Abdominal Transplant Surgery
Fellowship Training and Certification Requirements

This information is published by the Transplant Accreditation & Certification Council (TACC) to outline the requirements for certification in abdominal transplant surgery through the fellowship pathway. Applicants and fellows are expected to be familiar with all the requirements.

Transplant Accreditation & Certification Council (TACC)

Mission:
The Transplant Accreditation & Certification Council (TACC) serves the public, healthcare community, and transplant surgeons by promoting excellence and professionalism through education, accreditation, and certification.

Purpose:
The Transplant Accreditation & Certification Council was formed for the following purpose:

- To improve the safety and quality of transplant care.
- To develop and maintain high standards of excellence by rigorous evaluation and accreditation of training programs.
- To establish professional standards through, setting training benchmarks, examination, and certification of transplant surgeons.

History:
The Transplant Accreditation & Certification, LLC is a limited liability corporation founded by the American Society of Transplant Surgeons (ASTS) in January 2017 to oversee the accreditation of fellowship training programs and implement a certification pathway for transplant surgeons.

Fellowship Objective:
The objective of an Abdominal Transplant Surgery Fellowship Training Program is to develop proficiency in the surgical and medical management of patients with end-stage organ diseases amenable to transplantation. This objective should be achieved through a 24-month structured supplemental program for the study and treatment of these diseases in an accredited and properly supervised transplant surgery fellowship.

Fellows should apply for a complimentary ASTS Trainee membership before entering the fellowship training program. Fellows apply for online at www.ASTS.org. The application must be completed and include your CV. Applications should be submitted at least 3 months prior to the fellows start date.

Program Requirements for Fellowship Training:
The program must provide adequate volumes of various transplant procedures and have a formal structure of didactic and clinical training in place. The fellow must demonstrate proficiency by participating in the Principal Role in an adequate number of operative transplants for each organ in order to receive a certificate of completion of a fellowship in a particular organ system.

Fellows will be eligible to train in the Basic Training Categories (BTF) and Specialized Training Categories (STF) category in which they match into and the program is accredited to train in. Upon successful completion, Program Directors will notify the ASTS which organ track(s) the fellow is competent in.
Programs must notify the ASTS National Office of their incoming fellows. Name, degree, organ training slot, email address and start date must all be submitted to ASTS prior to fellowship start date.

Programs must submit surgical milestone assessments of fellows at 6-month intervals after start of training. Fellows are required to send their surgical logs to their program director for the milestone assessment.

Review the Program Accreditation Requirements.

Fellowship Match:
The annual Abdominal Transplant Surgery Fellowship match is administered through SF Match. The goal of the SF Match is to coordinate appointments, thus relieving the pressure of uncoordinated appointments and forced early choices. The participating programs will not make any appointments until the match has been completed. ASTS sponsors the matching process and the TACC is responsible for the enforcement of application rules.

The match takes place in June and will be used to process all applicants who want to start their Abdominal Transplant Surgery Fellowship training in July/August of the following year. Applicants are responsible for ensuring they meet all prerequisites for eligibility prior to registering for the match. All match participants must agree and abide by the SF Match rules and policies as well as any additional rules stated by ASTS and the TACC.

Fellowship Eligibility:
Candidates for training in a TACC Accredited Abdominal Transplant Surgery Fellowship Training Program must have satisfactorily completed a residency which satisfies the educational requirements for certification by the American Board of Surgery, American Board of Urology, American Osteopathic Board Certification, or foreign equivalency. Individual training programs may also have additional requirements.

Central Application Process
SF Match’s Central Application Service (CAS) distributes complete applications to programs electronically. The use of CAS is mandatory for both programs and applicants. For more information, visit the Central Application Service (CAS) tab.

Duration of Training:
The length of the fellowship should be no less than twenty-four months. The twenty-four months must include a minimum of eighteen months of clinical training and the remaining six months can be either clinical training or nonclinical duties.

Surgical Volume Requirements:
Fellows are required to meet the following volumes over the course of their 24-month fellowship in order to receive a certificate of completion in the organ systems they matched into and the program is accredited to train in.

Fellows must maintain a surgical log in the Academic Universe. This surgical log should be updated in a timely fashion and must be approved by the Fellowship Training Program Director bi-annually during the milestone assessment.

