Forging New Territory: UNOS Liver Paired Donation Pilot Program

Ruthanne Leishman, RN, MPH
Paired Donation Program Manager
UNOS Business Development Manager
VISION
A life-saving transplant for everyone in need

MISSION
Unite and strengthen the donation and transplant community to save lives
What is UNOS Labs?
Goals

Pilot nation’s first multi-hospital liver paired donation (LPD) program

• Increase access to living donor transplant
• Increase candidate access earlier, when in better health
• Determine how to create a nationally available program
  • How to sustain it/grow it
  • Identify challenges
Community Partners – Steering Committee

**CHAIR:** Benjamin Samstein, MD  
*Chief of Liver Transplantation and Hepatobiliary Surgery*  
*New York Presbyterian Weill Cornell Medical Center*

Peter Abt, MD  
*Transplant Surgeon and Professor of Surgery*  
*University of Pennsylvania*

Juliet Emamaullee, MD, PhD, FRCSC, FACS  
*Abdominal Organ Transplant Surgeon, Assistant Professor of Clinical Surgery, Research Director for Abdominal Organ Transplantation*  
*Keck Hospital of University of Southern California*

Julie Heimbach, MD  
*Chair of the Division of Transplantation*  
*Mayo Clinic, Rochester Minnesota*

Abhinav Humar, MD  
*Chair of the Division of Transplantation*  
*University of Pittsburgh*

Tarunjeet Klair, MD  
*Surgical Director of Live Donor Liver Transplantation*  
*University of Texas Health San Antonio*

David Mulligan, MD, FACS  
*Chief of Transplant Surgery and Immunology*  
*Yale New Haven*

Elizabeth Pomfret, MD, PhD  
*Chief of Transplant Surgery*  
*University of Colorado Hospital*

John Roberts, MD  
*Transplant Surgeon and Professor of Surgery*  
*University of California San Francisco*
## Community Partners - Subcommittees

### Education

<table>
<thead>
<tr>
<th>CHAIR: Dianne LaPointe Rudow, DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of the Center for Living Donation, Recanati Miller Transplantation Institute</td>
</tr>
<tr>
<td>Mount Sinai Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Therese Bittermann, MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transplant Hepatologist, Medical Director of Living Donor Liver Transplantation</td>
</tr>
<tr>
<td>University of Pennsylvania</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jaime Cisek, RN, BSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Donor Coordinator</td>
</tr>
<tr>
<td>University of Colorado Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rebecca Hays, MSW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Work Supervisor</td>
</tr>
<tr>
<td>University of Wisconsin Hospital and Clinics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kay Kosberg, RN, CCTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPD Living Donor Coordinator</td>
</tr>
<tr>
<td>Mayo Clinic, Rochester Minnesota</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AnnMarie Liapakis, MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transplant Hepatologist, Medical Director of Living Donor Liver Transplantation</td>
</tr>
<tr>
<td>Yale New Haven</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Akhil Shenoy, MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of Transplant Psychiatry</td>
</tr>
<tr>
<td>Columbia University Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sandy Weinberg, MSW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker and Living Donor Advocate</td>
</tr>
<tr>
<td>University of California San Francisco</td>
</tr>
</tbody>
</table>

### Finance

<table>
<thead>
<tr>
<th>CHAIR: Jennifer Milton, BSN, MBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Administrative Officer</td>
</tr>
<tr>
<td>University of Texas Health San Antonio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kara Campbell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Analyst</td>
</tr>
<tr>
<td>University of California San Francisco</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kim Gifford, MBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
</tr>
<tr>
<td>National Living Donor Assistance Center (NLDAC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>John Gutowski, MBA, MHA, FACHE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Director of Transplant Services</td>
</tr>
<tr>
<td>University of Colorado Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bob Merion, MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>President, Ann Arbor Research Collaborative</td>
</tr>
<tr>
<td>Deputy Director of NLDAC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lisa Omer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Manager</td>
</tr>
<tr>
<td>University of California San Francisco</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Andrea Tietjen, CPA, MBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVP of Transplant Administrative Services, Renal and Pancreas Transplant</td>
</tr>
<tr>
<td>Saint Barnabas Medical Center</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travis Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transplant Administrator</td>
</tr>
<tr>
<td>Dell Seton Medical Center at UT Austin and Ascension Seton Medical Center Austin</td>
</tr>
</tbody>
</table>

UNOS  UNITED NETWORK FOR ORGAN SHARING

LIVER PAIRED DONATION
Transplant Program Pilot Eligibility
Hospital Requirements

All participating centers must:
- Performed 20+ adult LDLTs over the last 3 years
- Consistent leadership over the last 3 years
- Not be under OPTN MPSC review for liver transplant or living liver donation-related outcomes

Centers must also:
- Sign Participation and Data Use Agreements
  - Abide by the Liver Paired Donation Pilot Program Operational Guidelines
- OPTN-approved to perform liver transplants and living liver recoveries
- Abide by all relevant OPTN and UNOS Policies
- Agree to share feedback with UNOS to facilitate improvements to the program
Participating Hospitals

