

2020 Education Needs Assessment Report – LICOP

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).

162 participants began the "Liver and Intestinal" specialty section and 144 completed the section. A breakdown of the information gathered from these participants is provided in this report.

I. "Liver and Intestinal" Specialty Section Participants

Role of Participants:

Participants were asked, "*Which best describes you? (please choose one)*." Based on the 162 participants who started the LICOP 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 | 14 (8.6%) | 65 (8.7%) |
| Physician/Primarily Clinical | 48 (30.0%) | 316 (42.4%) |
| Surgeon/Primarily Research | 1 (0.6%) | 12 (1.6%) |
| Surgeon/Primarily Clinical | 16 (9.9%) | 45 (6.0%) |
| Administrator | 7 (4.3%) | 34 (4.6%) |
| Advanced Practice Provider | 18 (11.1%) | 43 (5.8%) |
| Histocompatibility Specialist | 3 (1.9%) | 23 (3.1%) |
| Nurse/Transplant Coordinator | 6 (3.7%) | 16 (2.1%) |
| Pharmacist | 29 (17.9%) | 104 (14.0%) |
| Psychologist/Psychiatrist | 4 (2.5%) | 12 (1.6%) |
| Social Worker | 4 (2.5%) | 19 (2.6%) |
| Researcher/Scientist | 8 (4.9%) | 37 (5.0%) |
| Other | 4 (2.5%) | 19 (2.6%) |

Affiliation of Participants:

Participants were asked what is their "*Affiliation (please choose one.)*" Based on the 162 participants who started the LICOP 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 | 90 (55.6%) | 427 (57.3%) |
| Government or Military | 2 (1.2%) | 9 (1.2%) |
| Hospital | 60 (37.0%) | 256 (34.4%) |
| Industry | 2 (1.2%) | 16 (2.1%) |
| Organ Procurement Organization | 3 (1.9%) | 15 (2.0%) |
| Stand-alone Private Practice | 3 (1.9%) | 13 (1.7%) |
| Other | 2 (1.2%) | 9 (1.2%) |

Experience Level of Participants:

Participants were asked to *"Please enter your level of experience/years in practice."* Based on the 162 participants who started the LICOP 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 | 1 (0.6%) | 5 (0.7%) |
| In training (resident) | 5 (3.1%) | 16 (2.1%) |
| In training (fellow) | 4 (2.5%) | 46 (6.2%) |
| <5 years | 39 (24.1%) | 182 (24.4%) |
| 6-10 years | 37 (22.9%) | 147 (19.7%) |
| 11-15 years | 26 (16.1%) | 123 (16.5%) |
| 16-20 years | 14 (8.6%) | 81 (10.9%) |
| 21+ years | 36 (22.2%) | 145 (19.7%) |

II. LICOP's "Liver and Intestinal" Specialty Section Data

A list of important and timely topics was created for the 2020 Needs Assessment Survey specialty sections by LICOP 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 144 participants who completed this specialty section.

LICOP 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 144 results).

- (Tied) Precision immunosuppression to improve allograft outcomes: new approaches to utilize biomarkers in clinical management: 2.58 (Tied) Expansion of allocation, utilization and optimization of donor organs - use of artificial intelligence to improve allocation, extended criteria donors, split grafts, living donor liver transplant, machine perfusion, administration of free radical scavengers, graft/recipient matching: 2.58
- 3. ICU care of pre- and post-liver transplant recipients: When is the patient too sick to transplant?: 2.47
- 4. Assessment of renal function in cirrhotic patients and prediction of renal recovery after liver transplantation: 2.46
- 5. Liver transplantation for alcoholic liver disease/alcoholic hepatitis and prognostic markers: 2.4
- 6. Prevention and management of obesity and metabolic syndrome in liver transplant recipients (e.g. role of bariatric surgery in cirrhotics, post-transplant weight management, etc.): 2.38
- 7. Multidisciplinary approaches to training transplant professionals (more educational initiatives, building upon the comprehensive trainee curriculum and approaches from other multidisciplinary fields): 2.37
- 8. Heart-liver axis in cirrhotic patients (e.g., impact and management of cirrhotic cardiomyopathy, management of cardiac cirrhosis): 2.36
- 9. Cardiopulmonary risk assessment and optimization of the liver transplant candidates: 2.33
- 10. (Tied) Old age and frailty in liver transplantation, including prehabilitation prior to liver transplantation: 2.31

(Tied) Liver transplantation for HCC – changes in clinical management in setting of changes in allocation, e.g., treat smaller tumors than wait to grow due to NLRB change) downstaging of large tumors, surveillance for recurrence (e.g., RETREAT score): 2.31

- 12. Expansion of transplant oncology (liver transplantation for non-HCC malignancy, including new indications such as metastatic colon cancer): 2.26
- 13. Cancer screening and surveillance in the LT recipient (Consensus conference): 2.19

LICOP 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 144 results).

