

## 2020 Education Needs Assessment Report – TRM COP

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).

47 participants began the “Regenerative Medicine” specialty section and 41 completed the section. A breakdown of the information gathered from these participants is provided in this report.

### I. “Regenerative Medicine” Specialty Section Participants

#### Role of Participants:

Participants were asked, “Which best describes you? (please choose one).” Based on the 47 participants who started the TRM COP specialty section, the chart below outlines the roles that were represented (results from all participants in the survey are provided for comparison).

Role	Specialty Participants	Overall Participants
Physician/Primarily Research	5 (10.6%)	65 (8.7%)
Physician/Primarily Clinical	10 (21.3%)	316 (42.4%)
Surgeon/Primarily Research	2 (4.3%)	12 (1.6%)
Surgeon/Primarily Clinical	6 (12.8%)	45 (6.0%)
Administrator	1 (2.1%)	34 (4.6%)
Advanced Practice Provider	1 (2.1%)	43 (5.8%)
Histocompatibility Specialist	4 (8.5%)	23 (3.1%)
Nurse/Transplant Coordinator	4 (8.5%)	16 (2.1%)
Pharmacist	1 (2.1%)	104 (14.0%)
Psychologist/Psychiatrist	1 (2.1%)	12 (1.6%)
Social Worker	1 (2.1%)	19 (2.6%)
Researcher/Scientist	8 (17.0%)	37 (5.0%)
Other	3 (6.4%)	19 (2.6%)

### Affiliation of Participants:

Participants were asked what is their “*Affiliation (please choose one.)*” Based on the 47 participants who started the TRM COP specialty section, the chart below outlines the affiliations that were represented (results from all participants in the survey are provided for comparison).

Affiliation	Specialty Participants	Overall Participants
Academic	27 (57.5%)	427 (57.3%)
Government or Military	1 (2.1%)	9 (1.2%)
Hospital	8 (17.0%)	256 (34.4%)
Industry	4 (8.5%)	16 (2.1%)
Organ Procurement Organization	5 (10.6%)	15 (2.0%)
Stand-alone Private Practice	1 (2.1%)	13 (1.7%)
Other	1 (2.1%)	9 (1.2%)

### Experience Level of Participants:

Participants were asked to “*Please enter your level of experience/years in practice.*” Based on the 47 participants who started the TRM COP specialty section, the chart below outlines the levels of experience that were represented (results from all participants in the survey are provided for comparison).

Level of Experience	Specialty Participants	Overall Participants
Not yet in training	0	5 (0.7%)
In training (resident)	2 (4.3%)	16 (2.1%)
In training (fellow)	1 (2.1%)	46 (6.2%)
<5 years	8 (17.0%)	182 (24.4%)
6-10 years	9 (19.2%)	147 (19.7%)
11-15 years	6 (12.8%)	123 (16.5%)
16-20 years	5 (10.6%)	81 (10.9%)
21+ years	16 (34.0%)	145 (19.7%)

## II. TRM COP's "Regenerative Medicine" Specialty Section Data

A list of important and timely topics was created for the 2020 Needs Assessment Survey specialty sections by TRM COP 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 41 participants who completed this specialty section.

**TRM COP 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 41 results).

1. Stem cells and organs preservation: 2.85
2. New technologies to manufacture transplantable organs: 3D Printing: 2.83
3. (Tied) Organ preservation, regeneration and repair engineering: the Organ Repair Center: 2.80  
(Tied) Regenerative Medicine technologies in transplantation: 2.80
5. New technologies to manufacture transplantable organs: Decellularization, cell on scaffold seeding technology: 2.76
6. Define "Regenerative Medicine": beyond cell therapies: 2.63
7. Beta cell replacement and Regenerative Medicine: 2.59
8. New technologies to manufacture transplantable organs: Blastocyst complementation: 2.56
9. Hepatocyte transplantation: what to do to make it work: 2.39

