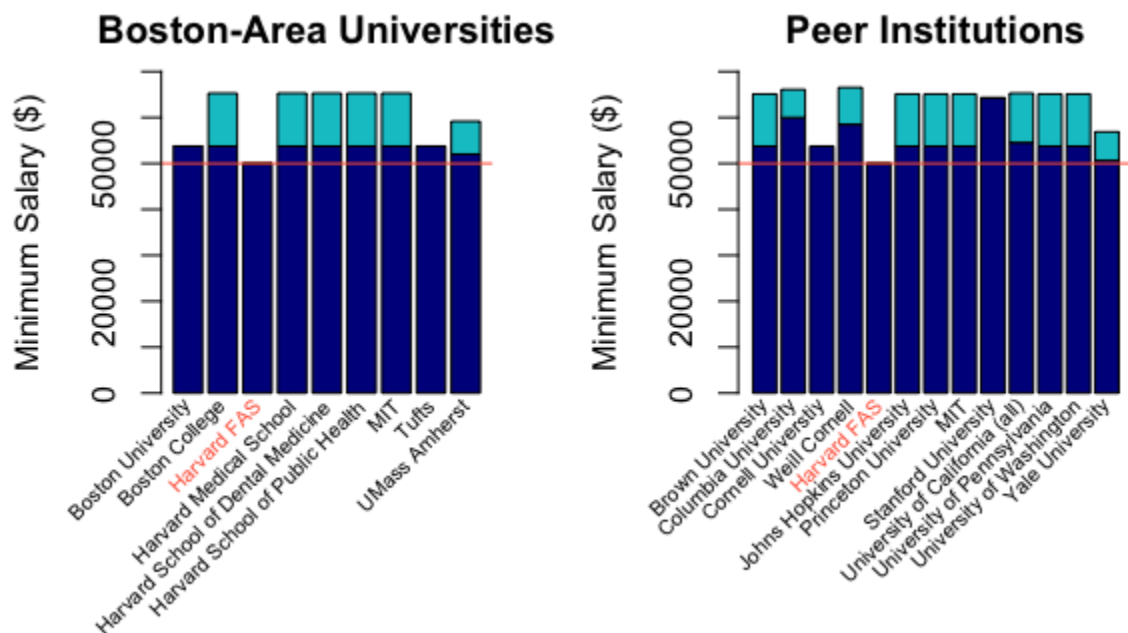
Distribution of self-reported full time postdoc salaries at Harvard FAS.



Median salary reported by department for 2020 and 2021. Note that we did not include an “Other” option in our 2020 survey. MCB = Molecular and Cellular Biology, OEB = Organismic and Evolutionary Biology, CCB = Chemistry and Chemical Biology, SCRB = Stem Cell and Regenerative Biology, EPS = Earth and Planetary Sciences, SEAS = School of Engineering and Applied Sciences, Oth-STEM = departments with fewer than 10 respondents in STEM fields, Hum/SS = Humanities and Social Science departments with fewer than 10 respondents.

### Harvard FAS Postdoc Salary Compared to NIH Minimum Scale

Last year, we recommended that FAS adopt the NIH salary minimums that are used as postdoctoral salary minimums at most Boston-area universities (including HMS and HSPH) and most of Harvard’s peer institutions. We would like to point out that paying postdocs wages that enable comfortable living in Boston is likely to increase retention of underrepresented demographic groups into the postdoc phase, in particular women, who often face choosing between providing childcare and working: a choice that becomes harder when salary barely covers childcare costs<sup>5</sup>, and those from lower socioeconomic backgrounds.

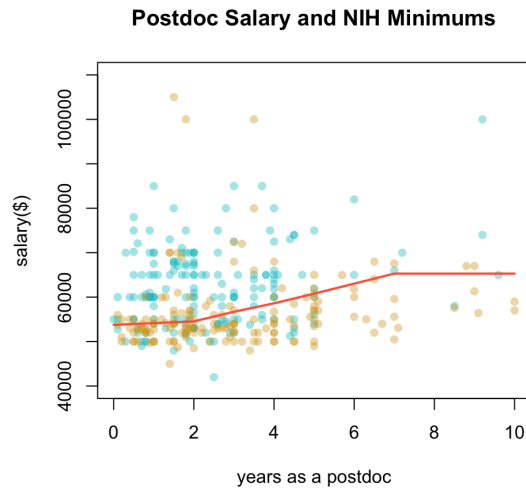


*Minimum postdoc salaries at Harvard FAS and other Boston-area and peer institutions. The dark blue represents the minimum for postdocs with 0 years of experience, and the lighter color represents the maximum salary on the salary scale if salary minimums increase with experience. The red line denotes Harvard FAS’s minimum salary, for comparison.*

Harvard increased the minimum postdoc salary to \$50,000 for 2021, and we observed a slight increase in median postdoc salary in 2021 compared to 2020. However, Harvard does not plan to meet any NIH minimum until 2024, and at that point, they have still not committed to paying at the NIH minimum salary scale. As a result, 46% of postdocs are still being paid below NIH minimums. We note that a particularly large number of postdocs who have been postdocs for 3 or more years are paid below NIH minimums (42% for postdocs <3 years into postdoc careers, and 54% for those >=3 years in). We suspect this is because postdocs are often hired at NIH minimum salaries for 0 years of experience, but their salaries are never increased accordingly.

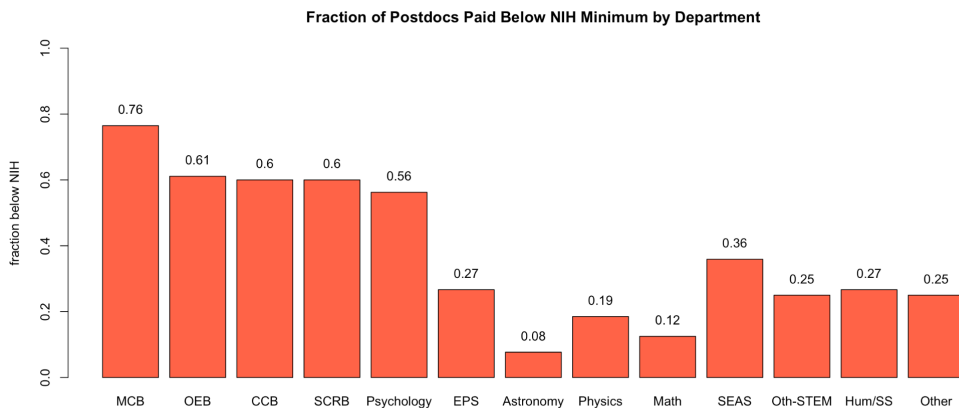
<sup>5</sup> In support of this idea, we found that 75% of postdocs without dependents are able to save money, but only 50% of postdocs with dependents.





Self-reported postdoc salaries by years of experience. The red line represents the NIH recommended minimum salaries. Yellow points represent OEB, MCB, CCB, SCR, and Psychology departments, those we estimated to be most likely to receive funding from the NIH. Blue points represent individuals from any other department. 46% of postdocs are paid below the NIH minimums.

Like median salary, the fraction of postdocs paid below the NIH minimums varies substantially by department. Surprisingly, departments with the highest fraction of postdocs being paid below the NIH minimums are the life science departments (OEB, MCB, CCB, SCR, Psychology): the departments completing research most relevant to the mission of the NIH. Given that (1) the NIH minimum salaries exist as nation-wide guidance for postdoctoral salaries in life science fields, (2) that departments at Harvard outside of the life sciences are already, for the most part, paying postdocs more than the NIH minimums<sup>6</sup>, and (3) that the cost of living in the Boston/Cambridge area is much higher than most of the country, we strongly recommend that FAS adopt the NIH minimum salaries - including scales by years of experience -- for Harvard postdocs for the 2022 fiscal year.



*Fraction of postdocs with self-reported salaries below the NIH minimums.*

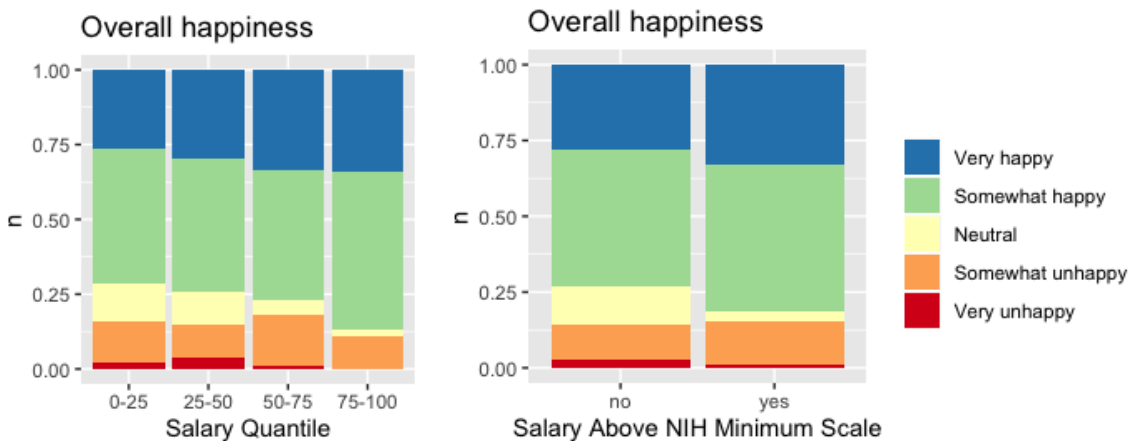
<sup>6</sup> Only 27% of postdocs outside of life sciences are paid below NIH minimums.

