International Maternal Pediatric AIDS Clinical Trials (IMPAAACT) Network

2015 Annual Meeting
Sharon Nachman, MD – Network Chair
James McIntyre, MD – Network Vice Chair
Grace Aldrovandi, MD – Laboratory Center PI
David Shapiro, PhD – Statistical & Data Management Ctr PI
Mission

- To decrease incident HIV and HIV-associated infections including mother-to-child transmission among infants, children, youth and pregnant/postpartum women

- To decrease HIV-associated mortality and morbidity among these populations
21 US Domestic NIAID and NICHD Sites

NICHD (red)
- Boston Medical Center Pediatric HIV Program
- Jacobi Medical Center Bronx
- University of Washington Children’s Hospital Seattle
- Emory University School of Medicine
- San Juan City Hospital PR
- SUNY Stony Brook
- University of Southern California LA
- University of Florida Jacksonville

NIAID (blue)
- University of California, UC San Diego
- U Miami
- Lurie Children’s Hospital of Chicago
- St Jude
- Texas Childrens
- University of Puerto Rico Pediatric HIV/AIDS Research Program
31 International NIAID and NICHD Sites

NICHD (red)
- Inst of Pediatrics Fed Univ Rio de Janeiro
- Hospital dos Servidores Rio de Janeiro
- SOM Federal University Minas Gerais Brazil
- Univ of Sao Paulo Brazil
- Hospital General de Agudos Buenos Aires Argentina
- Fundacion Huesped - Hospital Juan A Fernandez
- Hospital Geral De Nova Iguacu Brazil
- Hospital Santa Casa Porto Alegre Brazil
- Siriraj Hospital, Department of Pediatrics-Mahidol University
- PHPT Chiangrai Prachanukroh Hospital
- Hospital Nossa Senhora da Conceicao
- KCMC Kilimanjaro Christian Medical Centre
- Fundacion Huesped, Hospital Juan A Fernandez
- MUHAS University of Health and Allied Sciences
- The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

NIAID (blue)
- Umlazi Clinical Research Site
- Chiang Mai University
- Gheskio Clinical Research
- Gaborone Clinical Research Site
- Molepolole Clinical Research Site
- Byramjee Jeejeebhoy
- Blantyre Clinical Research Site
- Desmond Tutu TB Centre
- FAM-CRU, Cape Town
- Baylor-Uganda Clinical Research Site
- Makerere University
- Harare Family Care Clinical Research Site
- Seke North Clinical Research Site
- St. Mary’s Clinical Research Site
- George Clinic Clinical Research Site
- Malawi Clinical Research Site
- Soweto IMPAACT Clinical Research Site
- Shandukani Clinical Research Site
IMPAAACT Participants on Study
June 2014 to May 2015

Total On Study = 10,681 participants
Newly Enrolled = 1,736 participants
## 30 Active Studies

**June 2014 to May 2015**

<table>
<thead>
<tr>
<th>Category</th>
<th>Pending and Open</th>
<th>13 Enrolling</th>
<th>9 In Follow-up</th>
<th>5 Closed to Follow-up*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>P1106, P1092</td>
<td>P1110, P1101, P1097, P1093, P1090, P1070, P1026s</td>
<td>P1060, P1066, P1102</td>
<td>P1020a</td>
</tr>
<tr>
<td>Prevention</td>
<td>P1112</td>
<td>(P1081)</td>
<td>1077HS, 1077FF, 1077BF</td>
<td></td>
</tr>
<tr>
<td>Complications</td>
<td>P1080</td>
<td>P1104s, P1084s, P1076</td>
<td></td>
<td>P1114, 2000, P1063, P1074</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>P1078, P1113</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cure</td>
<td>P1107, P1115</td>
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</tr>
</tbody>
</table>

*closed to follow-up in the last year
# Studies Newly Opened or Enrolling June 2014 to May 2015

<table>
<thead>
<tr>
<th>Category</th>
<th>Study Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>P1101: Raltegravir in ART-Naïve HIV &amp; TB Co-Infected Children</td>
</tr>
<tr>
<td>Treatment</td>
<td>P1092: PKs of ZDV, 3TC, and LPV/r in Severely Malnourished HIV-Infected Children</td>
</tr>
<tr>
<td>Prevention</td>
<td>P1112: Safety &amp; PK of VRC01 in HIV-Exposed Infants</td>
</tr>
<tr>
<td>Complications</td>
<td>2000: Recombinant Live-Attenuated RSV Vaccine in RSV-negative Infants &amp; Children</td>
</tr>
<tr>
<td>TB</td>
<td>P1078: Immediate vs. Deferred INH Preventive Therapy in HIV+ Women</td>
</tr>
<tr>
<td>Cure</td>
<td>P1107: Cord Blood Transplant Using CCR5Δ32 Donor Cells - Observed Effects on HIV-1 Persistence</td>
</tr>
<tr>
<td>Cure</td>
<td>P1115: Very Early Intensive Treatment of HIV+ Infants to Achieve HIV Remission</td>
</tr>
</tbody>
</table>
IMPAAACT Science Generation
June 2014 to May 2015

18 New Capsules
7 Treatment
5 Prevention
3 Tuberculosis
3 Cure

11 New Concepts
2 Treatment
3 Prevention
4 Tuberculosis
1 Complications
1 Cure

8 New Protocols
2 Treatment
3 Prevention
4 Tuberculosis
1 Complications
1 Cure
## Eight New Protocols Currently in Development