The fellow must demonstrate proficiency by participating in the Principal Role in an adequate number of operative transplants for each organ in order to receive a certificate of completion of a fellowship in a particular organ system. The Program Director will notify the ASTS which organ track(s) the fellow is competent in.

"Principal Role" does not suggest that an Attending Surgeon was not present during the procedure. The Fellow can act in the Principal Role when working together with a Staff Surgeon. "Principal Role" does require that the
Fellow was present for the vast majority of the procedure. Only one Fellow can be considered to have played the principal role for any one procedure.

<table>
<thead>
<tr>
<th>Total Transplant Volume</th>
<th>50</th>
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<tr>
<td>Multi-Organ Procurements</td>
<td>25</td>
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Kidney
*Living Donor Nephrectomies
| 40 | 12 |

Liver
| 45 |

Pancreas
| 10 transplants in the principal role |
| 10 back table preparations |
| 10 pancreas procurements |

**Intestine
| 10 |

**Hepatobiliary
Minimum 35 HB Cases
Minimum of 15 Hemihepatectomies
Minimum of 15 Biliary procedures

**Hepato-Pancreato-Biliary
Minimum 50 HPB Cases
Minimum of 15 Hemihepatectomies
Minimum of 15 Biliary procedures
Minimum of 15 Non-transplant major pancreatic procedures

*Fellows can perform a minimum of 12 living donor nephrectomies in the principal or participant role.

**Fellows must have successfully completed a fellowship in liver transplantation in order to be eligible for intestinal, hepatobiliary, or hepatopancreatobiliary certificate of completion.

National Transplant Curriculum:
All fellows will be required to complete all curriculum modules in each unit of the National Transplant Curriculum (outlined below) in order to receive a certificate of completion. Module completion will include the following: viewing the slide show presentation, reviewing the references, completing the Self-Assessment Questions, providing general and specific curriculum feedback at the completion of each presentation.

<table>
<thead>
<tr>
<th>Curriculum Units</th>
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<tbody>
<tr>
<td>Kidney</td>
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<tr>
<td>Medical Complications of Transplantation</td>
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<tr>
<td>Liver</td>
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<tr>
<td>Access for Renal Replacement Therapy</td>
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<tr>
<td>Pancreas</td>
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<tr>
<td>Public Policy and Organ Allocation</td>
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<tr>
<td>Immunobiology &amp; Pharmacology</td>
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<tr>
<td>Ethics</td>
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<tr>
<td>Organ Recovery</td>
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<td>HB/HPB</td>
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Managed Time Policy:
In addition to training fellows in all aspects of clinical care relevant to transplantation, transplant fellowship programs have a responsibility to ensure safe and responsible work habits. Such habits will lay the groundwork for routines that will form the foundation of a successful career as a transplant surgeon. We recognize that working to the point of exhaustion is both unhealthy for the fellow and unsafe for patients. Efforts to establish work hour and/or schedule restrictions are rife with difficulties. Transplantation is often unpredictable with periods of heavy workload interspersed with slower work periods due to donor paucity. Lastly, there are often valuable clinical education or continuity of care opportunities.

Annual Fellows Symposium
All second-year fellows in good standing at Accredited Fellowship Training Programs are invited to attend the ASTS Surgical Fellows Symposium. It is expected that all fellows attend this meeting and Program Directors are asked to provide fellows with the necessary support and time off from their clinical responsibilities.
that may exceed traditional work hour requirements but benefit fellowship training.

1. Despite these obstacles to creating responsible work hour practices, reliance on fellow self-reporting and self-recognition of fatigue does not meet the current standard of fellowship training. The ASTS believes that certain underlying principles below must be recognized in identifying responsible fellow workload practices:
   a) Programs must be mindful of the workload they are placing on fellows with respect to all facets of their responsibilities (e.g., clinic, operating room, inpatient service, phone calls, etc.). The fellowship director is responsible for setting this expectation and monitoring the impact of the workload on the fellow.

2. The program’s faculty must recognize it may be necessary to tell the fellow to rest. It is incumbent on the program’s faculty to monitor the fellow’s workload and outward signs of fatigue, in order to intervene appropriately in instances where the fellow does not recognize or acknowledge the need to rest.