**NIH Minimum Salaries for FY2021**

Years since PhD	NIH minimum annual salary
0	\$53,760
1	\$54,144
2	\$54,540
3	\$56,712
4	\$58,608
5	\$60,780
6	\$63,036
7+	\$65,292

**Postdoc Salary and Quality of Life**

We further find that salary affects postdoctoral happiness. Postdoc salary was correlated with self-reported happiness, with 30% postdocs in the bottom quartile of salary reporting that they are overall “Very unhappy,” “Somewhat unhappy”, or “Neutral”, compared to 13% of postdocs in the top quartile (note: no postdocs in the top quartile reported being “Very unhappy” overall). Strikingly, we also find that postdocs paid above the NIH minimum salary scale report being happier than those paid below the NIH minimum salary scale, providing evidence that raising Harvard FAS’s minimum salary to NIH NRSA levels will improve postdoc quality of life.

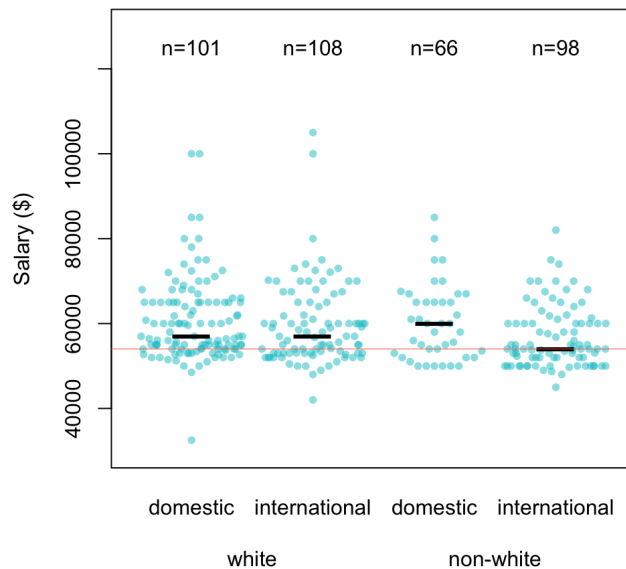


*Overall happiness by salary. Postdocs were asked how happy they are overall. We find a correlation between happiness and salary.*

Postdoc Salary by Race and Visa Status

Last year we reported inequities in salary where non-white postdocs are paid lower salaries than white postdocs, a result mainly driven by low salaries of international scholars of color. Harvard implemented changes in minimum salary, in part to try to rectify these disparities, though did not fully implement our recommendation to raise salary minimums to be in line with the NIH. We again observed inequities of a similar magnitude in salary for international scholars of color.

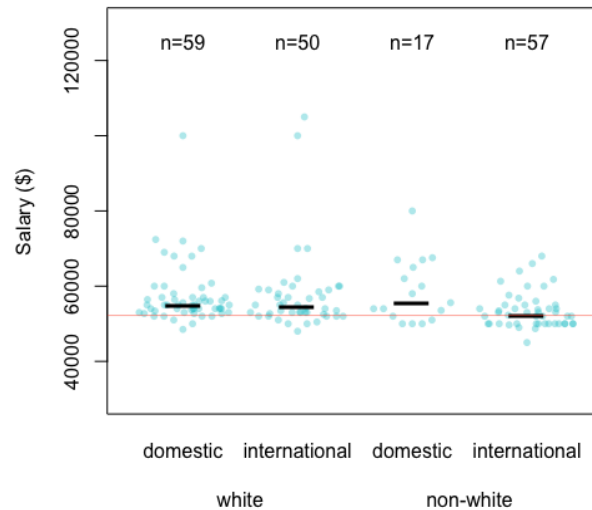
	2020 mean salary	2021 mean salary
white, domestic	\$57,314.47	\$60,640.58
white, international	\$58,342.70	\$59,325.68
non-white, domestic	\$59,957.50	\$60,285.63
non-white, international	\$52,819.29	\$56,214.64



*2021 salary distributions of postdocs by race and international status. Domestic = U.S. citizen or permanent resident. Each point is an individual, self-reported salary. The black lines are the group medians. The red line is the median for non-white international postdocs.  $p < 0.05$ , significant effect of race and immigration status, ANOVA. We found no significant difference in years as a postdoc between these groups.*

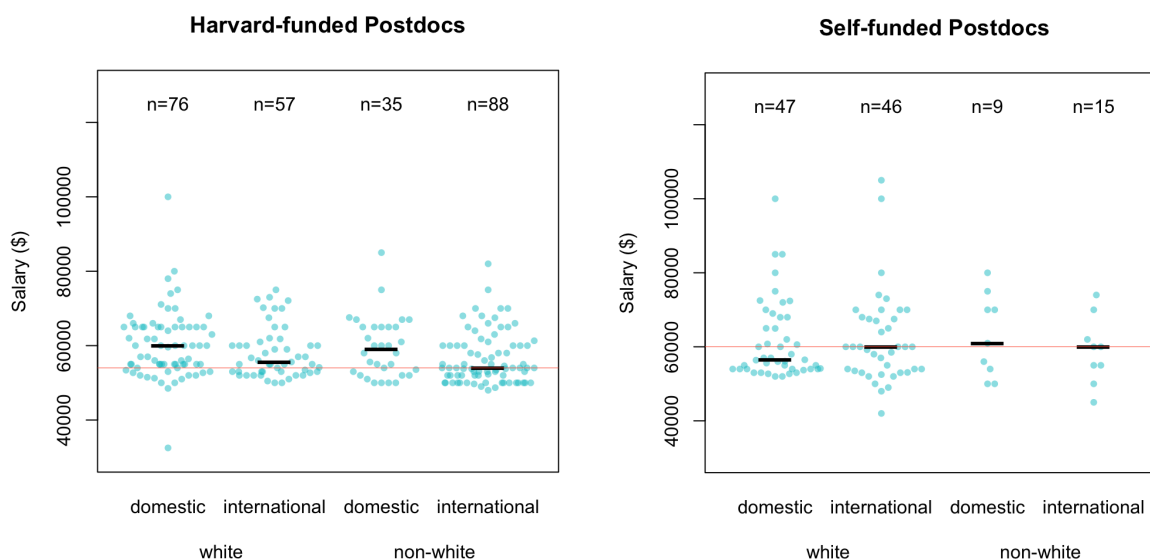
Given that we observed differences in both salary and race at the department level, with life sciences departments having both more nonwhite postdocs and lower salaries than other departments, we wondered whether this race-and-visa-based salary difference could be

explained by differences in departmental demographics. We therefore assessed salary by racial and immigration status classes in only life sciences departments. We find a significant effect of race and immigration status within the life sciences, suggesting that this discrepancy cannot be explained by departmental affiliation alone.



*2021 salary distributions of postdocs by race and international status for postdocs in life sciences departments (MCB, OEB, SCRB, CCB, Psychology). Domestic = U.S. citizen or permanent resident. Each point is an individual, self-reported salary. The black lines are the group medians. The red line is the median for non-white international postdocs.  $p < 0.05$ , significant effect of race  $\times$  immigration status, ANOVA. We found no significant difference in years as a postdoc between these groups.*

We next asked whether this impact of race and international status on salary was among postdocs funded directly by Harvard faculty or those who had applied for and won their own funding. We reasoned that perhaps funding discrepancies could be explained by differences in the external funding sources available to international postdocs. Surprisingly, we found that this race- and visa-status-based discrepancy exists only among postdocs funded directly by Harvard faculty rather than by postdocs that have won their own funding. As Harvard faculty are directly determining the salary levels of Harvard-funded postdocs, this difference is likely due to implicit or explicit bias towards non-white, international scholars or structural barriers in systems controlled directly by Harvard. We are therefore optimistic that interventions by Harvard FAS could go a long way to fixing this inequity.