**TRM COP 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 41 results).

1. (Tied) Regenerative Medicine technologies in transplantation: 35  
(Tied) Stem cells and organs preservation: 35
3. (Tied) New technologies to manufacture transplantable organs: 3D Printing: 34  
(Tied) Organ preservation, regeneration and repair engineering: the Organ Repair Center: 34
5. New technologies to manufacture transplantable organs: Decellularization, cell on scaffold seeding technology: 32
6. (Tied) Beta cell replacement and Regenerative Medicine: 30  
(Tied) New technologies to manufacture transplantable organs: Blastocyst complementation: 30
8. Define "Regenerative Medicine": beyond cell therapies: 29
9. Hepatocyte transplantation: what to do to make it work: 24

**TRM COP Specialty Topics – "Not interested" Only:** The following topics received the highest number of "Not interested" results (out of 41 results). \*

- Hepatocyte transplantation: what to do to make it work: 8
- New technologies to manufacture transplantable organs: Blastocyst complementation: 7
- Beta cell replacement and Regenerative Medicine: 6

\* TRM COP had two topics that received 0 "not interested" votes: "Stem cells and organs preservation" and "New technologies to manufacture transplantable organs: 3D Printing."

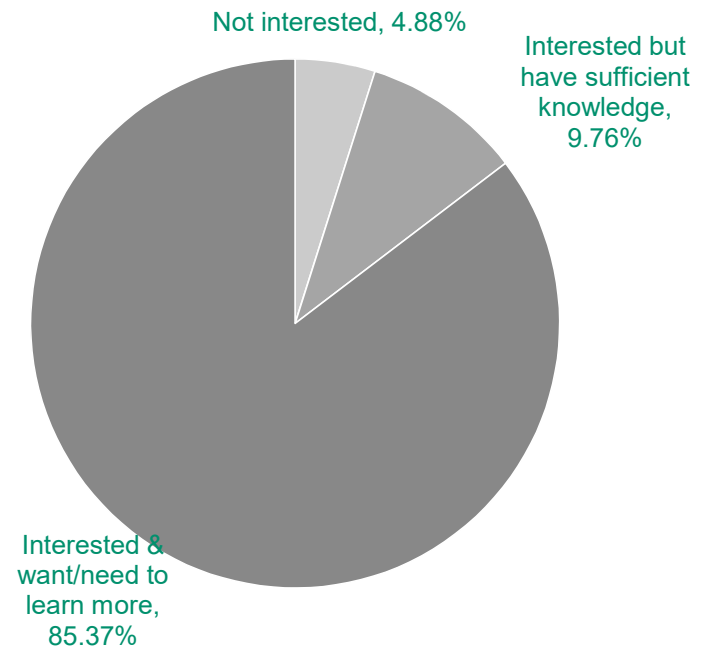
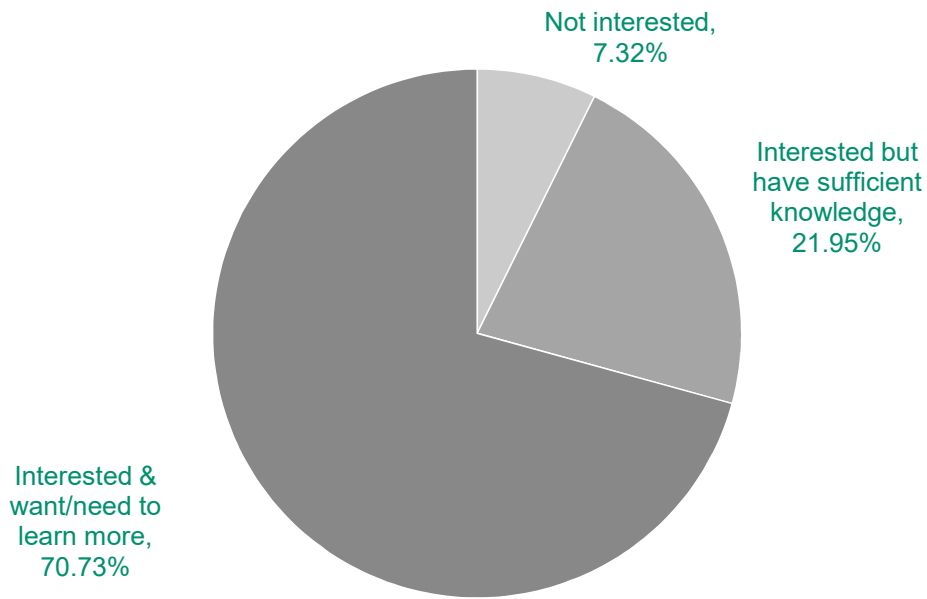
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**Please see the pie charts on the following pages for a topic-by-topic breakdown of participant interest in each topic.**

