#### EEMB DEI Report - 2022/23

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#### Load Data

These are the questions to be analyzed after omiting long responses (eg what "Other" means, "define diversity") and demographic information.

```
## questions in a useable format
  questions <- read_csv("eemb_dei_colrename.csv") %>%
    unite("newcolnames", c(colnames, category), sep = ":", na.rm=T, remove=F)
  ## these are the questions to be analyzed
  questions %>%
    filter(!str_detect(newcolnames, "longanswer"),
            !str_detect(newcolnames, "demograph"),
            !str_detect(newcolnames, "other"),
            !str_detect(newcolnames, "confirm")) %>%
    select(question)
# A tibble: 97 \times 1
   question
   <chr>>
 1 How comfortable do you feel discussing about general DEI issues with: - Frie~
 2 How comfortable do you feel discussing about general DEI issues with: - Fami~
 3 How comfortable do you feel discussing about general DEI issues with: - peer~
 4 How comfortable do you feel discussing about general DEI issues with: - juni~
 5 How comfortable do you feel discussing about general DEI issues with: - seni~
 6 How comfortable do you feel discussing about general DEI issues with: - advi~
 7 How comfortable do you feel discussing about general DEI issues with: - non-~
 8 How comfortable do you feel discussing about general DEI issues with: - EEMB~
 9 How comfortable do you feel discussing about general DEI issues with: - Anon~
10 Do you personally feel well supported - academically by the department
# i 87 more rows
```

In the dataset analyzed the shorter names for the questions are as follows after removing extra text:

```
(questions.short <- questions %>%
    filter(!str_detect(newcolnames, "longanswer"),
            !str detect(newcolnames, "demograph"),
            !str_detect(newcolnames, "other"),
            !str_detect(newcolnames, "eemb_support"),
            !str_detect(newcolnames, "confirm")) %>%
     separate(question, c("question", NA), sep = "-") %>%
    select(question, colnames) %>%
     mutate(question = str_remove_all(question, "\nUnderrepresented background: belonging t
            question = str_remove_all(question, "(financially, mentally, emotionally, acade
            question = str_remove_all(question, "Please identify how available support is f
            question = str_remove_all(question, "(We are primarily interested in TA experie
            question = str_remove_all(question, "(Science by the Pint, Happy Hour, Tea Time
            question = str_remove_all(question, "\\("),
            question = str_remove_all(question, "\\)")) %>%
    distinct())
Warning: Expected 2 pieces. Additional pieces discarded in 27 rows [7, 19, 20, 24, 37,
38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 55, 62, 63, 65, 66, ...].
Warning: Expected 2 pieces. Missing pieces filled with `NA` in 5 rows [29, 64, 81, 82,
83].
# A tibble: 17 x 2
   question
                                                                         colnames
   <chr>
                                                                         <chr>
 1 "How comfortable do you feel discussing about general DEI issues wi~ dei con~
 2 "Do you personally feel well supported "
                                                                         persona~
 3 "Do you think any of the following are issues in the EEMB departmen~ eemb_is~
 4 "To what extent do you feel that graduate students from the followi~ group_s~
 5 "I know what resources are available to me if I am discriminated ag~ discrim~
 6 "I feel comfortable using these resources and/or reporting acts of ~ discrim~
7 "How often do you think the department should hold department"
                                                                         eemb de~
 8 "There are many factors that can have an effect on someone's well"
 9 "We would like to identify EEMB's strengths and weaknesses in suppo~ eemb_st~
10 "Please use the scale below to help us understand the state of your~ finances
11 "To meet my monthly bills, I rely on..."
                                                                         monthly~
12 "How would you rate the support for personal financial well"
13 "How would you rate your experience as a TA for EEMB courses? We ar~ eemb_ta
14 "How satisfied are you by the frequency of social opportunities/eve~ social
15 "How satisfied are you by the types of social opportunities/events ~ social
16 "How satisfied are you by the climate of the social events/opportun~ social
17 "Which topics would you like EEMB to prioritize with regards to att~ eemb_pr~
```