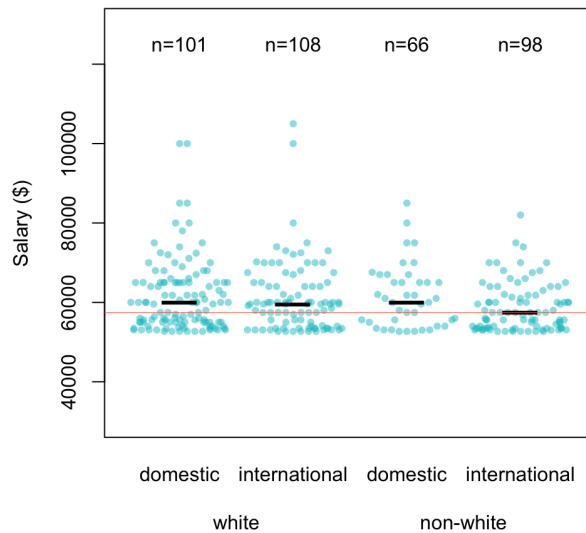
Salary distributions of postdocs funded by Harvard faculty (left) or by other sources (right) by race and international status. Domestic = U.S. citizen or permanent resident. Each point is an individual, self-reported salary. The black line is the median. The red line is the median for non-white international postdocs.  $p < 0.05$ , significant effect of race and immigration status for Harvard-funded postdocs but not those funded by other sources, ANOVA

	Harvard-funded mean salary	self-funded mean salary
white, domestic	\$60,087.79	\$61,512.76
white, international	\$58,121.31	\$60,823.80
non-white, domestic	\$59,553.47	\$62,888.89
non-white, international	\$55,901.29	\$59,000.00

In conclusion, we strongly recommend that Harvard amend its salary guidelines for postdocs urgently. Harvard has committed itself to being actively anti-racist and anti-xenophobic. As part of this pursuit, Harvard should endeavor to restructure policies that, whether intentional or not, discriminate against individuals on the basis of race or immigration status. The postdoc salary policy at Harvard is a prime example of such a policy that must be changed so that Harvard can achieve its anti-racist and anti-xenophobic ideals. In support of this idea, we find that increasing Harvard minimums to NIH minimums eliminates the race- and immigration-status-based discrepancies in FAS postdoc salaries<sup>7</sup>.

<sup>7</sup> We note that just raising salaries to the NIH minimum for 0 years of experience (currently \$53,760) does not mitigate the racial and immigration-based discrepancies in salary.

### Salaries Adjusted to NIH Minimums



*Adjusted salary distributions of postdocs by race and international status. In this plot, all salaries below the FY2021 NIH minimums (with increases for years of experience) are raised to the NIH minimums. Domestic = U.S. citizen or permanent resident. Each point is an individual, self-reported salary. The black line is the mean. The red line is the mean for non-white international postdocs.  $p>0.05$ , no significant effect of race and immigration status, ANOVA*

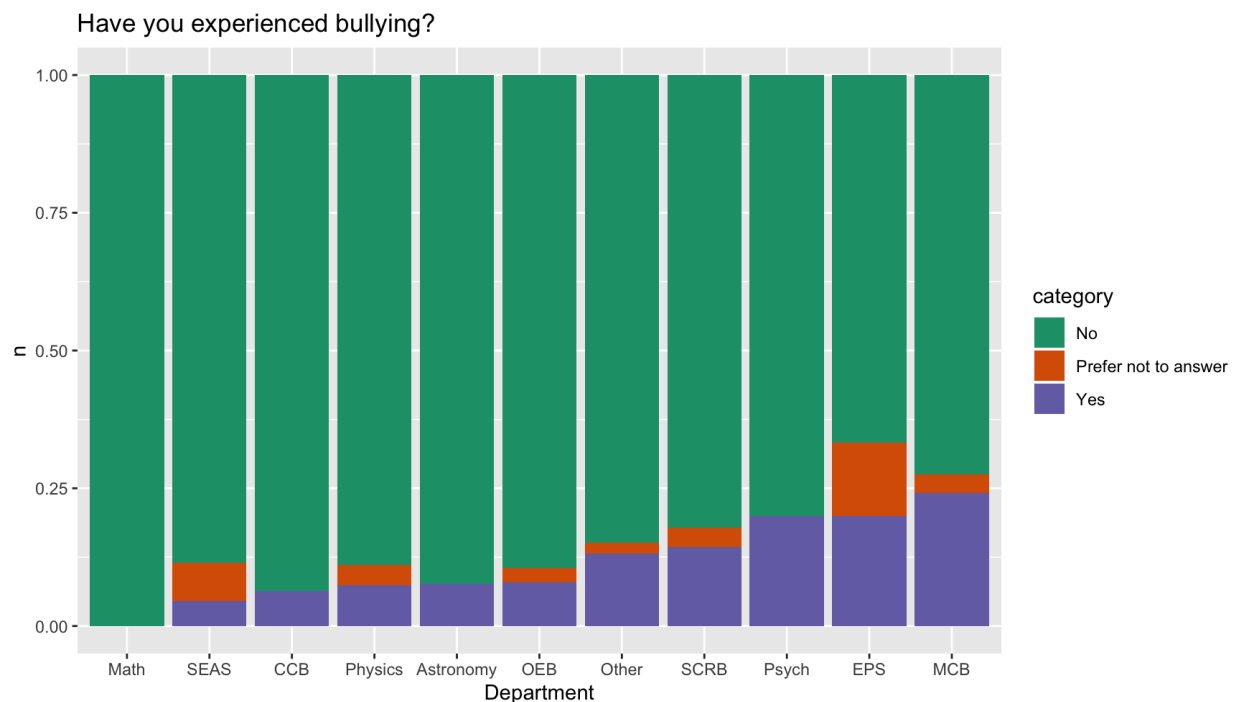
### **Recommendations Regarding Salary:**

- (1) Raise Harvard FAS/SEAS official salary minimum to the NIH minimums, with salary increases for each year of experience, for the 2022 fiscal year.
- (2) Starting immediately, officially recommend that Harvard FAS postdocs are paid according to the NIH salary scale, and notify postdocs who are being paid below NIH salary minimums, as well as their faculty advisors, that they are being paid below Harvard's recommended salary scale.
- (3) Monitor the salary discrepancies between different demographic groups, in particular based on international status and race, particularly among postdocs funded directly by Harvard faculty.
- (4) Review postdoc hiring and contract renewal practices and create guidelines for faculty to mitigate race- and international-status-based salary discrepancies.

## Postdoc Culture and Inclusion

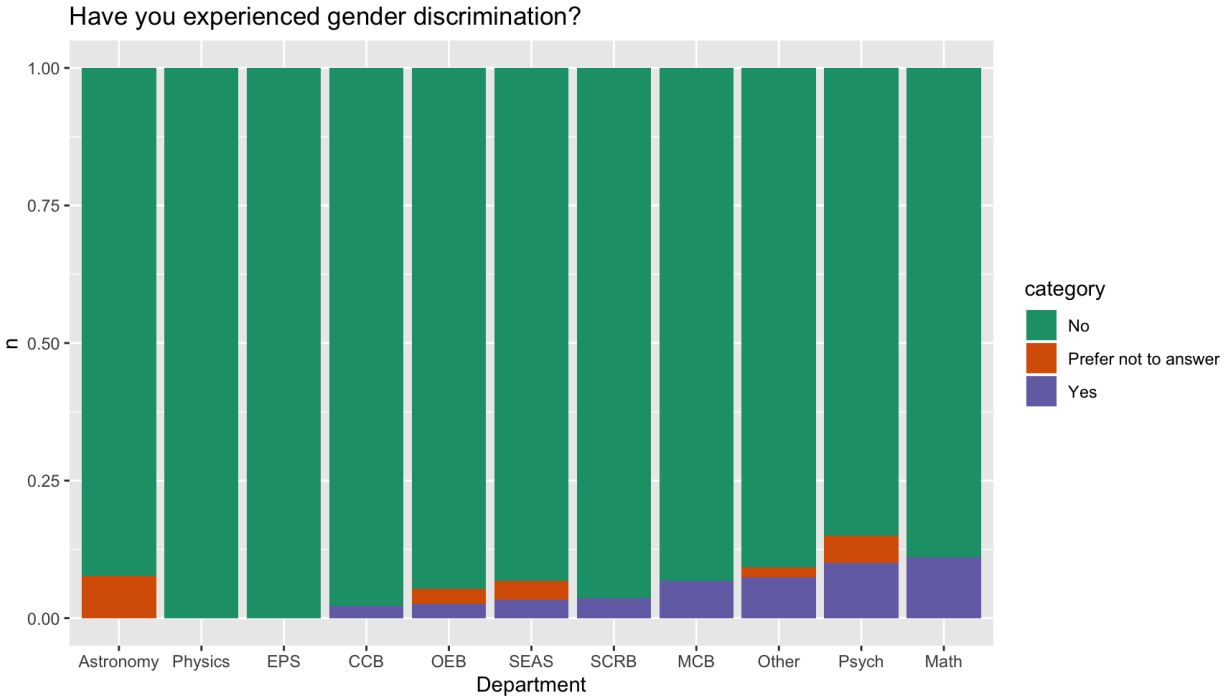
### Bullying, Gender Discrimination, and Racial Discrimination

We asked postdocs whether they had experienced bullying, harassment based on gender, or harassment based on race while a postdoc at Harvard. We found that bullying was fairly prevalent, with 10.8% of postdocs reporting that they had experienced bullying behavior. Of those respondents, 63% said that they had experienced bullying from faculty. However, we found that reports of bullying varied greatly by department, with some departments having up to 25% of postdocs reporting experiencing bullying.