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>P1108</strong></td>
<td>Bedaquiline for Multidrug-Resistant TB (MDR-TB), <em>Study of bioequivalence in crushed form in healthy adults</em></td>
</tr>
<tr>
<td><strong>2001</strong></td>
<td>Phase I/II Study of Rifapentine and Isoniazid in Pregnant and Postpartum Women with Latent TB</td>
</tr>
<tr>
<td><strong>2002</strong></td>
<td>Treatment of Depression in HIV-Infected Youth: Combined Cognitive Behavioral Therapy and Medication Management</td>
</tr>
<tr>
<td><strong>2003</strong></td>
<td>Protecting Households on Exposure to Newly Diagnosed Index MDR-TB Patients (PHOENIIX)</td>
</tr>
</tbody>
</table>
### New Protocols Currently in Development (cont’d)

<table>
<thead>
<tr>
<th>Year</th>
<th>Study Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Phase I/II Study of Clade C ALVAC-HIV and gp120 HIV Vaccines in African Infants</td>
</tr>
<tr>
<td>2005</td>
<td>PK &amp; Safety of Delamanid in Combination with OBR for MDR-TB in Children with MDR-TB and HIV Co-Infection</td>
</tr>
<tr>
<td>2006</td>
<td>NextGen Strategy Trial comparing Lopinavir/ritonavir versus Raltegravir-based ART in Children &lt;3 Years of Age</td>
</tr>
<tr>
<td>2007</td>
<td>Safety and PK of Maraviroc in HIV-1-Exposed Neonates</td>
</tr>
</tbody>
</table>
Publications

- **26** publications submitted in past 12 months
  - **12** manuscripts published in JAIDS, Vaccine, Clinical Pharmacology and Therapeutics, PIDJ, CID
  - **14** approved, pending publication

- Contributed to guidelines
  - OI guidelines in HIV+ children
  - Early inclusion of children in TB drug studies
15 Abstracts Accepted

**Treatment**
- Long Term Outcomes of Children Initiating NVP vs LPV/r Based Treatment
- PK of Rilpivirine During Pregnancy and Postpartum

**Prevention**
- Efficacy and Safety of Strategies to Prevent Perinatal HIV Transmission

**Complications**
- Mortality of HIV-Infected Youth in the cART Era

**Cure**
- Decay Rate and HIV-1 DNA Reservoir Size Following Early Infant ART
- Selectively Eliminating HIV Latently Infected Cells Without Viral Reactivation
Other meetings...

- Abstracts submitted to:
  - IAS
  - ICAAC
  - ICAAP12
  - ICASA 2015
  - ID week
  - others
Cross Network Study Initiatives

- MDR-TB Prevention (PHOENIX)
- TB and HIV Vaccine Studies (Aeras/P1113 and IMPAACT 2004)
- RSV and VRC01 Studies (IMPAACT P1114, 2000 and P1112)
- PrEP in pregnant women (Mirror study with HPTN HERS)
Pharma Collaborations: New Formulations/Products

- Dolutegravir PKs in children and pregnant women (P1093, P1026s)
- Maraviroc in infants (IMPAACT 2007)
- Raltegravir in neonates (P1097, 1110)
- Etravirine in infants and children (P1090)
- TB vaccine in infants (P1113)
External Review of Network Science

- Overall comments:
  - Science of network is appropriate and addresses the needs of the network
  - Priorities and focus aligned with the epidemic
  - Opportunities for collaboration/synergies with other research groups of continued importance
Site Information

- Completed site portfolios/site capacity August 2014
  - UPDATE PENDING

- Aids in network-wide planning, rapidly identifying sites with specific capabilities for specific studies
  - Avoids duplication of data collection for site selection

- Includes drug regulatory and ethical review requirements
Collaboration between IMPAACT and ACTG to make the large body of specimens collected for HIV research available to investigators

The specimen repositories are a collaboration between the ACTG and IMPAACT clinical trial networks to make the large body of specimens collected for HIV research available to investigators.

ACTG (The AIDS Clinical Trials Group) and IMPAACT (The International Maternal Pediatric Adolescent AIDS Clinical Trials) are two large global efforts studying HIV and related infections.

The specimens stored at the repositories were initially collected for specific studies that have concluded, and are now available to investigators conducting new research.

Using this website

You can use the interactive search tool on this website to learn about the types of specimens available at the repositories. After completing a search, you can see the number of specimens and unique participants available, information about the studies for which they were collected, and what research was published for those studies. The search tool will also provide you with a report that lists your specimens of interest. You can then use this report to help write your research proposal to the network.

<table>
<thead>
<tr>
<th>What’s in the repositories?</th>
<th>ACTG</th>
<th>IMPAACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimens</td>
<td>1330464</td>
<td>304780</td>
</tr>
<tr>
<td>Protocols</td>
<td>195</td>
<td>17</td>
</tr>
<tr>
<td>Types of specimens</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>Cryopreserved PBMCs</td>
<td>260676</td>
<td>57932</td>
</tr>
<tr>
<td>Plasma</td>
<td>681257</td>
<td>195289</td>
</tr>
<tr>
<td>Serum</td>
<td>148090</td>
<td>10734</td>
</tr>
</tbody>
</table>

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Early Career Investigator Mentored Research Award

• RFA issued in March 2015; responses due May 27 2015
• 14 applications received with review underway
• Scientific areas, often with overlap, included:
  – Tuberculosis: 3
  – Prevention: 5
  – Treatment: 5
  – Complications: 5
Scientific Agenda

HIV PREVENTION

TUBERCULOSIS

CURE

CO-MORBIDITIES/COMPLICATIONS

TREATMENT

HIV PREVENTION
Thank you to the sites, the community and to all the families engaged in clinical research.