Load the survey data and assign levels to all of the multilevel responses

```
## raw survey
  raw <- read_csv("EEMB Grad Student Climate Survey.csv", skip = 1) %>%
  mc <- raw
  colnames(mc) <- questions$newcolnames</pre>
  mc <- mc %>%
    select(-contains("longanswer"),
           -contains("demographic"),
           -contains("other"),
           -contains("eemb_support"),
           -confirm)
  colnames(mc)
[1] "dei_conversations:Friends"
 [2] "dei_conversations:Family members"
[3] "dei_conversations:peer EEMB graduate students"
[4] "dei_conversations:junior EEMB graduate students"
[5] "dei_conversations:senior EEMB graduate students"
[6] "dei_conversations:advising faculty"
[7] "dei_conversations:non-advising EEMB faculty"
[8] "dei_conversations:EEMB staff"
[9] "dei_conversations: Anonymous bias reporting on the EEMB DEI website"
[10] "personally_supported:academically by the department"
[11] "personally_supported:financially by the department"
[12] "personally_supported:mentally and emotionally by the department"
[13] "eemb_issues:Lack of graduate students from underrepresented backgrounds"
[14] "eemb_issues:Bias against graduate students from underrepresented backgrounds"
[15] "eemb_issues:General lack of support for graduate students from underrepresented backgraduate
[16] "eemb_issues:Lack of invited speakers from underrepresented backgrounds"
[17] "eemb_issues:Lack of faculty from underrepresented backgrounds"
[18] "group_supported:All graduate students"
[19] "group_supported:First-generation college"
[20] "group_supported:First-generation graduate"
[21] "group_supported:Socioeconomically disadvantaged"
[22] "group_supported:Underrepresented cultural backgrounds"
[23] "group_supported:Underrepresented ethnicities"
[24] "group_supported:International (non-American)"
[25] "group_supported:Underrepresented gender identities"
[26] "group_supported:Underrepresented sexualities"
[27] "group_supported:Physical disabilities"
[28] "group_supported:Neurodivergent"
[29] "discrimination_resources"
[30] "discrimination_reporting:Talking to my advisor"
```