*Self-reported incidence of bullying by department among Harvard FAS postdocs. Postdocs were asked whether they had experienced bullying, defined as, "harmful mistreatment by words or actions that humiliate, degrade, demean, intimidate, and/or threaten an individual or group", while a postdoc at Harvard.*

Compared to bullying, postdocs reported less gender discrimination, with only 4.2% of postdocs reporting gender discrimination or sexual harassment, though that number rises to 7.8% when only considering female postdocs. However, unlike bullying, only 31% of postdocs who reported gender discrimination report discrimination by faculty, suggesting that much gender discrimination comes from peers, students, or staff in the community. Gender discrimination, like bullying, varies by department.



*Self-reported incidence of gender discrimination by department among Harvard FAS postdocs. Postdocs were asked whether they had experienced gender discrimination while a postdoc at Harvard.*

Finally, we found that reported levels of discrimination based on race was relatively low, at only 1.3% of respondents, and 2.0% of non-white postdocs. With such a small number of reports of racial discrimination, it was not possible to determine departmental trends.

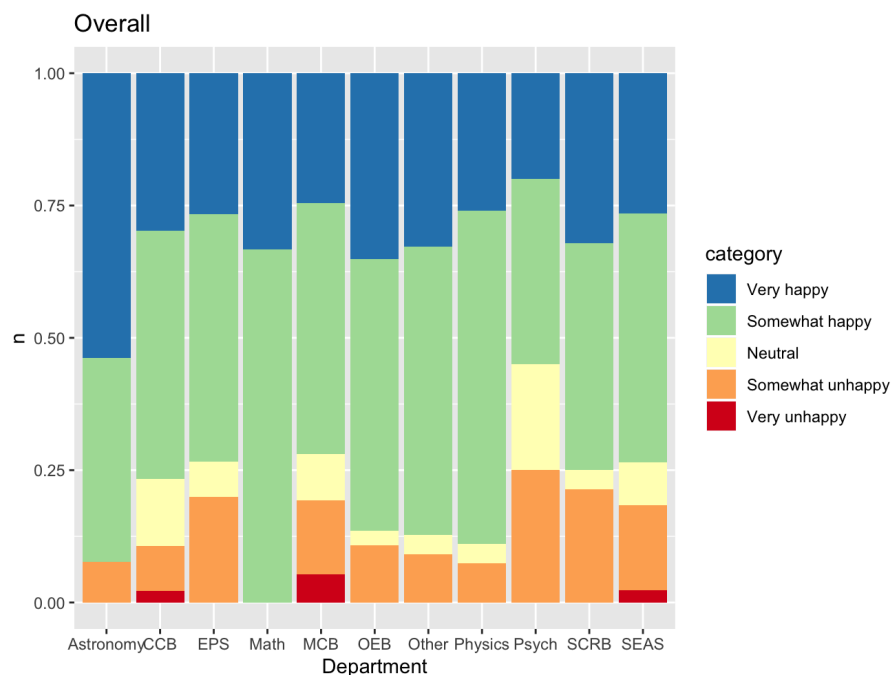
We recommend a targeted approach to addressing bullying, gender discrimination and racial discrimination among postdocs at Harvard, with more effort paid to departments with higher levels of this behavior reported. We note that there are currently few resources and tools in place at Harvard to address bullying, which may be part of the reason for its relatively high incidence among postdocs. We also note that the majority of this bullying comes from faculty, whom postdocs are often deeply dependent on for their job, their future career prospects, and their visa status. We recommend that faculty who are mentoring postdocs receive management evaluations and, if deemed necessary, training in healthy management practices. We further recommend that the PDO conducts exit interviews to identify faculty supervisors who bully their postdocs and proactively reach out to support other postdocs mentored by those faculty members. Finally, we recommend establishing supplemental mentoring support programs for postdocs experiencing bullying, harassment, or discrimination from their faculty advisor.

### *Postdoc Happiness*

We also asked postdocs about their general happiness and found variation by department. Please see Appendix II for results, but as a whole, postdocs expressed being somewhat or very unhappy with their work/life balance and social life. We expect that some of this unhappiness is



likely linked to the pandemic (see below) and, with the support of departments, the Postdoctoral Office, and FAS, aim to increase opportunities for in-person socialization and community building among postdocs in the coming year.



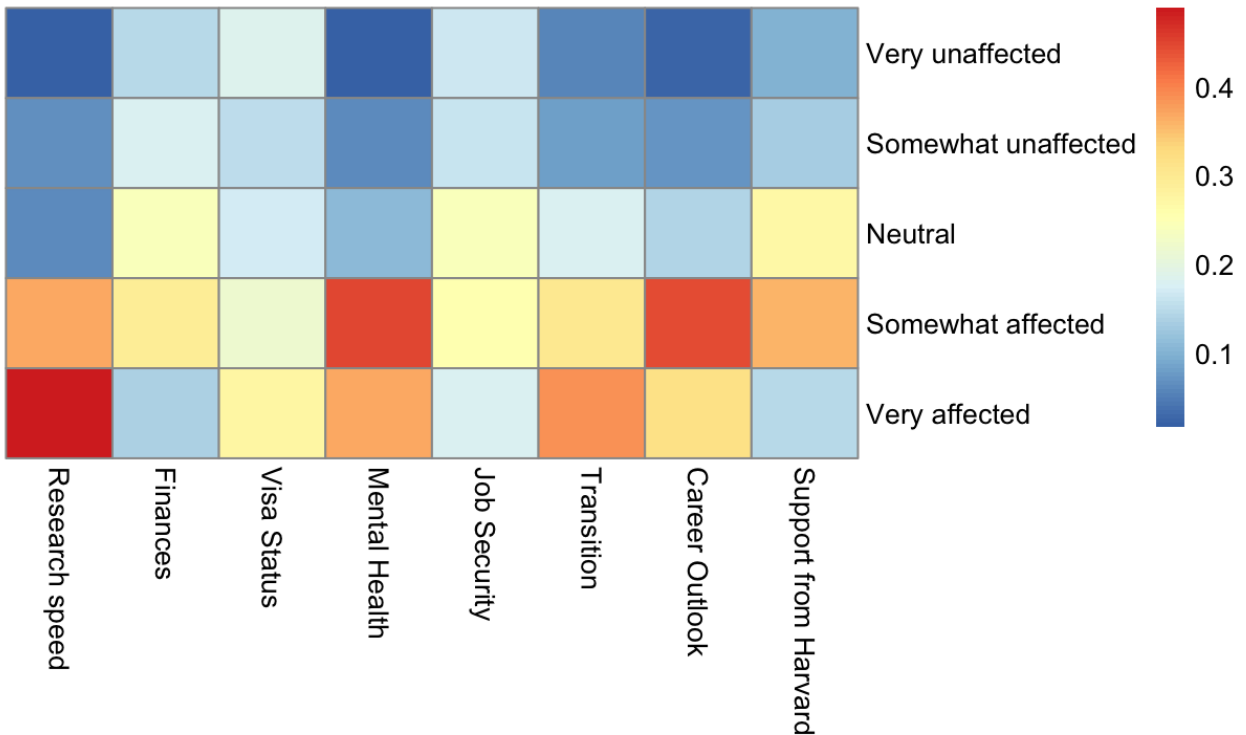
*Self-reported happiness by department among Harvard FAS postdocs.*

**Recommendations to Improve Department Culture/Inclusion:**

- (1) Provide postdocs with information about how to address bullying behavior. We recommend an informational campaign informing postdocs about the existence of resources available to them, such as the Ombuds office. We note that currently available resources are insufficient and hope to see more resources for postdocs with the implementation of Harvard’s planned Anti-Bullying policy.
- (2) Ensure that postdocs are aware of the resources available to them to address sexual or gender-based harassment and racial discrimination.
- (3) Perform exit surveys of postdocs to identify faculty members engaging in bullying behavior (or other forms of harassment/discrimination) and proactively support other postdocs supervised by faculty who engage in bullying behavior.
- (4) Implement a supplementary mentoring/advising program for postdocs who experience bullying, harassment, or discrimination. We envision this as a volunteer group of faculty who are willing to take on an advisory/mentoring role (not a funding role) for postdocs who have difficult relationships with their primary faculty mentors.
- (5) Require management reviews of faculty working with postdocs and provide training as necessary to ensure they are aware of healthy management practices.
- (6) Provide voluntary training for faculty managing postdocs on how best to support postdocs in their career ambitions.