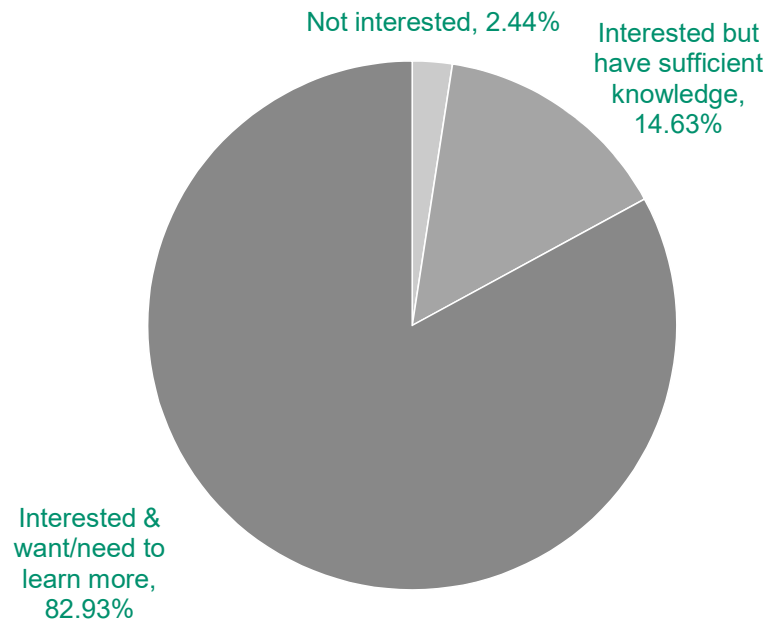
If you have follow-up questions, or would like additional details on a result, please contact the AST Education Program Manager, Brian Valeria ([bvaleria@myast.org](mailto:bvaleria@myast.org)) for more information.

*Define “Regenerative Medicine”: beyond cell therapies*

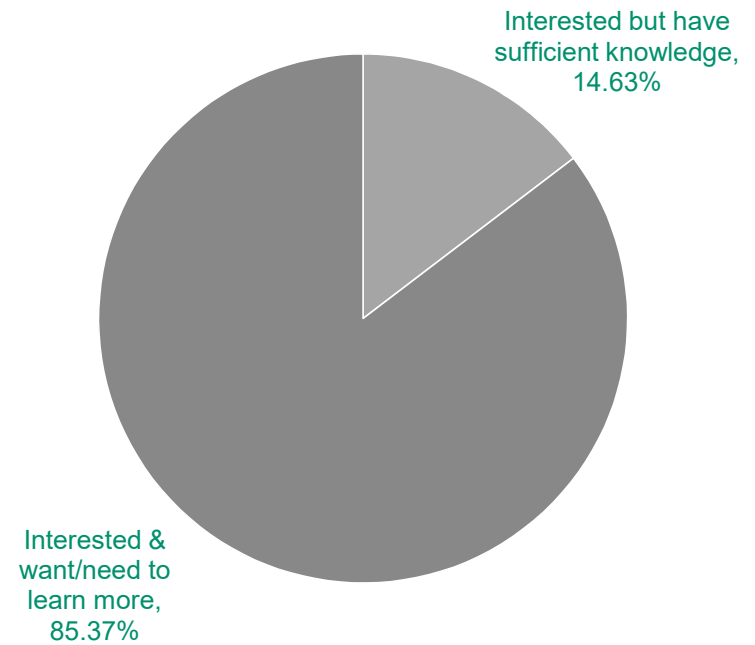
*Regenerative Medicine technologies in transplantation*