- [31] "discrimination\_reporting: Talking to the EEMB Chair"
- [32] "discrimination\_reporting:Talking to the Grad Affairs Chair"
- [33] "discrimination\_reporting:Talking to a committee member"
- [34] "discrimination\_reporting:Reporting to the EEMB anonymous feedback site"
- [35] "discrimination\_reporting:Reporting outside of EEMB"
- [36] "eemb\_dei\_meeting\_frequency"
- [37] "factors:Non-academic support from research advisors, including committee advisors"
- [38] "factors: Academic support from peers"
- [39] "factors:Non-academic support from peers"
- [40] "factors: Approachability of non-advising faculty"
- [41] "factors: Approachability of department staff"
- [42] "factors:Sense of department camaraderie"
- [43] "factors:Mentorship opportunities"
- [44] "factors:Spirituality/religion"
- [45] "factors:Social life"
- [46] "factors:Family life"
- [47] "factors: Spending time outdoors"
- [48] "eemb\_strengths\_weaknesses:Mental Health"
- [49] "eemb\_strengths\_weaknesses:Physical Health"
- [50] "eemb\_strengths\_weaknesses:Physical Safety"
- [51] "eemb\_strengths\_weaknesses:Food security"
- [52] "eemb\_strengths\_weaknesses:Financial security"
- [53] "eemb\_strengths\_weaknesses:Sense of department camaraderie"
- [54] "eemb\_strengths\_weaknesses:Academic support from research advisors, including committee
- [55] "eemb\_strengths\_weaknesses:Approachability of non-advising faculty"
- [56] "eemb\_strengths\_weaknesses:Approachability of department staff"
- [57] "eemb\_strengths\_weaknesses:Mentorship opportunities"
- [58] "eemb\_strengths\_weaknesses:Spirituality/religion"
- [59] "eemb\_strengths\_weaknesses:Social life"
- [60] "eemb\_strengths\_weaknesses:Family life"
- [61] "eemb\_strengths\_weaknesses:Spending time outdoors"
- [62] "finances:Monthly salary (\$, current spring quarter 2023)"
- [63] "finances: Monthly cost of living currently (\$, rent, food, gas, internet, dependency can be a sense of the cost of living currently (\$).
- [64] "monthly\_bills"
- [65] "financially\_supported:Teaching assistantship"
- [66] "financially\_supported:Summer block grant"
- [67] "financially\_supported:Graduate student research assistantship"
- [68] "financially\_supported:Conference travel"
- [69] "financially\_supported:Research support for research project"
- [70] "financially\_supported:Emergency support"
- [71] "financially\_supported:Research support for objects or consummables that may be personated.
- [72] "financially\_supported:Mentoring students"
- [73] "financially\_supported: Service work provided to the department (organizing seminars, even
- [74] "eemb\_ta:Time dedicated to TA'ing is reasonable and assigned tasks can be accomplished
- [75] "eemb\_ta:TAs are not expected to carry out tasks outside the scope of their contracts."
- [76] "eemb\_ta:There is sufficient training given to graduate students to learn how to TA."

```
[77] "eemb_ta:TA stress levels are comparable or less to that of graduate students on GSR or
[78] "eemb_ta:Even though I have wanted to say 'no', I have felt pressured to take on extra
[79] "eemb_ta:There is reasonable support from the professors I TA for"
[80] "eemb_ta:I have been confident in my knowledge of the material in the courses to which
[81] "social:frequency"
[82] "social:type"
[83] "social:climate"
[84] "eemb_prioritize: Equity and transparency for financial support"
[85] "eemb_prioritize:Departmental climate (inclusivity and wellbeing)"
[86] "eemb_prioritize:Departmental transparency"
[87] "eemb_prioritize:Faculty advising"
[88] "eemb_prioritize:Professional skills development (e.g., stat courses)"
[89] "eemb_prioritize:Program requirements (e.g., oral exam structure)"
[90] "eemb_prioritize:Teaching assistant assignments or GSR work load"
[91] "eemb_prioritize:Faculty diversity (e.g., recruitment and retention)"
[92] "eemb_prioritize:Graduate student diversity (e.g., recruitment and retention)"
[93] "eemb_prioritize:Undergraduate student diversity (e.g., recruitment and retention)"
[94] "eemb_prioritize:Staff diversity (e.g., recruitment and retention)"
[95] "eemb_prioritize:Research associate diversity (e.g., recruitment and retention)"
  ## add levels to scaled questions
  mc %>% select(contains("eemb_prior")) %>% pivot_longer(everything()) %>% pull(value) %>%
[1] 6 2 3 1 4 5 7 8 9 10 12 11 NA
  mc <- mc %>%
    mutate(across(c(contains("dei_conversations"),
                    contains("discrimination_reporting")), ~factor(., levels = c("Very unco
                                                                        "Somewhat uncomforta
                                                                        "Neither comfortable
                                                                        "Somewhat comfortabl
                                                                        "Extremely comfortab
                                                                        "Unsure"))),
           across(c(contains("personally_supported"),
                    contains("eemb_ta")), ~ factor(., levels = c("Strongly disagree",
                                                                            "Somewhat disagr
                                                                            "Neither agree r
```

across(contains("eemb\_issues"), ~ factor(., levels = c("No", "Somewhat", "Yes",
across(contains("group"), ~factor(., levels = c("No support", "Minimal support",
eemb\_dei\_meeting\_frequency = factor(eemb\_dei\_meeting\_frequency, levels = c("Ever

"Somewhat agree"
"Strongly agree"