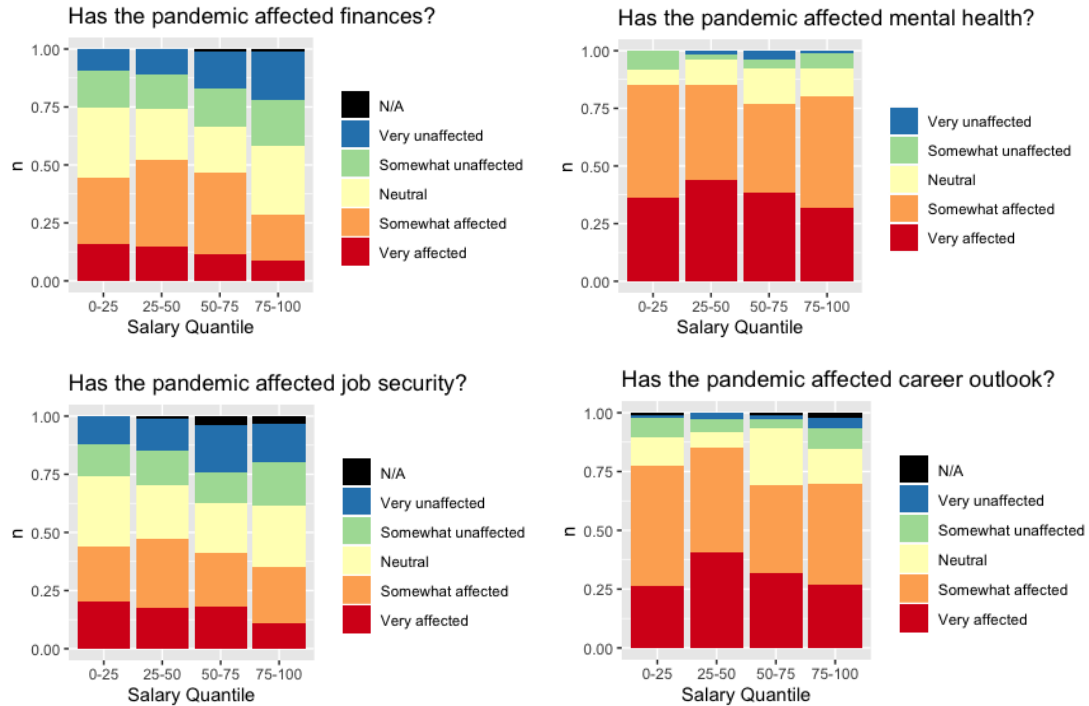
## Support for Postdocs during the COVID-19 Pandemic

We asked postdocs to provide information about how they were affected by the COVID-19 pandemic. We note that the two areas where postdocs report being most affected by the pandemic are in their mental health and their research productivity, followed by their ability to transition to a new position and career outlook. We also asked an open question about the effects of the pandemic to get more detail about these impacts.



Results of a survey question asking postdocs how much each of the following categories (columns) were affected by the COVID-19 pandemic. The heatmap is colored based on the percentage of responses in each level of effect for each category. Research speed and mental health showed the most number of postdocs somewhat or very affected.

Importantly, we found that postdocs in the lowest salary quantiles were more affected by the pandemic than those in higher salary quantiles. In particular, postdocs with salaries less than the median salary reported larger effects on their finances, mental health, job security and career outlooks as compared to their peers with higher salaries. This is yet another reason that Harvard FAS urgently needs to raise its minimum postdoc salary.



*Self-reported effects of the pandemic on various aspects of postdoc life and career, broken down by salary. Postdocs with lower salaries are more affected.*

We analyzed postdocs' responses to an open question about the impact of the pandemic using NVivo Qualitative Software, which allows the coding and in-depth analysis of open-ended responses.

Question: Do you have other comments on the ways in which COVID-19 has affected you, or how Harvard could better support you with regards to the effects of COVID-19?

N = 68 respondents answered this question. We listed main answer categories in the table:

Rank	Coding Category	# of Answers
1	The logistics of working at home or the lab during COVID-19	19
2	Missed chance to build relationships at Harvard	16

3	Worries about the academic job market	11
4	Visa issues, travel issues, and employment extensions	8
5	Parenting as a Postdoc during COVID-19	6

Below follow typical examples drawn from within each coding category, to illustrate key concerns.

### 1. The logistics of working at home or the lab during COVID-19

“I work reasonably unsociable hours to fit in with laboratory shifts (6am-1pm). This also isn't a lot of time for lab work, given that I do chemistry and therefore have had to modify my projects to accommodate shorter experiments.”

“I had to pay out of pocket and using my personal funds to get a proper workspace at home. It would be great if Harvard was more aware and offered some minor funding for such type of purchase (e.g. decent office chair, etc.).”

“COVID-19 has brought tremendous isolation and working from home is extremely inefficient. The least Harvard could do is allow access to the office regularly, say a few hours every alternate day ensuring one person per office. I think is it not very difficult to come-up with a system where in a given building/floor people come to office (again one per office) on a rotation basis. This will greatly enhance the work-life balance, and reduce stress and anxiety.”

### 2. Missed chance to build relationships at Harvard

“Since my postdoc has been virtual, I don't feel connected to the Harvard community at all. Aside from the fellowship's admins, I don't get to interact with any professors or students whatsoever.”

“I started my postdoc very shortly before the pandemic began, so I honestly don't know anyone in my department. This is a real shame because coming to Harvard is of course all about making new connections and collaborations with others, so I feel I've missed out a lot on that because there were no real efforts to reach out to postdocs in my dept.”

### 3. Worries about the academic job market

"With all conferences being run in virtual mode, I had almost zero chance of networking which was required for my academic job search."

"Career outlook very uncertain - not sure what the academic job market will look like next year."

#### 4. Visa issues, travel issues, employment extensions

"Visa clock running down while stuck in a shared apartment with roommates as I don't earn enough to live on my own and unable to visit family due to international travel bans and concerns about what would happen if there was a family emergency (to go home and risk getting stuck or not)."

"Postdocs that terminate in this past year should have had a blanket extension. The academic job market collapsed and it looks like it will recover this fall."

#### 5. Parenting as a Postdoc during COVID19

"It would be great if our university-affiliated daycare were open full-time (8-6). It has been difficult working with their reduced hours (8-3 or 9-4)."

"I lost 6 months of work due to not having childcare."

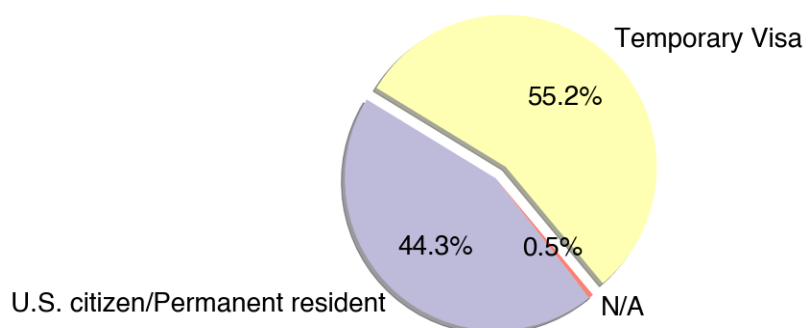
### **Recommendations to Support Postdocs During the COVID-19 Pandemic:**

- (1) Prioritize opportunities for postdocs to build connections within the Harvard community.  
This is especially important for the 2020 cohort – many of these postdocs crave in-person opportunities to meet and make professional and social connections. We are optimistic that this will have a positive impact on their mental health: and see a key role here for the PDO, FAS, departments, and the Postdoc Association itself.
  - (a) Increase the PDO/PDA budget to at least pre-pandemic levels (\$12,500/year from the current \$6000/year)
- (2) Provide financial support for career development/job applications. Many postdocs reported financial strain, stress about career outlook, and difficulty in obtaining their next positions due to the lack of available jobs in 2020. We therefore recommend extra support for postdocs in these areas, noting that much of the support that was available prior to 2020 (e.g., travel grants) no longer exist.
  - (a) Increase the PDO/PDA budget to at least pre-pandemic levels (\$12,500/year from the current \$6000/year)
  - (b) Reinstate travel grants for postdocs who want to attend meetings (even virtual meetings often have registration costs of >\$100)
  - (c) Cover the cost of Interfolio (\$40) for those currently applying to jobs
  - (d) Provide small grants to cover equipment purchased to improve office set-ups, as many postdocs continue to work full or part time from home
- (3) We plan to set up a meeting with HIO directly about our recommendations for how to improve communication with and support to international postdocs.

- (4) Further extend child care scholarship eligibility & the size of scholarships for postdoc parents. While we appreciate last year's expansion, much progress could still be made on this front to truly support Postdoc parents.

## Support for International Postdocs

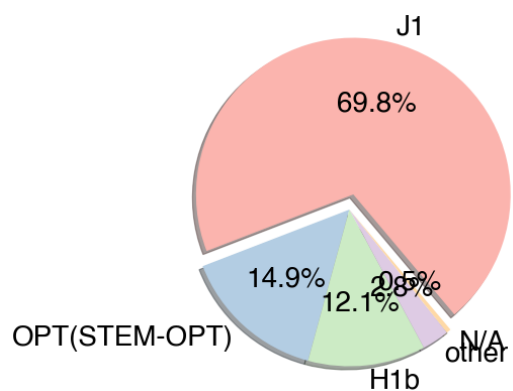
In our survey, we identified a number of issues specific to International Scholars that impede their ability to succeed as postdocs at Harvard. International scholars made up 55.2% of postdocs in our survey. This has slightly decreased from 2020 (61.3% international). Although this difference is not statistically significant, we note that it correlates with immigration restrictions placed in 2020. These restrictions made it very difficult for international postdocs to enter the United States to start their postdoc, but also sent non-welcoming messages to highly skilled scholars to seek employment elsewhere.



2021 data showing the proportion of postdocs who are US citizens or permanent residents and those who are on a temporary visa.

