The 2020 AST Education Needs Assessment Survey was distributed to all AST members from February 6 to March 6, 2020. The survey included a topical specialty section based on each of AST’s Communities of Practice (COP).

30 participants began the “Vascular Composite Allotransplantation” specialty section and 25 completed the section. A breakdown of the information gathered from these participants is provided in this report.

I. “Vascular Composite Allotransplantation” Specialty Section Participants

Role of Participants:

Participants were asked, “Which best describes you? (please choose one).” Based on the 30 participants who started the VCA AC specialty section, the chart below outlines the roles that were represented (results from all participants in the survey are provided for comparison).

<table>
<thead>
<tr>
<th>Role</th>
<th>Specialty Participants</th>
<th>Overall Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician/Primarily Research</td>
<td>3 (10.0%)</td>
<td>65 (8.7%)</td>
</tr>
<tr>
<td>Physician/Primarily Clinical</td>
<td>3 (10.0%)</td>
<td>316 (42.4%)</td>
</tr>
<tr>
<td>Surgeon/Primarily Research</td>
<td>4 (13.3%)</td>
<td>12 (1.6%)</td>
</tr>
<tr>
<td>Surgeon/Primarily Clinical</td>
<td>4 (13.3%)</td>
<td>45 (6.0%)</td>
</tr>
<tr>
<td>Administrator</td>
<td>2 (6.7%)</td>
<td>34 (4.6%)</td>
</tr>
<tr>
<td>Advanced Practice Provider</td>
<td>1 (3.3%)</td>
<td>43 (5.8%)</td>
</tr>
<tr>
<td>Histocompatibility Specialist</td>
<td>2 (6.7%)</td>
<td>23 (3.1%)</td>
</tr>
<tr>
<td>Nurse/Transplant Coordinator</td>
<td>1 (3.3%)</td>
<td>16 (2.1%)</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>3 (10.0%)</td>
<td>104 (14.0%)</td>
</tr>
<tr>
<td>Psychologist/Psychiatrist</td>
<td>0</td>
<td>12 (1.6%)</td>
</tr>
<tr>
<td>Social Worker</td>
<td>1 (3.3%)</td>
<td>19 (2.6%)</td>
</tr>
<tr>
<td>Researcher/Scientist</td>
<td>4 (13.3%)</td>
<td>37 (5.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (6.7%)</td>
<td>19 (2.6%)</td>
</tr>
</tbody>
</table>
Affiliation of Participants:

Participants were asked what is their "Affiliation (please choose one.)" Based on the 30 participants who started the VCA AC specialty section, the chart below outlines the affiliations that were represented (results from all participants in the survey are provided for comparison).

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Specialty Participants</th>
<th>Overall Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>18 (60.0%)</td>
<td>427 (57.3%)</td>
</tr>
<tr>
<td>Government or Military</td>
<td>0</td>
<td>9 (1.2%)</td>
</tr>
<tr>
<td>Hospital</td>
<td>7 (23.3%)</td>
<td>256 (34.4%)</td>
</tr>
<tr>
<td>Industry</td>
<td>2 (6.7%)</td>
<td>16 (2.1%)</td>
</tr>
<tr>
<td>Organ Procurement Organization</td>
<td>1 (3.3%)</td>
<td>15 (2.0%)</td>
</tr>
<tr>
<td>Stand-alone Private Practice</td>
<td>1 (3.3%)</td>
<td>13 (1.7%)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (3.3%)</td>
<td>9 (1.2%)</td>
</tr>
</tbody>
</table>

Experience Level of Participants:

Participants were asked to “Please enter your level of experience/years in practice.” Based on the 30 participants who started the VCA AC specialty section, the chart below outlines the levels of experience that were represented (results from all participants in the survey are provided for comparison).

<table>
<thead>
<tr>
<th>Level of Experience</th>
<th>Specialty Participants</th>
<th>Overall Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not yet in training</td>
<td>0</td>
<td>5 (0.7%)</td>
</tr>
<tr>
<td>In training (resident)</td>
<td>0</td>
<td>16 (2.1%)</td>
</tr>
<tr>
<td>In training (fellow)</td>
<td>1 (3.3%)</td>
<td>46 (6.2%)</td>
</tr>
<tr>
<td>&lt;5 years</td>
<td>6 (20.0%)</td>
<td>182 (24.4%)</td>
</tr>
<tr>
<td>6-10 years</td>
<td>7 (23.3%)</td>
<td>147 (19.7%)</td>
</tr>
<tr>
<td>11-15 years</td>
<td>5 (16.7%)</td>
<td>123 (16.5%)</td>
</tr>
<tr>
<td>16-20 years</td>
<td>3 (10.0%)</td>
<td>81 (10.9%)</td>
</tr>
<tr>
<td>21+ years</td>
<td>8 (26.7%)</td>
<td>145 (19.7%)</td>
</tr>
</tbody>
</table>
II. VCA AC’s “Vascular Composite Allotransplantation” Specialty Section Data

A list of important and timely topics was created for the 2020 Needs Assessment Survey specialty sections by VCA AC Leadership and the AST Education Committee. Participants were asked to “Rate each educational topic’s importance to you” as either 1) “Not interested,” 2) “Interested but have sufficient knowledge” or 3) “Interested & want/need to learn more.”

