The Association between Sub-Internships and Match Rank Order at Integrated Plastic Surgery Programs

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Disclosures

• No disclosures
Sub-Internships and the Plastic Surgery Match

• **Important** for integrated plastic surgery match

• Match rank list heavily based on subjective qualities

• Performance correlates with Match rank

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**2007 program director survey**

<table>
<thead>
<tr>
<th>Quality</th>
<th>Response (average rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance on away/subinternship rotation</td>
<td>2.29</td>
</tr>
<tr>
<td>Performance on interview</td>
<td>3.34</td>
</tr>
<tr>
<td>Personality</td>
<td>4.03</td>
</tr>
<tr>
<td>Maturity</td>
<td>4.07</td>
</tr>
<tr>
<td>Leadership potential</td>
<td>4.23</td>
</tr>
<tr>
<td>Research experience</td>
<td>6.00</td>
</tr>
<tr>
<td>Interest in academics</td>
<td>6.20</td>
</tr>
<tr>
<td>Appearance</td>
<td>8.13</td>
</tr>
</tbody>
</table>

1 (most important) to 10 (least important)

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Sub-Internships and the Plastic Surgery Match

12. A visiting rotation/subinternship at our institution is very important for an applicant to be considered for a position on our rank list.

   Strongly agree: \( n = 2; \) 4.5 percent
   Somewhat agree: \( n = 18; \) 40.9 percent
   No opinion: \( n = 6; \) 13.6 percent
   Somewhat disagree: \( n = 14; \) 31.8 percent
   Strongly disagree: \( n = 3; \) 6.8 percent

13. The ultimate quality of our residents has consistently been predicted by their position on the rank order list submitted for the match.

   Strongly agree: \( n = 15; \) 34.1 percent
   Somewhat agree: \( n = 16; \) 36.4 percent
   No opinion: \( n = 4; \) 9.1 percent
   Somewhat disagree: \( n = 5; \) 11.4 percent
   Strongly disagree: \( n = 3; \) 6.8 percent

Sub-Internships and the Plastic Surgery Match

44% PGY-1 composition were Sub-Interns and Home Students

Sub-Internships and the Plastic Surgery Match

![Graph showing the number of residents who rotated or were medical students at the institution.](image)

**Fig. 1.** Number of residents who rotated or were medical students at the institution.

Aims

• Characterize the final rank position of sub-interns compared to non-sub-interns in the Plastic Surgery Match

• Examine the current resident composition at each institution for residents who were home students or had performed a sub-internship
Methods

• ACAPS and IRB approved online survey
• Administered to Doximity top 25 reputation programs
  • Current program details, Sub-internship structure
  • Composition of current residents
    (# of sub-interns:non-sub-interns)
  • 2018-2019 Rank List composition
Finally, we would like to assess the sub-intern matched resident composition of your program.

Looking at your current residents, please select whether each was a sub-I, a home student, or a non-sub-I.

For programs with both integrated and Independent residents, only consider integrated residents for this question. If your program has increased in integrated class number, please select "N/A" for the non-applicable resident position. For the purpose of this question, research fellows should be considered as sub-interns.

### Current resident composition

<table>
<thead>
<tr>
<th>PGY-1</th>
<th>Home Student</th>
<th>Non Sub-I</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

### 2018-2019 Rank List

Please select the appropriate student designation (sub-I vs. home student vs. non-sub-I) for each numerical order on your program’s 2018-2019 rank list.

Only select answers for the number of students your program ranked. For the purpose of this question, research fellows should be considered as sub-interns.

**Results of this question will be analyzed in aggregate and anonymized.**

<table>
<thead>
<tr>
<th></th>
<th>Sub-I</th>
<th>Home student</th>
<th>Non-Sub-I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>10</td>
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</tbody>
</table>
Results

- 100% response rate (25/25 programs)
- Mean # of sub-interns 12.2 (range 6-30)
- 70.8% service; 29.2% mentorship models
- 25% first come first serve; 75% screened
Results

Mean # students interviewed

34.9 (Range 22-50)

Mean # students ranked

32.8 (Range 10-50)
Results

Type of Letter Offered

- Committee Letter
- Individual Faculty Letter
- Program Director Letter
- Chief/Chairman Letter

Number of Rotators Invited Back for Interviews

- 0.25%
- 25-50%
- 50-75%
- 75-99%
- 100% (all invited)
- Interview during Sub-I
Results

2018-2019 Match List Rank Order

- 1: 72% Home student
- 2: 65% or Sub-Intern
- 3: 56%

Legend:
- Blue: Home Student
- Green: Sub-Intern
- White: Non-Sub-Intern
Results

- Mean 64.3% of “ranked to match” spots composed of sub-interns/home students
- Institution-specific: Range 10-100% home students/sub-interns in top 10
- **22.2%** of Top 10 lists composed of 70-100% sub-interns/home students
## Results

<table>
<thead>
<tr>
<th>Median (IQR) Rank Position</th>
<th>Home Student</th>
<th>Sub-Intern</th>
<th>Non-Sub-Intern</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 (2-10)</td>
<td>9 (5-14)</td>
<td>11 (7-16)</td>
<td></td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Composite rank position of home students/sub-interns **significantly higher** than non-sub-interns
Results

- PGY-1: 56.9%
- PGY-2: 61.9%
- PGY-3: 73.8%
- PGY-4: 68.3%
- PGY-5: 58.8%
- PGY-6: 65.5%

Legend:
- Non-Sub-Intern
- Sub-Intern
- Home Student
Results

- Mean 64.2% of current residents were sub-interns or home students in their integrated program.

- Institution specific:
  Range 13.3-100% of current residents sub-interns/home students.

- 20.8% of Top 25 programs composed of 80-100% sub-interns/home students.
Conclusions

• Home students/sub-interns ranked higher on rank lists vs. non-sub-interns

• Majority of "ranked to match” positions occupied by sub-interns/home students

• Majority of matched residents performed a sub-internship at their respective program

  • Some programs rank and match 100% sub-interns

• Performing a sub-internship $\rightarrow$ significant benefit in the Match

  • Most specifically at their home or sub-internship institution
Thank You

• ACAPS
• Program Directors
• Associate Program Directors
• Program Coordinators
• Co-Authors