### Visa categories

We also note that over 70% of postdocs hold J1 visa, which is a non-immigrant visa category. A J1 visa imposes additional restrictions that can interfere with postdoc progress compared to other visa classes (e.g., work restrictions). In comparison 12% of international scholars hold H1b visas, a dual purpose visa category. OPT and STEM-OPT are training programs (STEM majors get an additional 2 years) to help international students who obtained degrees in the United States to get practical training to complement their education.



Visa Type Breakdown for International Scholars

While the J1 visa is flexible, it is a non-immigration visa and does not give postdoc any job security or US status security even after working for more than 5 years. From our data, we see postdocs on H1b visa after being a postdoc for a year, indicating that this can be a viable route for postdocs who seek a dual purpose visa.

Similarly, there is a maximum 3 years for OPT status (1 year OPT and 2 year STEM-OPT). After those three years, postdocs need to switch to a different visa category. It is important to offer postdocs the possibility to switch to H1b directly after OPT as switching to J1 will require a consular visit outside of the US, which can be very difficult because of the pandemic or other reasons (postdocs from certain countries are more likely to get administrative processing when applying for a visa and it can take as short as 3 weeks up to indefinite).

*Support from the Harvard International Office*

We also asked postdocs an open question about how they could be better supported by the Harvard International Office.

N = 62 respondents answered this question in total. We listed main answer categories in the table:

Rank	Coding Category	# of Answers
<i>A. Practical Changes in HIO/Harvard FAS Policy</i>		
1.	Provide more tax advice	11
2.	Offer more support for green card applications for Postdocs	9
3.	Support premium H1-B processing/ more H1-B for Postdocs	5
<i>B. Changes in the communication between HIO advisors and Postdocs</i>		
1.	Advisors can be more friendly and compassionate	7



2.	Provide more pro-active advice and support	5
3.	HIO seems understaffed / advisors non-responsive to emails	5
4.	Advice can be clearer and more direct: be advocate for Postdocs rather than Harvard	4

We identified two overarching subcategories of suggestions: (a) practical changes in HIO/ Harvard FAS policy and practices, and (b) changes in the communication between HIO advisors and Postdocs. Indeed, over a third of all suggestions – 34% (21/62) --were solely about the stance, tone, and way some HIO advisors communicate with Postdocs. We identified this as a significant area of concern. However, we think this could be a relatively easy area of intervention. We look forward to conversations with HIO staff on how we can improve mutual expectations and communication between Postdocs, the HIO office, and HIO advisors.

Below are examples from each coding category, to illustrate key concerns.

A. Practical Changes in HIO/ Harvard FAS Practices and Policy

1. Provide more tax advice

“Usually HIO defers you to Non-Resident Alien Tax Compliance Office which has very long delays to answer emails (if they even answer) and they are not very used to pick the phone when you call them. I arrived during the pandemic and I had a lot of troubles because they never sent me the link to register in GLACIER. I emailed the HIO about this and the only answer I got was that “I should wait until they send it to me”. I guess that HIO should have someone that at least can orient you to set up things in GLACIER and fill the W-4 and M-4 forms and which act as a connection between HIO and NRA Tax Compliance Office.”

“The hardest year for me was the one with the transition from non-resident with tax treaty to resident (for tax purposes). It’s the year you suddenly are not eligible for Glacier, so all by yourself, and wherever you go you keep hearing “we legally cannot give you any advice on taxes”. I almost accidentally found the relevant information hidden in the big PDF given by the IRS, that my case was named “dual status”; it was then easier to find relevant info. But oh boy the dread, the anxiety, the weeks with no relevant answers and reading through tax documents and websites with their joyful jargon while repeating yourself “If I f\* up something it is a federal offense and that probably get me kicked out”...”

## 2. Offer more support for Green Card Applications for Postdocs

"I hope Harvard could support green card applications for postdocs who has been working at Harvard for more than 3+ years. These days there has been many challenges involved and also lot of denials with GC applications. Recently I have seen many postdocs applying for jobs since the companies file the GC for them."

"Providing extra support for transitions to more permanent situations (e.g. green card)."

## 3. Support premium H1-B processing / more H1-B's for Postdocs

"6 months of wait for H1-B application is ridiculous. I was told to wait for 6 months, so I have to file the OPT extension for only 2 months to cover the gap. Then I will need to discontinue that. It was a waste of money, resources and an abuse of the system."

"This internal 6-month policy is simply absurd - never seen any where else compared to other institutions - MIT, Tufts, BU, Harvard affiliated hospitals, etc. "

"Sponsor more H1B visas for Postdocs, especially those who have done PhD programs in the United States."

## B. Changes in how HIO advisors deliver their advice to Postdocs

### 1. Advisors can be more friendly and compassionate

"Be compassionate. Not act like the legal team for immigration. Don't feel welcomed."

"My contact at HIO has been particularly not helpful and dismissive when I (and others in my department) had questions about immigration situation, security checks, etc. Given how stressful these issues are for us, at the very least it would be appreciated if they were a bit more empathetic and considering."

### 2. Provide more pro-active advice and support

"More pro-active support on International-issues viz. clearing some confusions on Visa/work permit etc."

"To be more clear and accessible and not assume foreigners understand all the nuances of the US system. the best thing can be - to match an experienced and accessible mentor for each postdoc, for the first months. it should be at the department level maybe."

### 3. HIO seems understaffed/ advisors non-responsive to emails

"Being more responsive, maybe better staffed would be helpful"

"Replying to emails in a timely manner would be a good start"

4. Advice can be clearer and more direct: be an advocate for Postdocs, rather than just for Harvard

“Be more friendly, people are in a difficult situation. Show some compassion. Give direct advice not vague suggestion. Especially for waiver and H1B there should be timelines and guides how to switch! Honestly, it's a disaster. It feels like they are working against us not for us.”

### **Recommendations for HIO/Harvard Administration to Better Support International Postdoctoral Scholars:**

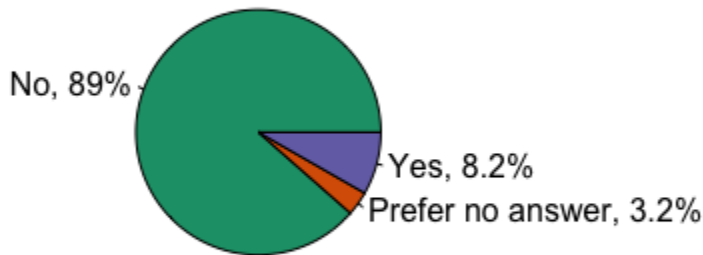
- (1) Open conversations with the FAS Administration, under what conditions it is willing to sponsor H1-B visas for Postdocs. *Why does Harvard FAS sponsor so few H1-B visas for Postdocs?* Harvard lags partner institutions in its sponsorship of H1-B visas. For instance, we would like to see H1-B visas for Postdocs who have worked at Harvard University for longer than 3 years (e.g. completed a STEM OPT). We also think it makes sense to transition to H1-B, for Postdocs who did a Ph.D. in the United States, and who were previously on a F1 visa and OPT. Harvard sponsoring H1-B for Postdocs, keeps the University competitive for the best international scholars seeking to do a Postdoc. This sponsorship makes Postdoctoral positions also more competitive with private market jobs, where employers *do* sponsor H1-Bs and green cards. We ask that Harvard FAS reviews this policy and reconsiders its current sponsorship policies.
- (2) Offer walk-in hours during tax season, where confused Postdocs can walk in with their paperwork and get some guidance on where to even start looking, what tax software they should use, what resident or non-resident category they fall into, or what other papers they should think about and gather. Tax season can be a significant cause of stress for everyone, but particularly for international students and Postdocs. Postdocs may switch status to become resident taxpayers for the first time while here. We recommend that HIO hires a tax accountant, who is comfortable and equipped giving tax advice to international students and scholars, to host these hours – and provide some guidance in what can feel overwhelming, and direct them to the right resources and tax software.
- (3) Improve transparency about premium H1-B processing, and the current reasoning behind the “six months wait” for Postdocs transitioning to this status. The cost of premium processing for H1-B is currently around \$2,500. There needs to be more transparency about whether or not this is an option, and if so, where scholars should turn for additional funds (e.g. Department or Advisor)
- (4) Start a roundtable with Postdocs, to have a conversation about relationships between advisors and Postdocs, communication styles and mutual expectations, and how to create a more supportive environment for Postdocs. Our vision of the HIO, is a place where Postdocs can get supportive, prompt, direct advice on matters relating to their current immigration status, matters relating to being new in the US, as well as what to think about immigration-wise when they transition to future jobs: they can get so over email, as well as by scheduling an appointment with their advisor. The HIO should also be a place where they feel welcomed and feel like they belong at Harvard and in the United States.



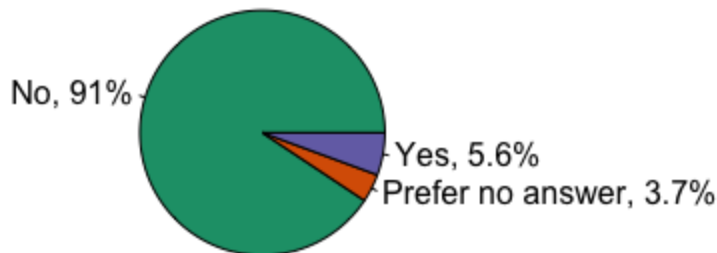
**Appendix I: Other Demographic Information Collected:**

Here we present information about other demographic information collected but not highlighted in the main report.

