**APSA Mentorship Program Matching Algorithm**

1. Match on “Ethnicity”
   1. If “Not Hispanic, Latino, or Spanish Origin” go to step 2
   2. If “Hispanic, Latino, or Spanish Origin” skip to step 3
2. Match on “Race”
   1. “American Indian or Alaska Native”
   2. “Asian”
   3. “Black or African American”
   4. “Native Hawaiian or Other Pacific Islander”
   5. “White”
   6. “Other”
   7. “Prefer not to answer”
3. Match on “Are you a first-generation college student in your family?”
   1. If “No” go to step 4
   2. If “Yes” skip to step 5
4. Match on “Parent’s Annual Household Income”
   1. “<$25,000/year”
   2. “$25,000 to $49,999/year”
   3. “$50,000 to $74,999/year”
   4. “>$100,000/year”
   5. “Prefer not to answer”
5. Match on “Region”
6. “Midwest”
7. “Mountain”
8. “Northeast”
9. “South”
10. “Southeast”
11. “West Coast”
12. Match on “State” \*text will be an exact match, as entered by admin
13. Match on “City” \*text will be an exact match, as entered by admin
14. Match on “Gender”
    1. “Male”
    2. “Female”
15. Create matches (use this algorithm at all matching steps)
    1. On the mentor spreadsheet query the field “Would you be willing to mentor two undergraduate students?”
       1. If “Yes” match one mentor with two mentees, remove mentor and mentees from their bins, and add match information to the output speadsheet
       2. If “No” match one mentor with one mentee, remove mentor and mentee from their bins, and add match information to the output speadsheet
       3. If “Yes” but only one mentee is available, match and leave the mentor in the bin for further matching while removing the mentee from their bin
       4. If “Yes” and mentor has already been matched with one mentee, match with one additional mentee, remove mentor and mentee from their bins, and add match information to the output spreadsheet
       5. If there is no available mentee to match with a mentor, or mentor to match with a mentee, leave the mentor or mentee in their bin for further matching
16. Unmatch on “Gender”
17. Create matches
18. Unmatch on “City”
19. Create matches
20. Unmatch on “State”
21. Create matches
22. Unmatch on “Region”
23. Match on “Gender”
24. Create matches
25. Unmatch on “Gender”
26. Create matches
27. Unmatch on “Parent’s Annual Household Income” AND “Are you a first-generation college student in your family?”
28. Match on “Gender”
29. Create matches
30. Unmatch on “Gender”
31. Create matches
32. Unmatch on “Race” AND “Ethnicity”
33. Match on “Gender”
34. Create matches
35. Unmatch on “Gender”
36. Create matches

Note: As a disclaimer, I am not a programmer. I envision both lists being progressively binned. Then, when final bins have been created, like bins should be compared, and mentor to mentee matches should be created alphabetically or randomly, whichever is easier. Once this process is complete, then progressive unbinning, and a few times re-binning, should occur with subsequent matching where indicated. Also, all fields on which matching should occur have text that was selected from a list, or in the case of region, state, and city input by me. Thus, all text that should be matched on will appear exactly as indicated within quotations in the algorithm. Finally, I envision the ultimate output of the algorithm to be a spreadsheet in which mentors and mentees are paired. I have attached an example of the final spreadsheet from last year’s manual matching.