Here are the results from the 25 participants who completed this specialty section.

VCA AC Specialty Topics – Overall Ranking: The topic list has been ranked below based on a weighted mean score of up to 3.0, with “Interested & want/need to learn more” weighted highest, “Interested but have sufficient knowledge” weighted next highest, and “Not interested” weighted lowest (out of 25 results).

1. Chronic rejection: 2.60  
2. Outcomes after a VCA: 2.52  
3. (Tied) Antibody mediated rejection: 2.44  
   (Tied) Immune monitoring, predictive biomarkers, and non-invasive imaging strategies after VCA: 2.44  
5. (Tied) Immunosuppression protocols use in VCA: 2.40  
   (Tied) Patient selection: 2.40  
   (Tied) Treatment of cell- and antibody-mediated rejection: 2.40  
8. Quality of life measures and outcomes in VCA: 2.32  
9. Exit strategies after a VCA: 2.24  
10. (Tied) Psychosocial evaluation of VCA recipients: 2.08  
   (Tied) Complications in VCA recipients (surgical, metabolic, infectious): 2.08  
12. Assessment of technology advances to improve medication non-adherence and compliance after transplantation: 2.04

VCA AC Specialty Topics – “Interested and want/need to learn more” Only: The topic list has been ranked below based exclusively on the number of “Interested and want/need to learn more” results (out of 25 results).

1. Chronic rejection: 18  
2. (Tied) Antibody mediated rejection: 16  
   (Tied) Outcomes after a VCA: 16  
4. (Tied) Immunosuppression protocols use in VCA: 15  
   (Tied) Patient selection: 15  
   (Tied) Treatment of cell- and antibody-mediated rejection: 15  
   (Tied) Immune monitoring, predictive biomarkers, and non-invasive imaging strategies after VCA: 15  
8. (Tied) Exit strategies after a VCA: 14  
   (Tied) Quality of life measures and outcomes in VCA: 14  
10. Psychosocial evaluation of VCA recipients: 11  
11. (Tied) Assessment of technology advances to improve medication non-adherence and compliance after transplantation: 10  
   (Tied) Complications in VCA recipients (surgical, metabolic, infectious): 10
VCA AC Specialty Topics – “Not interested” Only: The following topics received the highest number of “Not interested” results (out of 25 results).

- Assessment of technology advances to improve medication non-adherence and compliance after transplantation: 9
- Psychosocial evaluation of VCA recipients: 9
- Complications in VCA recipients (surgical, metabolic, infectious): 8
- Exit strategies after a VCA: 8

Please see the pie charts on the following pages for a topic-by-topic breakdown of participant interest in each topic.

If you have follow-up questions, or would like additional details on a result, please contact the AST Education Program Manager, Brian Valeria (bvaleria@myast.org) for more information.
Complications in VCA recipients
(surgical, metabolic, infectious)

- Not interested, 32.00%
- Interested but have sufficient knowledge, 28.00%
- Interested & want/need to learn more, 40.00%

Antibody mediated rejection

- Not interested, 20.00%
- Interested but have sufficient knowledge, 16.00%
- Interested & want/need to learn more, 64.00%
Immune monitoring, predictive biomarkers, and non-invasive imaging strategies after VCA

- Not interested, 16.00%
- Interested but have sufficient knowledge, 24.00%
- Interested & want/need to learn more, 60.00%

Outcomes after a VCA

- Not interested, 12.00%
- Interested but have sufficient knowledge, 24.00%
- Interested & want/need to learn more, 64.00%
Psychosocial evaluation of VCA recipients

Not interested, 36.00%
Interested but have sufficient knowledge, 20.00%
Interested & want/need to learn more, 44.00%

Quality of life measures and outcomes in VCA

Not interested, 24.00%
Interested but have sufficient knowledge, 20.00%
Interested & want/need to learn more, 56.00%
Assessment of technology advances to improve medication non-adherence and compliance after transplantation

- Not interested, 36.00%
- Interested but have sufficient knowledge, 24.00%
- Interested & want/need to learn more, 40.00%

Patient selection

- Not interested, 20.00%
- Interested but have sufficient knowledge, 20.00%
- Interested & want/need to learn more, 60.00%
**Chronic rejection**
- Not interested, 12.00%
- Interested but have sufficient knowledge, 16.00%
- Interested & want/need to learn more, 72.00%

**Exit strategies after a VCA**
- Not interested, 32.00%
- Interested but have sufficient knowledge, 12.00%
- Interested & want/need to learn more, 56.00%