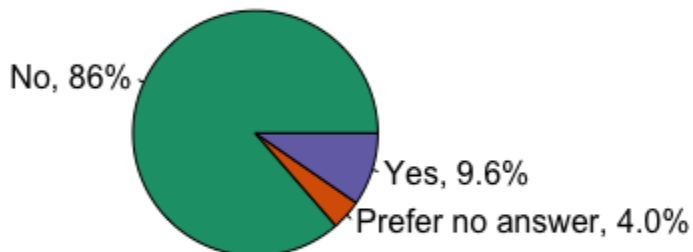
**Do you identify as Hispanic?**



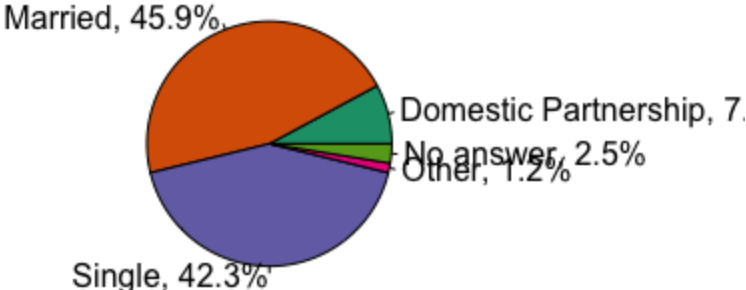
**Do you identify as MENA  
(Middle Eastern/North African)?**



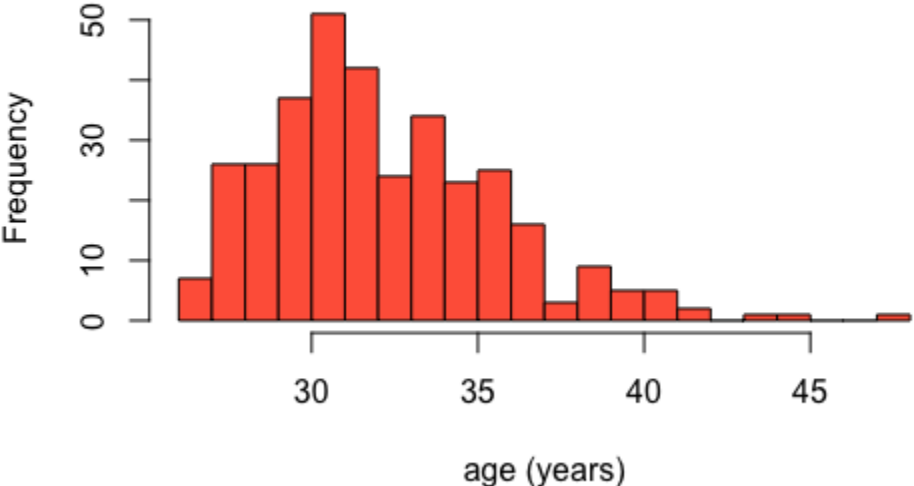
**Do you identify as LGBTQIA+?**



### Marital Status

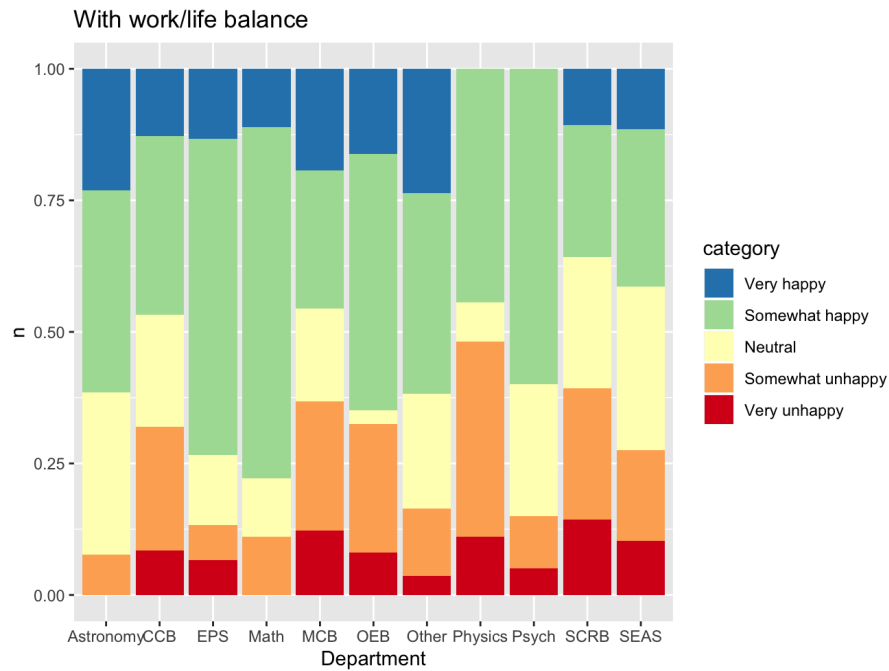
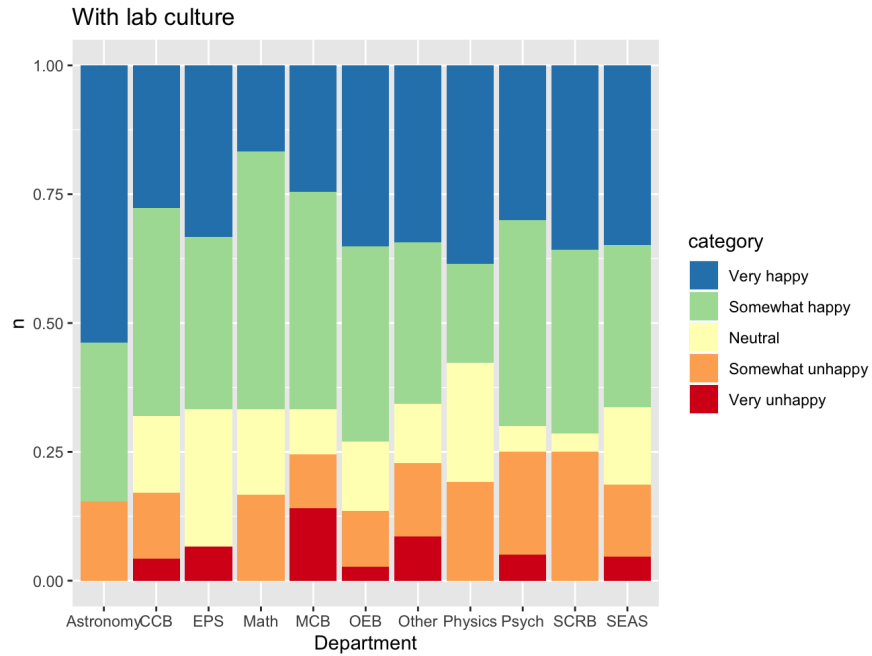