- 1. Precision immunosuppression to improve allograft outcomes: new approaches to utilize biomarkers in clinical management: 108
- 2. Expansion of allocation, utilization and optimization of donor organs use of artificial intelligence to improve allocation, extended criteria donors, split grafts, living donor liver transplant, machine perfusion, administration of free radical scavengers, graft/recipient matching: 107
- 3. Assessment of renal function in cirrhotic patients and prediction of renal recovery after liver transplantation: 95
- 4. Heart-liver axis in cirrhotic patients (e.g., impact and management of cirrhotic cardiomyopathy, management of cardiac cirrhosis): 93
- 5. ICU care of pre- and post-liver transplant recipients: When is the patient too sick to transplant?: 92
- 6. Prevention and management of obesity and metabolic syndrome in liver transplant recipients (e.g. role of bariatric surgery in cirrhotics, post-transplant weight management, etc.): 91
- Multidisciplinary approaches to training transplant professionals (more educational initiatives, building upon the comprehensive trainee curriculum and approaches from other multidisciplinary fields): 89
- 8. Liver transplantation for alcoholic liver disease/alcoholic hepatitis and prognostic markers: 88
- 9. Cardiopulmonary risk assessment and optimization of the liver transplant candidates: 85
- 10. Old age and frailty in liver transplantation, including prehabilitation prior to liver transplantation: 84
- 11. Expansion of transplant oncology (liver transplantation for non-HCC malignancy, including new indications such as metastatic colon cancer): 83
- Liver transplantation for HCC changes in clinical management in setting of changes in allocation, e.g., treat smaller tumors than wait to grow due to NLRB change) downstaging of large tumors, surveillance for recurrence (e.g., RETREAT score): 79
- 13. Cancer screening and surveillance in the LT recipient (Consensus conference): 75

LICOP Specialty Topics – "Not interested" Only: The following topics received the highest number of *"Not interested"* results (out of 144 results).

- Cancer screening and surveillance in the LT recipient (Consensus conference): 47
- Expansion of transplant oncology (liver transplantation for non-HCC malignancy, including new indications such as metastatic colon cancer): 45
- Heart-liver axis in cirrhotic patients (e.g., impact and management of cirrhotic cardiomyopathy, management of cardiac cirrhosis): 41
- Old age and frailty in liver transplantation, including prehabilitation prior to liver transplantation: 40
- Cardiopulmonary risk assessment and optimization of the liver transplant candidates: 38

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 (<u>bvaleria@myast.org</u>) for more information.

Cardiopulmonary risk assessment and optimization of the liver transplant candidates

Prevention and management of obesity and metabolic syndrome in liver transplant recipients (e.g. role of bariatric surgery in cirrhotics, post-transplant weight management, etc.)







Precision immunosuppression to improve allograft outcomes: new approaches to utilize biomarkers in clinical management





Liver transplantation for alcoholic liver disease/alcoholic hepatitis and prognostic markers

Expansion of allocation, utilization and optimization of donor organs - use of artificial intelligence to improve allocation, extended criteria donors, split grafts, living donor liver transplant, machine perfusion, administration of free radical scavengers, graft/recipient matching





Liver transplantation for HCC – changes in clinical management in setting of changes in allocation, e.g., treat smaller tumors than wait to grow due to NLRB change) downstaging of large tumors, surveillance for recurrence (e.g., RETREAT score)

Multidisciplinary approaches to training transplant professionals (more educational initiatives, building upon the comprehensive trainee curriculum and approaches from other multidisciplinary fields)





Assessment of renal function in cirrhotic patients and prediction of renal recovery after liver transplantation

Expansion of transplant oncology (liver transplantation for non-HCC malignancy, including new indications such as metastatic colon cancer)





Cancer screening and surveillance in the LT recipient (Consensus conference)

ICU care of pre- and post-liver transplant recipients: When is the patient too sick to transplant?





Heart-liver axis in cirrhotic patients (e.g., impact and management of cirrhotic cardiomyopathy, management of cardiac cirrhosis)