*Organ preservation, regeneration and repair engineering:  
the Organ Repair Center*

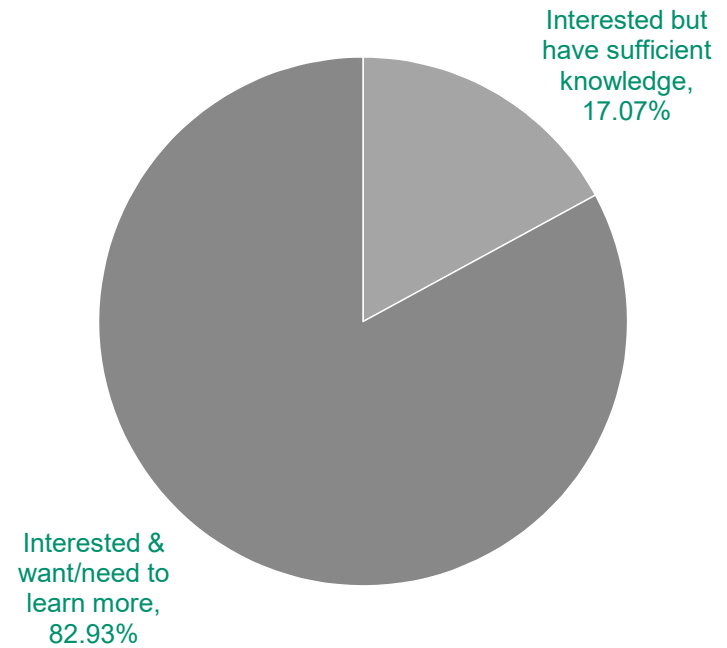
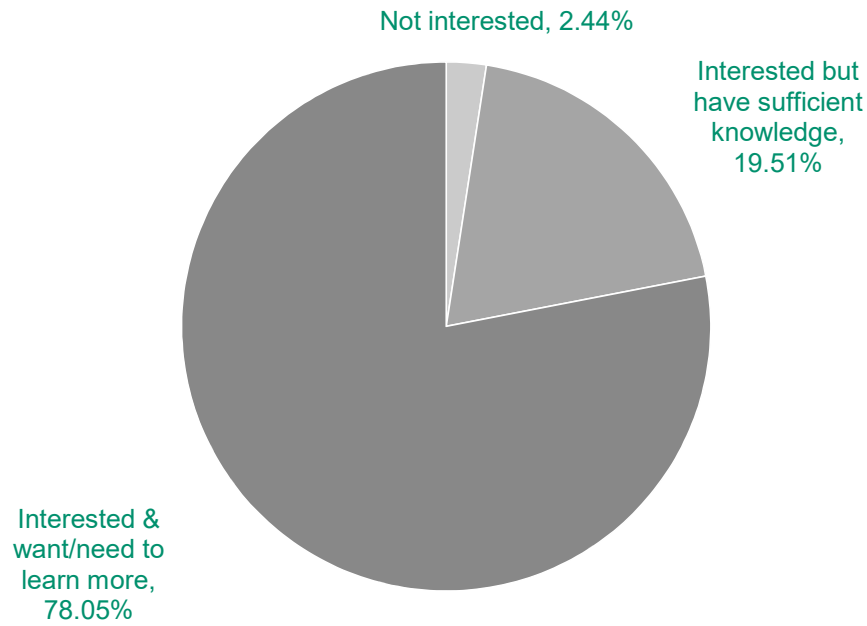