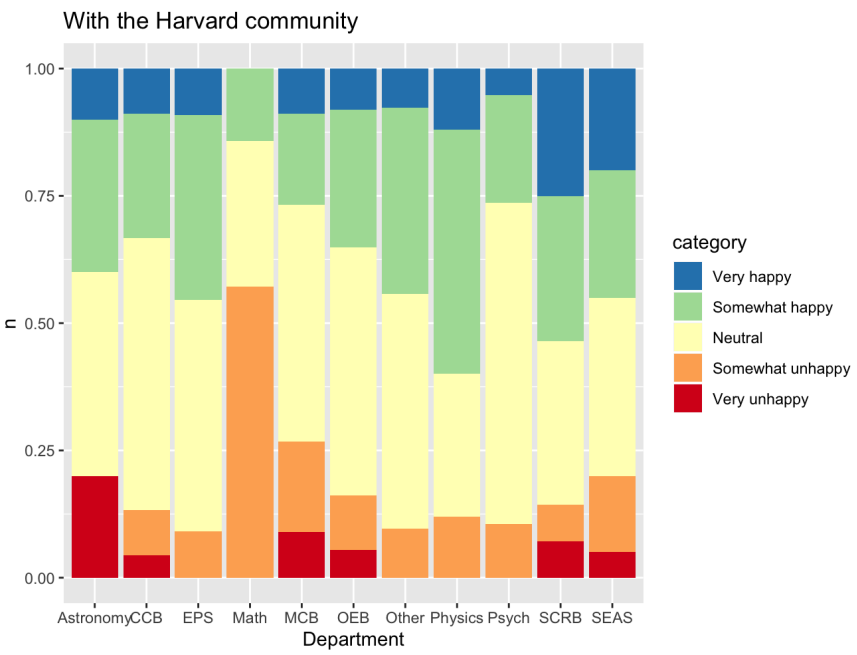
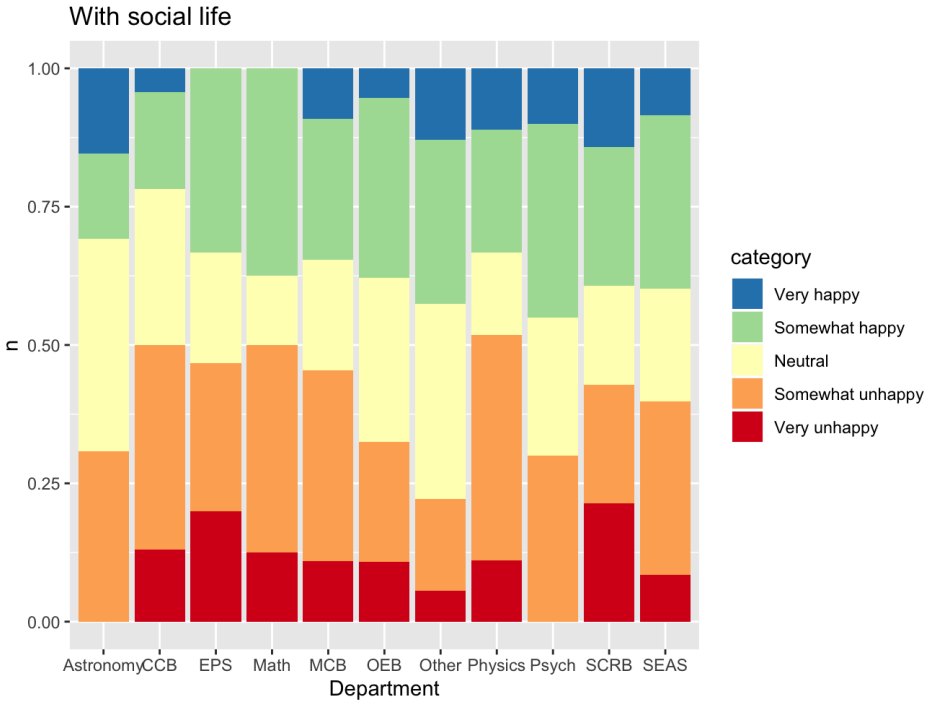
### Age Distribution of Postdocs



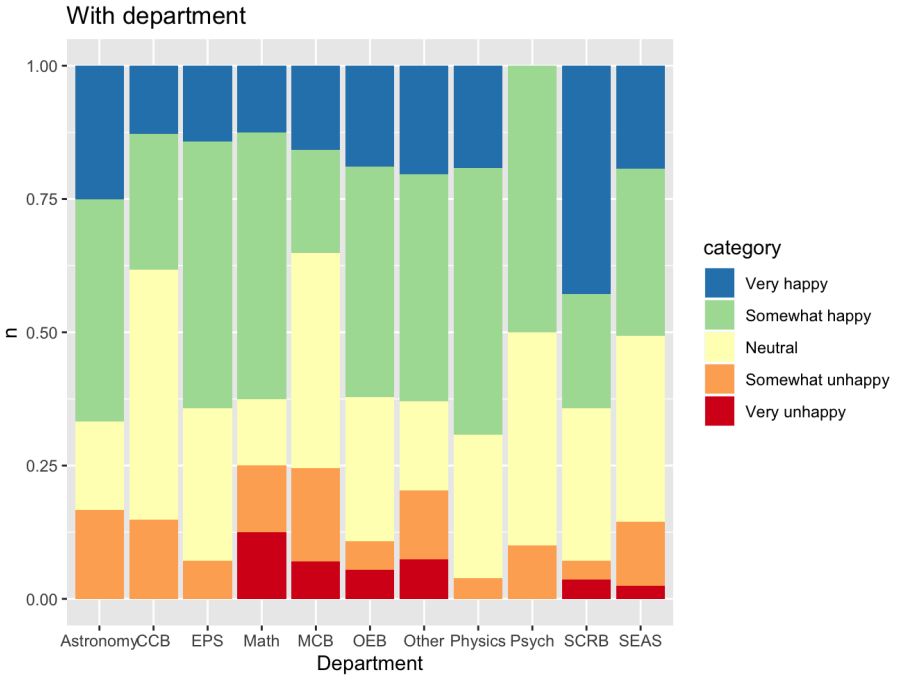
## Appendix II: Happiness/Satisfaction Among Postdocs

Are you happy...

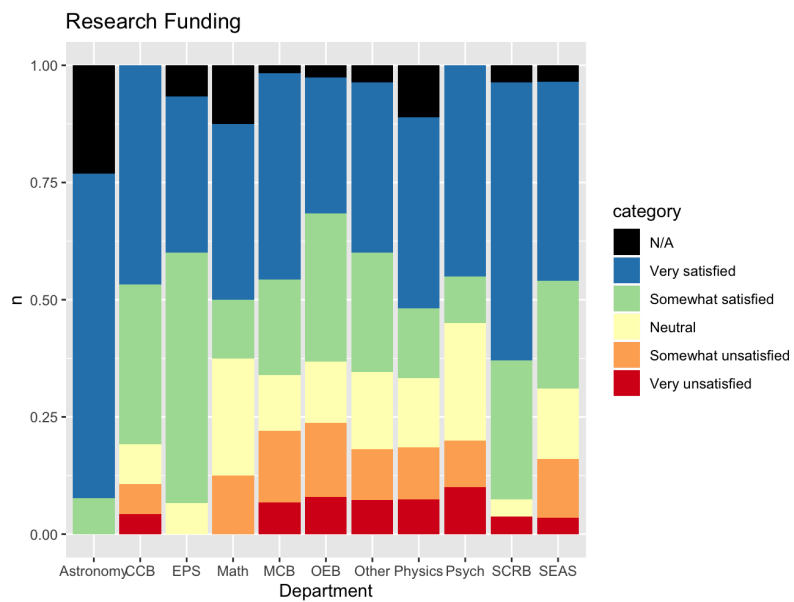
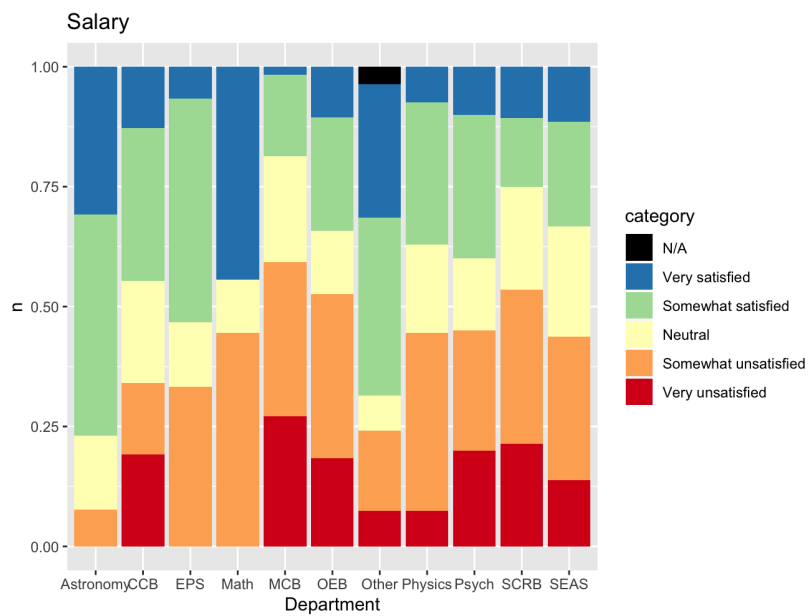




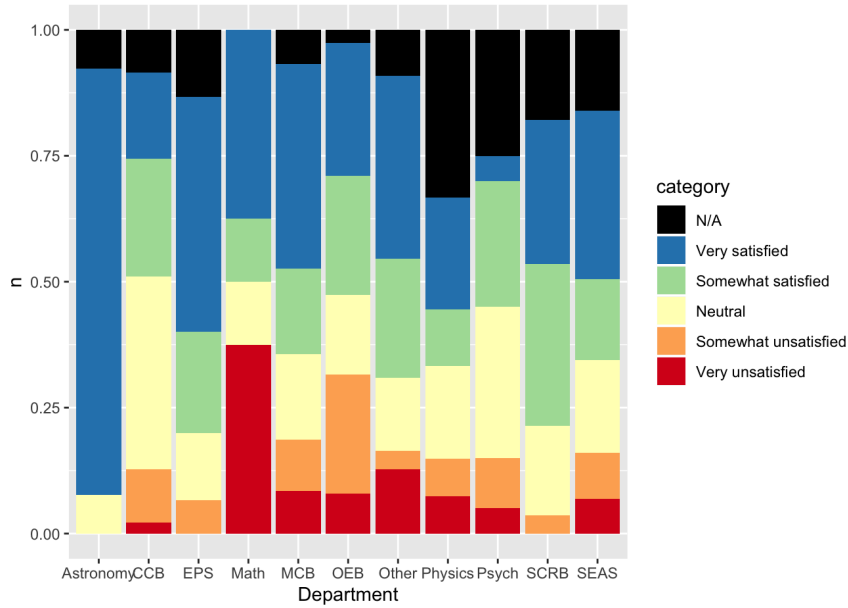




## Are you satisfied with...



Travel Funding



University Facilities