3. The impact of activities which are neither educational nor require their level of experience needs to be scrutinized on an ongoing basis. Fellows are board eligible or certified in General Surgery or Urology or foreign equivalency and must be given responsibilities consistent with their level of expertise. While any caregiver may need to step in from time to time to help in any task related to patient care, it is not the fellow’s role to routinely perform tasks that are appropriately delegated to a coordinator, resident, physician assistant, or advance nurse practitioner. To be effective in this role, the program must engage sufficient human resources to allow the fellow to function at the appropriate level.

Based on the three principles above, the following three structural elements are considered requirements of TACC accredited fellowships:

1. The fellowship training program must designate formal continuing medical education (CME) time for the fellows, including attendance to at least one regional/national meeting during their fellowship that does not count toward vacation time.
   a. Planning for the meeting is the joint responsibility of the fellow and the Program Director.
   b. Certificates of attendance or registration must be submitted to ASTS at the completion of fellowship training.
   c. Attendance at the ASTS Fellows Symposium does not fulfill this requirement as this is an additional requirement.

2. The fellow must be provided at least two weeks of vacation every year, excluding time for academic meetings.
   a. Each program must submit their vacation guidelines at the time of fellowship reaccreditation and provide documentation of fellow vacations on a yearly basis.
   b. Proper adherence to fellow vacation guidelines will be assessed at the time of reaccreditation. Documentation of this is the program’s responsibility.
   c. All fellows will be asked at the end of the fellowship exit survey if they received the allotted time off.

3. The fellow must be off call and free from clinical responsibilities at least one weekend per month (48 hours) and at least two additional 24-hour periods every month exclusive of vacation time.
a. Each program must submit their time-off guidelines at the time of reaccreditation.
b. Each fellow will be surveyed at the end of fellowship to confirm the time off occurred.

Providing the highest quality care to patients requires caregivers who are not impaired by fatigue, and who are not constrained by arbitrary restrictions regarding participation in a given patient’s care. It is incumbent upon TACC Accredited Fellowship Training Programs to responsibly manage these issues.

If at any time a fellow feels that the program is not adhering to the Fellowship Managed Time Policy, fellows may contact the ASTS Office. The name of the fellow will be kept anonymous and the program will only be contacted at the fellow’s discretion.

Knowledge Assessment: Pathway to Certificate of Completion

Fellows in Accredited Training Programs are required to take the annual Knowledge Assessment during their first and second year of fellowship training. In order to receive the certificate of completion from the Transplant Accreditation & Certification Council (TACC), fellows must complete all of the requirements outlined above as well as achieve satisfactory performance on the Knowledge Assessment. The Knowledge Assessment will be offered in April of each year for first- and second-year fellows. Fellows must have an average score of >50% correct when the scores from their first- and second-year assessments are combined. The assessment will be administered using a secure online exam platform and will be proctored by the fellows’ Fellowship Training Program Director. Individual scores as well as category breakdown performance will be sent to the fellows and their Fellowship Training Program director after the assessment. The assessment will consist of 120 questions which fellows will have 2.6 hours to complete (1.3 minutes per question). The assessment will cover the following categories from the National Transplant Curriculum.

Note, fellows who complete an accredited fellowship training program and begin an additional fellowship are required to complete the Knowledge Assessment requirements during their second fellowship.

Remediation:
It is expected that there is improvement in fellows scores on the Knowledge Assessment from the first to the second-year assessment. For fellows that achieve a high score on their first attempt, the expectation is that they maintain that standard on their second-year assessment. All exams will be adjusted for difficulty and will be assessed for question quality.

Should a fellow not score an average of >50% correct when the scores of their first- and second-year assessments are combined, the following options will be available. Remediation must be completed within 60 days of their released exam scores.

Remediation 1:
Repeat the same exam within 60 days of the first exam. Fellow will be provided category breakdown to review prior to the exam.

Remediation 2:
If a fellow fails a repeat exam, a focused and incremental self-knowledge assessment will be administered based on areas of weakness.

Step 1: Certificate of Completion

Fellows are eligible to receive a certificate of completion when they successfully complete a twenty-four-month TACC Accredited Abdominal Transplant Surgery Fellowship and fulfill requirements for organ systems in which their fellowship program is accredited to train. This includes organ systems for which the program is accredited in at the start of the fellow’s training AND organ systems for which the program receives accreditation within the first twelve months of the fellow’s training.
For example, if a fellow started training in August 2017 and the program became accredited in Pancreas transplant in July 2018, the fellow would be eligible to receive a certificate of completion in pancreas transplant if he or she meets requirements.