• University of California San Francisco Medical Center
• Keck Hospital of USC
• University of Colorado
• Lahey Clinic Medical Center
• Johns Hopkins Hospital
• Henry Ford Hospital
• New York Presbyterian
  • Columbia University Medical Center
  • Weill Cornell Medical Center
• Mayo Clinic Rochester
• Strong Memorial Hospital
• Mount Sinai Medical Center
• The Cleveland Clinic Foundation
  • Cleveland
  • Florida
• Hospital of the University of Pennsylvania
• University Hospital, University of Texas Health Science Center
• University of Utah Medical Center
Donor and Candidate Eligibility
Donor and Candidate Eligibility

<table>
<thead>
<tr>
<th>Candidate</th>
<th>Donor</th>
</tr>
</thead>
<tbody>
<tr>
<td>18+ years old</td>
<td>Listed in TIEDI</td>
</tr>
<tr>
<td>Complete LPD-specific Informed Consent</td>
<td>Evaluated per OPTN living donor policy</td>
</tr>
<tr>
<td>Sign release of PHI</td>
<td></td>
</tr>
<tr>
<td>Active on deceased donor waitlist</td>
<td></td>
</tr>
<tr>
<td>Lab MELD &lt;=25, upon entering program</td>
<td></td>
</tr>
<tr>
<td>Not Status 1A/1B or multi-organ</td>
<td></td>
</tr>
</tbody>
</table>
Screening/Matching Criteria
LPD Screening Criteria

*Donors and candidates are screened & matched based on information entered by the transplant hospitals*

<table>
<thead>
<tr>
<th>Match this <strong>candidate</strong> data...</th>
<th>**...With this <strong>donor</strong> data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min and max donor age</td>
<td>Donor DOB</td>
</tr>
<tr>
<td>Max acceptable donor BMI</td>
<td>Height (cm)</td>
</tr>
<tr>
<td></td>
<td>Weight (kg)</td>
</tr>
<tr>
<td>Candidate ABO</td>
<td>Donor ABO</td>
</tr>
<tr>
<td>Max acceptable fat fraction</td>
<td>Fat fraction (MRI)</td>
</tr>
<tr>
<td>Min acceptable graft volume</td>
<td>Willing to donate LLS, left lobe, right lobe, or all of the above</td>
</tr>
<tr>
<td></td>
<td>• Left lateral segment volume</td>
</tr>
<tr>
<td>Max acceptable graft volume</td>
<td>• Left lobe volume</td>
</tr>
<tr>
<td></td>
<td>• Right lobe volume</td>
</tr>
</tbody>
</table>
## Prioritization Algorithm

<table>
<thead>
<tr>
<th>Candidate ABO</th>
<th>If the</th>
<th>Then the match will receive:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Candidate ABO is O</td>
<td>100 points</td>
</tr>
<tr>
<td></td>
<td>Candidate ABO is B</td>
<td>50 points</td>
</tr>
<tr>
<td></td>
<td>Candidate ABO is A</td>
<td>25 points</td>
</tr>
<tr>
<td></td>
<td>Candidate ABO is AB</td>
<td>0 points</td>
</tr>
</tbody>
</table>

### Paired Donor ABO

<table>
<thead>
<tr>
<th>If the</th>
<th>Then the match will receive:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Donor ABO is O</td>
<td>0 points</td>
</tr>
<tr>
<td>Paired Donor ABO is B</td>
<td>100 points</td>
</tr>
<tr>
<td>Paired Donor ABO is A</td>
<td>250 points</td>
</tr>
<tr>
<td>Paired donor ABO is AB</td>
<td>400 points</td>
</tr>
</tbody>
</table>

### Donor Age

<table>
<thead>
<tr>
<th>If the</th>
<th>Then the match will receive:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donor Age 18-29</td>
<td>150 points</td>
</tr>
<tr>
<td>Donor Age 30-39</td>
<td>100 points</td>
</tr>
<tr>
<td>Donor Age 40-49</td>
<td>50 points</td>
</tr>
<tr>
<td>Donor Age 50-59</td>
<td>0 points</td>
</tr>
</tbody>
</table>

### Candidate MELD (allocation)

30 points per MELD point

### Prior Living Donor

150 points

### Tiebreaker

Wait time in program: .07/day
Pairs and Matches

Amir and Shauna (and Mary and Carlos) are a Pair
Amir and Carlos are a Match (Matched Donor and Matched Candidate); Mary and Shauna are a Match
The two matches grouped together are an Exchange

- Incompatible
- Compatible
- Non-directed donors can enter with a waitlist candidate to maximize their gift
Pilot Length and Evaluation

1 YEAR

- Start date = first successful match run
- Quarterly reports and evaluation
- Reviewed by Advisory Council
Pilot Evaluation

