International Maternal Pediatric AIDS Clinical Trials (IMPAAACT) Network

Sharon Nachman, MD, IMPAAACT Network Chair

2014 Joint IMPAAACT/HPTN Plenary
Wednesday, 18 June 2014
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
IMPAAACT Leadership

- 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
- Brooks Jackson, MD, MBA – LOC Grant PI
Successful Re-competition

- Leadership group funded starting Dec 2013
  - Change in leadership: Brooks Jackson named as Dean, Minnesota School of Medicine
- Lab and statistical core funded
- Operations center moved to FHI360
- All sites re-competed:
  - NIAID: 6 US domestic, 18 international
  - NICHD: 15 US domestic, 14 international
21 US Domestic Sites

NICHD
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

University of Colorado Denver
South Florida CDC Ft Lauderdale
Rush University Cook County Hospital Chicago
Johns Hopkins University Baltimore
David Geffen School of Medicine at UCLA
The Children’s Hospital of Philadelphia (CHOP)
Bronx-Lebanon Hospital Center

NIAID
UCSD
U Miami
Northwestern
St Jude
Texas Childrens
32 International Sites

NICHD
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
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.
<table>
<thead>
<tr>
<th>Scientific Committee</th>
<th>Chair</th>
<th>Vice Chair</th>
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<tbody>
<tr>
<td>Cure</td>
<td>Deborah Persaud, MD</td>
<td>Ellen Chadwick, MD</td>
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<tr>
<td>Tuberculosis</td>
<td>Anneke Hesseling, MD</td>
<td>Amita Gupta, MD</td>
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<tr>
<td>Complications &amp; Co-Morbidities</td>
<td>Coleen Cunningham, MD</td>
<td>Mark Abzug, MD</td>
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<td>Treatment</td>
<td>Elaine Abrams, MD</td>
<td>Ted Ruel, MD</td>
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<td>Prevention</td>
<td>Lynda Stranix-Chibanda, MBChB</td>
<td>Sybil Hosek, PhD</td>
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Cure Scientific Agenda

- Evaluate early aggressive ART to reduce viral reservoir in neonates and achieve “functional cure”

- Evaluate specific interventions in chronically infected- youth to reduce HIV reservoirs
  - Antiretroviral treatment
  - HIV vaccines
  - Immunomodulatory agents

- Elucidate relationships between viral reservoirs and infant immunity
Tuberculosis Scientific Agenda

In HIV-infected infants, children, and pregnant women, evaluate novel:

- Tools for **diagnosis** of TB
- Approaches for **prevention** of TB
- Drugs and regimens for TB **treatment**
HIV Treatment Scientific Agenda

In HIV-infected infants, children and adolescents:

- Safety, pharmacokinetics (PK), and drug-drug interactions
  - new ARVs and formulations
  - novel drug combinations

In HIV-infected pregnant women:

- Safety and PK of ARVs
- Drug-drug interactions (e.g., ARVs, TB drugs and contraceptives)
HIV/ARV Complications & Comorbidities Scientific Agenda

- Evaluate novel vaccines in HIV-exposed infants
  - Safety and immunogenicity of RSV/other vaccine candidates (building on successful collaboration with NIAID Intramural)

- Prevent & treat cognitive impairment
  - Evaluate long-term neurocognitive outcomes, drug-drug interactions, and relationship to specific ARV therapies
HIV Prevention Scientific Agenda

- Prevent mother to child transmission and optimize infant and maternal health outcomes
- Reduce HIV infections in youth combining behavioral and biomedical interventions
  - Primary Prevention
    - Pre-exposure prophylaxis (PrEP)
  - Secondary Prevention
    - Adherence to biomedical interventions, retention and care
What have we done in the past year...
## Participants Enrolled in Last 12 Months

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<thead>
<tr>
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<th>Participants (including mother-infant pairs)</th>
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<tbody>
<tr>
<td><strong>PROMISE Studies (n=4)</strong></td>
<td>3,137</td>
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<tr>
<td><strong>Other Studies (n=21)</strong></td>
<td>743</td>
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<td><strong>Grand Total</strong></td>
<td>3,880</td>
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Participants Followed On Study in Last 12 Months

<table>
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<tr>
<th>Study Type</th>
<th>Participants (including mother-infant pairs)</th>
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<tr>
<td>PROMISE Studies (n=4)</td>
<td>8,309</td>
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<tr>
<td>Other Studies (n=28)</td>
<td>4,374</td>
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<tr>
<td>Grand Total</td>
<td>12,683</td>
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New Studies Opened/Opening Soon

- Cure in infants (1115)
- Cord blood transplantation (1107)
- INH for HIV-infected pregnant women (1078)
- RSV vaccine (1114, 2000)
- Raltegravir in HIV-infected and TB/HIV co-infected infants and children (1101)
- Rilpivirine pk & safety in children (1111)
- Pk of ARVs and TB meds in LBW infants (1106)
- Recombinant Protein TB Vaccine (1113)
- Raltegrivir in high risk infants (1110)
Publications

- More than 29 publications submitted in past 12 months
  - Manuscripts published in JAIDS, Vaccine, Clinical Pharmacology and Therapeutics, PIDJ, CID
  - 18 approved, pending publication
- Contributed to guidelines
  - OI guidelines in HIV+ children
Cross Network Initiatives

- MDR TB prevention
  - MRC with IMPAAACT
  - IMPAAACT with ACTG
- TB vaccine study
  - IMPAAACT with HVTN
- RSV studies with Intramural
- Adolescents
  - IMPAAACT with HPTN, MTN, ATN
Ongoing Pharma Collaborations

- **ViiV**
  - DTG PKs in children (1093)
  - DTG/ TB therapy PKs
  - DTG PKs in pregnant women

- **Merck**
  - RAL in neonates (1110)

- **Janssen**
  - ETR (1090)
  - ETV (1111)

- **Aeras (TB vaccine;1113)**
IMPAAACT Community Advisory Board

- Revised and streamlined its work plan and structure for new grant cycle
- Reconstituted leadership group and membership
Where do we go from here?
Plans for Upcoming Year

- Work with other networks, partners, community and scientific experts to develop robust collaborations
- 5 year agenda from each scientific committee
- Critical review of all open studies
  - Assess enrollment, secondary objectives
- Prioritize new capsules/concept sheets
Plans for Upcoming Year (cont.)

- Develop junior investigator initiative
  - Build on models of excellence from other networks
  - Seek funding from outside the network
- Continue to migrate SOPs to comprehensive searchable network MOP
- Work with Lab and Stats core to maximize information from data and samples in the ‘freezers’
And most of all, push the science forward