"Once

```
"Once
across(contains("factors"), ~ factor(., levels = c("Not at all important", "Most
across(contains("eemb_strengths"), ~ factor(., levels = c("Critically lacking",
                                             "Somewhat lacking",
                                             "Somewhat available",
                                            "Readily available",
                                            "Unsure"))),
across(contains("financially_supported"), ~ factor(., levels = c("Poor",
                                                                  "Adequate",
                                                                  "Fair",
                                                                  "Good",
                                                                  "Great"))),
across(c(`social:type`, `social:climate`), ~factor(`social:type`, levels = c("Ex
                                                  "Somewhat dissatisfied",
                                                  "Neither satisfied nor dissatis
                                                  "Somewhat satisfied",
                                                  "Extremely satisfied"))))
```

## Summarize responses

Without the demographics, all there is to report is how many people responded. Last year they grouped people into "Person of Color" and "White".

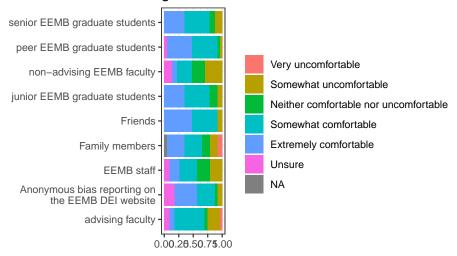
nrow(mc)

[1] 23

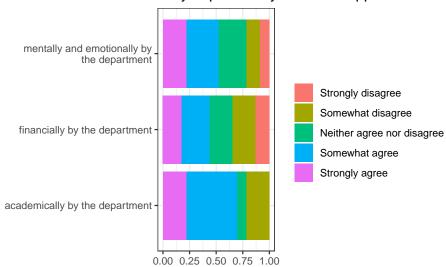
#### **Plots**

```
## plotting function
plot_fun <- function(question){</pre>
  plot_title = questions.short$question[which(questions.short$colnames == question)]
  plot_title = str_wrap(plot_title, width = 50)
  mc %>%
    select(contains(question)) %>%
   pivot_longer(everything()) %>%
    mutate(name = str_remove_all(name, paste0(question, ":")),
           name = str_wrap(name, width=30)) %>%
    ggplot()+
    geom_bar(aes(y = name, fill = value),
             position = "fill")+
    labs(title = plot_title,
         fill = NULL)
}
# plot_fun(questions.short$colnames[1])
toplot <- questions.short %>%
  filter(!colnames %in% c("finances", "monthly_bills", "eemb_prioritize", "eemb_dei_meeti
for (i in 1:nrow(toplot)) {
  print(
  plot_fun(toplot$colnames[i])
}
```

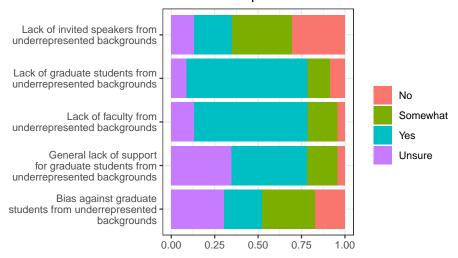
### How comfortable do you feel discussing abou general DEI issues with:



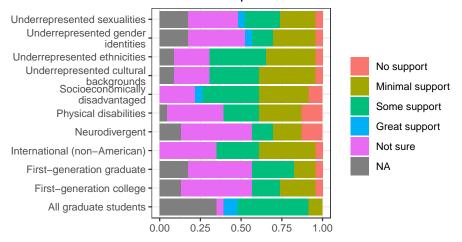
#### Do you personally feel well supported



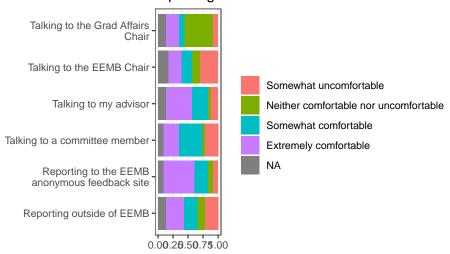
#### Do you think any of the following are issues in the EEMB department?