It is the responsibility of an individual training program to inform the fellow about specific program accreditation status at the start of fellowship training and when changes to the program accreditation status occur that affect the certificate eligibility of the fellow.

Fellows are responsible for submitting a certificate of completion request when they complete their fellowship training program. This online submission must include the following attachments:

1. Certificate of Completion Program Director Approval Form
2. Surgical Log Entries Report
3. Surgical Log Summary Report
4. National Transplant Curriculum Certificate

Note, attachments 2-4 must be downloaded from the fellow's Academic Universe account. It is recommended you keep a copy of your surgical log reports for your records. You will be asked by various credentialing organizations for a copy during your career. Certificate requests are reviewed on a monthly basis and you should allow 6-8 weeks for processing. The materials must be submitted through the online form. Emailed submissions will not be accepted.

**Step 2: Fellowship Certification Pathway**

The Transplant Accreditation & Certification, LLC was founded by the American Society of Transplant Surgeons (ASTS) in January 2017 to oversee the accreditation of fellowship training programs and implement a certification pathway for transplant surgeons. Currently, the TACC offers a certificate of completion for fellows who successfully complete a TACC Accredited Abdominal Transplant Surgery Fellowship Training Program. Below are the steps candidates will take to become Certified Abdominal Transplant Surgeons. This certification process is available for fellows that have successfully completed an Accredited Abdominal Transplant Surgery Fellowship Training Program in 2019 and beyond.

**Certification Eligibility:**
Candidates who successfully complete a TACC Accredited Fellowship Training Program are eligible to enter into the Fellowship Certification Pathway. Successful completion includes completing all requirements during the 24-month accredited fellowship program, as outlined in the Fellow Requirements. This includes meeting the minimum volume requirements, successfully completing the Knowledge Assessment written exam requirements, and the candidate must receive a TACC Certificate of Completion.

**In-Practice Requirement:**
Candidates are required to be in practice for a minimum of one year and a maximum of five years. Candidates must also have an active (non-expired) license to practice. During the in-practice period of one to five years, candidates should maintain a surgical log which will be required to be uploaded in the ASTS Surgical Log format for the application process.

**Certification Application Process:**
Individuals who believe they meet the requirements for certification may submit a certification application. The first applications will be accepted starting in September 2021 through December 2021. The application requires candidates to provide their license and certification information, educational background, and hospital appointments. Candidates will also need to upload two
reference letters. One reference letter must be from their Fellowship Training Program Director (or Division Chief) addressing the candidate’s surgical experience from fellowship. The second reference letter should be from their current Program Chief, Chief of Staff, or equivalent addressing the individual’s surgical experience post-fellowship. The candidate must upload surgical case logs from their fellowship and one to five years of transplant and HPB in practice cases. The case logs must be uploaded in the ASTS Surgical Log format. In preparation for the oral exam, candidates will submit five cases in a rubric provided in the application. The cases must be from post-fellowship. The application process will be further detailed in an online application and candidates will need to pay a nonrefundable application fee. Completed applications will be reviewed by the Transplant Accreditation & Certification Council.

Transplant Oral Exam:
If the TACC approves the candidate’s certification application and they meet all requirements to sit for the oral exam, the candidate will receive written notice and will be required to pay an oral exam fee. The first certifying oral exam will be held in Fall 2022. The oral exam will consist of two sessions which will include general transplant knowledge, organ specific topics, and cases submitted by the examinee in the certification application. The candidate will be assessed by two examiners during each session of the exam. The scoring rubric from the four oral examiners will be reviewed by the Transplant Accreditation & Certification Council.

Certification:
Upon successful completion of all certification components, the Transplant Accreditation & Certification Council will approve the candidate to become a Certified Abdominal Transplant Surgeon. The candidate will receive a letter and certificate from the TACC. A formal recognition ceremony will be held each year at the ASTS Winter Symposium. A registry of certified diplomates will be available on the ASTS and TACC website. If the candidate fails to meet the requirements and is denied certification, an appeals process will be provided, and candidates will be eligible to retake the oral exam.

Note, TACC reserves the right to make changes in its rules and procedures for its certification at any time.