- Increase in overall LDLT at participating programs
- Donor and Recipient Outcomes
- Participation metrics
- Hospital versus Participation Averages
Donor Financial Assistance Options

Available to all donors, regardless of income
Non-medical Expenses
In partnership with National Living Donor Assistance Center (NLDAC)

• Covered
  • Travel expenses donor and one traveling companion
  • Lost wages for donor
  • Dependent care expenses for donor

• Up to $10,000
  • If quality, $6,000 from NLDAC and up to $4,000 additional from UNOS fund
  • If do not quality, up to $10,000 from UNOS fund

• For more information: https://www.livingdonorassistance.org/
Insurance coverage

In partnership with the American Foundation for Donation and Transplant (AFDT)

- Accidental death and dismemberment
  - maximum, one year $500,000
- Medical complications
  - $5,000 deductible, maximum $250,000
- Temporary disability
  - maximum $100 per week
- Permanent disability
  - $5000.00 per month up to maximum $250,000
- Traveling companion benefit (one person)
  - One year $500,000 accidental death and dismemberment benefit
- Hospitals must have a AFDT filer

*Exclusions, limitations, and waiting periods apply. Review the summary of benefits for full details of coverage
Resources

- Trainings
- Listserv
- Forums
- Dedicated UNOS staff
- Quarterly Reports
- Educational Resources (SharePoint site)
  - Professional
  - Donor and Candidate
Educational Resources

Professional
• Hospital contact lists
• What is the LPDPP
• Financial Guidelines and MOUs
• Guide to getting started checklist
• Match process instructions and flow diagram
• Operational Guidelines

Donor and Candidate
• About my match transplant hospital
• Financial assistance options
• Live swap FAQ
• Match process
• Informed consent templates
• LPD introduction letter
• What is LPD and is it right for me?
❖ Spanish versions
What we have learned so far

• Getting ready takes a long time
  • Signing agreements
  • Training
  • Identifying pairs

• Hospitals are generally in agreement
• Coordinators love sharing ideas with each other
LPDPP Advisory Committee Members

CHAIR: Benjamin Samstein, MD
Chief of Liver Transplantation and Hepatobiliary Surgery
NY Presbyterian/Weill Cornell Medical Center

Peter Abt, MD
Transplant Surgeon and Professor of Surgery
University of Pennsylvania

Juliet Emamaullee, MD, PhD, FRCSC, FACS
Assistant Professor Of Clinical Surgery
Associate Director - DoS Clinical Research

Yuri Genyk, MD
Chief, Hepatobiliary, Pancreas and Abdominal Transplant Surgery
Keck Hospital of University of Southern California

Elizabeth Pomfret, MD, PhD
Chief of Transplant Surgery
University of Colorado Hospital

Julie Heimbach, MD
Chair of the Division of Transplantation
Mayo Clinic, Rochester Minnesota

John Roberts, MD
Transplant Surgeon and Professor of Surgery
University of California San Francisco

Dianne LaPointe Rudow, DNP
Director of the Center for Living Donation
Recanati Miller Transplantation Institute Mount Sinai Hospital

Priya Grewa, MD
Professor Medicine, Liver Diseases
Mount Sinai Medical Center

Tarunjeet Klaire, MD
Surgical Director of Live Donor Liver Transplantation
University of Texas Health San Antonio

Jennifer Milton BSN, MBA
Chief Administrative Officer
University of Texas Health San Antonio

Deepak Venkat, MD
Medical Director of Living Donor Liver Transplant
Henry Ford Health System

Xaralambos ‘Bobby’ Zervos, DO
Medical Director Liver Disease Program
The Cleveland Clinic Foundation Florida

Koji Hashimoto, MD
Director of Living Donor Liver Transplantation
The Cleveland Clinic Foundation Ohio

Yee Lee Cheah, MD
Director Living Donor Liver Transplantation
Lahey Hospital and Medical Center

Alyson Fox, MD
Medical Director Living Donor Team
NY Presbyterian Hospital/Columbia Univ. Medical Center

Manuel Rodriguez-Davalos MD, FACS
Director Liver Transplantation

Talia Baker, MD
Chief of Transplant Surgery
Co-Executive Medical Director of Transplant Services
Medical Center University of Utah Health

Roberto Hernandez-Alejandro, MD
Chief of Transplantation and Liver Cancer Surgery
Strong Memorial Hospital, University of Rochester Medical Center

Benjamin Philosophe MD, Ph.D.
Surgical Director
Johns Hopkins Comprehensive Transplant Center
Questions contact

• Ruthanne Leishman, UNOS KPD Program Manager 804-782-4770

• Hannah Brown, UNOS Organ Center Operations Coordinator 804-782-4732

• Jennifer Musick, UNOS Organ Center Operations Manager
  LiverPairedDonation@UNOS.org

Dr. Ben Samstein, Advisory Council Chair: samstei@med.cornell.edu