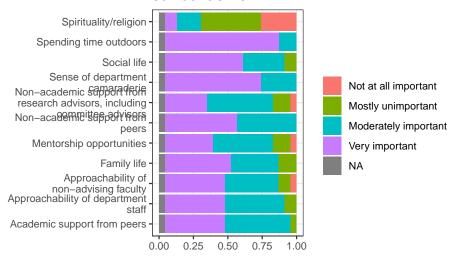
# To what extent do you feel that graduate studer from the following groups are well supported in the EEMB department?



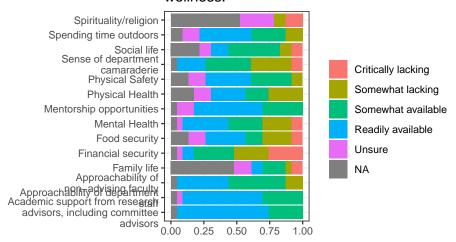
#### I feel comfortable using these resources and/c reporting acts of discrimination.



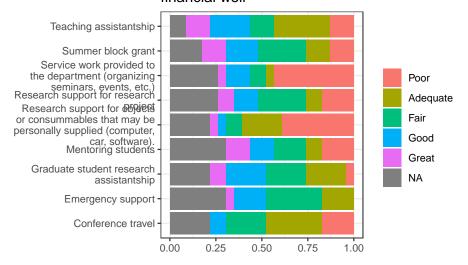
#### There are many factors that can have an effect someone's well



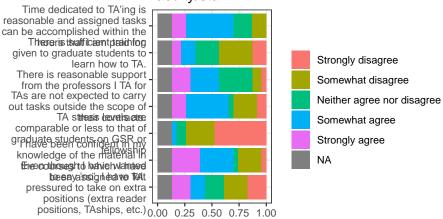
# We would like to identify EEMB's strengths and weaknesses in supporting graduate stuc wellness.

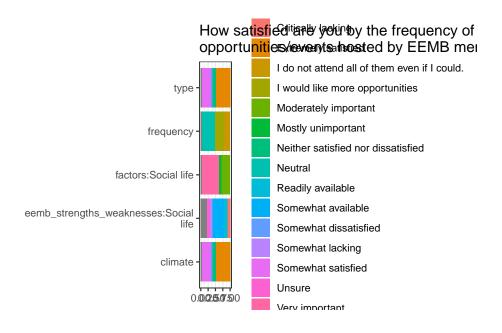


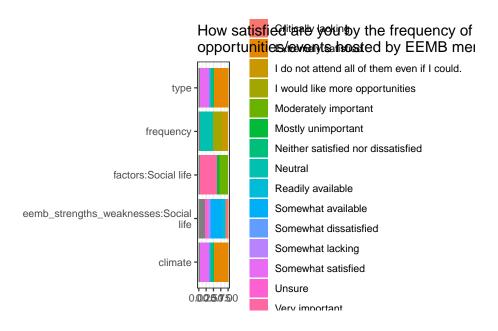
#### How would you rate the support for personal financial well

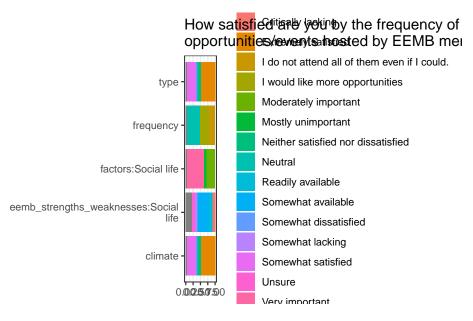


How would you rate your experience as a TA for EEMB courses? We are primarily interests in TA experiences for EEMB courses with EEI faculty/staff.









plot\_fun(toplot\$colnames[8])

### How would you rate the support for personal financial well