*Stem cells and organs preservation*



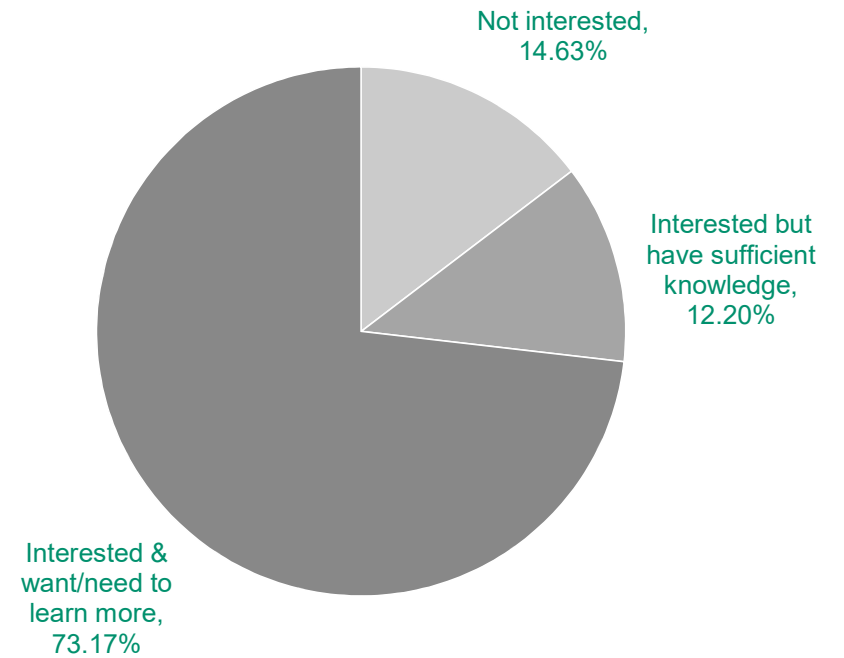
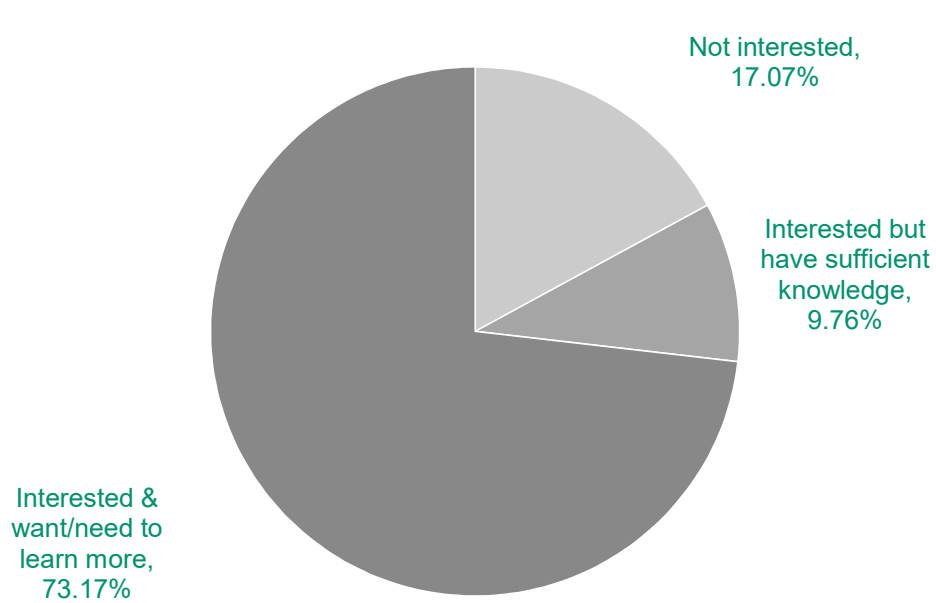
*New technologies to manufacture transplantable organs:  
Decellularization, cell on scaffold seeding technology*

*New technologies to manufacture transplantable organs:  
3D Printing*



*New technologies to manufacture transplantable organs:  
Blastocyst complementation*

*Beta cell replacement and Regenerative Medicine*





*Hepatocyte transplantation: what to do to make it work*

