History
The Kidney Transplant Program at Lahey Hospital & Medical Center has been in existence since 1970. Initially, the program was located at the New England Deaconess Hospital and under the supervision of the Department of Urology with a single transplant surgeon. Following the move to our present location, the program continued under the direction of the Urology department with input from several interested nephrologists. In 2009, the Department of Transplantation and Hepatobiliary Diseases was formed under the leadership of Dr. Elizabeth Pomfret, consolidating transplant-related services into a single unit. The Department consists of five transplant surgeons, two dedicated transplant nephrologists and three transplant hepatologists. The Department of Urology continues to participate in the transplant program by providing laparoscopic donor nephrectomy and complex urinary procedures and services. In addition, the Department of Nephrology actively collaborates with the transplant team.

Outcomes
The program has grown in scope and volume over the past several years. To date, the program has transplanted 627 renal failure patients, 40 percent of which have been living donor transplant. The group has also performed nearly 1,500 liver transplant operations, 15 percent of which were living donor transplants. Outcomes, as monitored by the Scientific Registry of Transplant Recipients (SRTR), demonstrate that our kidney and liver transplant programs enjoy observed patient and graft survival at or exceeding expected survival rates at one year (>90%). In addition, our patients enjoy a statistically higher than expected transplant rate in the region.

Team
The renal transplant surgical team is led by Surgical Director, Dr. James Pomposelli and includes Dr. Mohamed Akoad, Dr. W. David Lewis, Dr. Elizabeth A. Pomfret, Dr. Roger L. Jenkins and living donor surgeon, Dr. Andrea Sorcini. They are complemented by our Transplant Nephrology staff, Medical Director, Dr. Shiang-Cheng Kung and transplant nephrologist Dr. Zeeshan Khawaja, in addition to members of the Nephrology department. Other key team members include two dedicated pre-transplant coordinators, one dedicated post-transplant coordinator and one dedicated living donor coordinator. Daily multidisciplinary rounds also include representatives from social work, nutrition, pharmacy, transplant fellows, surgical residents, Tufts medical students and a dedicated transplant physician assistant. A dedicated financial coordinator, infectious disease physicians, cardiologists and psychiatrists with expertise in transplant-related issues and a team of researchers round out the multidisciplinary team.

Patient Services
As part of our integrated transplant department, kidney transplant patients also have access to our newly formed Post-Transplant Wellness Program, under the direction of Dr. Amir Qamar, where the goal is to identify and treat common post-transplant conditions such as metabolic syndrome and improve long-term care of the transplant patient. Lahey actively conducts clinical research on modern immunosuppression protocols and recently published work on low-dose induction therapy with Thymoglobulin and steroid-free protocol for renal transplant recipients. We offer desensitization protocols for renal transplant candidates who are highly sensitized and incompatible donor-recipient pairs also have the option of participating in national kidney exchange programs. The integrated program also allows us to offer combined liver-kidney transplantation to patients with both liver and kidney failure.
KIDNEY TRANSPLANT PROGRAM

KIDNEY TRANSPLANT SRTR OUTCOME DATA

Patient Survival
07/01/2011 – 12/31/2013

<table>
<thead>
<tr>
<th>Observed</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>96.42%</td>
<td>96.18%</td>
</tr>
</tbody>
</table>

One Year Patient Survival

Graft Survival
07/01/2011 – 12/31/2013

<table>
<thead>
<tr>
<th>Observed</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.78%</td>
<td>94.12%</td>
</tr>
</tbody>
</table>

One Year Graft Function

Kidney Transplant Observed Minus Expected Graft and Patient One-Year Survival
07/01/2011 – 12/31/2013

- Graft Failures (101 transplants):
  - Observed: 6.00
  - Expected: 5.51

- Patient Deaths (91 transplants):
  - Observed: 3.00
  - Expected: 3.10
Statistically higher rate of kidney transplantation when compared to other centers in New England.
Kidney Transplant Observed and Expected Mortality Rates
07/01/2013 – 06/30/14

![Bar chart showing observed and expected mortality rates per 100 person years for different regions.]

<table>
<thead>
<tr>
<th>Region</th>
<th>Observed</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Center</td>
<td>2.8</td>
<td>6.7</td>
</tr>
<tr>
<td>OPO/DSA</td>
<td>5.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Region</td>
<td>5.4</td>
<td>5.7</td>
</tr>
<tr>
<td>U.S.</td>
<td>5.3</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Kidney Transplant Mortality Rates on the Waitlist
07/01/2013 – 06/30/2014

![Bar chart showing waiting list mortality rate per 100 person years.]

Waiting List Mortality Rate (1)
(1) Statistically lower (p=0.048)

Statistically lower likelihood of death on the waiting list when compared to other centers in New England.