Vanderbilt-CIDRZ AIDS International Training and Research Program (AITRP)

Sten H. Vermund, MD, PhD
Amos Christie Chair of Global Health
Director, Vanderbilt Institute for Global Health
& on behalf of the Centre for Infectious Disease Research in Zambia (CIDRZ)

Holly Cassell, MPH
Program Director, Vanderbilt Institute for Global Health

sten.vermund@vanderbilt.edu
holly.cassell@vanderbilt.edu
## VU-CIDRZ AITRP Partners

<table>
<thead>
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<th>Country</th>
<th>Partner</th>
<th>Focus Area</th>
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<tr>
<td>Zambia</td>
<td>CIDRZ*; Univ. of Zambia (UNZA)</td>
<td>HIV prevention, care &amp; treatment, PMTCT, &amp; HIV-cancer</td>
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<tr>
<td>China</td>
<td>NCAIDS; Ctr. for Project Supervision/MoH</td>
<td>HIV epidemiology, substance abuse, and HIV-cancer</td>
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<tr>
<td>Pakistan</td>
<td>BRIDGE Foundation; Aga Khan University (AKU)</td>
<td>TB/HIV/STI epidemiology &amp; prevention; substance abuse</td>
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<td>India</td>
<td>Natl. AIDS Res. Inst. (NARI) / Indian Coun. of Med. Research (ICMR)</td>
<td>HIV-cancer</td>
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<td>Mozambique</td>
<td>Universidade Eduardo Mondlane</td>
<td>QI, HIV prevention, care &amp; treatment, PMTCT, &amp; HIV-cancer</td>
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**Previous partner countries:** Mongolia, Bangladesh, Jamaica

* Affiliated with UAB through 2012, and now with UNC
AITRP Trainees

- AITRP activities began in 2004 at UAB via subcontracts from UCLA & U. of Miami; independent AITRP since 2008
- 75 graduate degrees recipients (VU-MPH & PhD, UAB MPH & DrPH, LHSTM-MSc); 16 currently in degree programs
- 98% returned to work in their home countries for >2 yrs.
- 2,000+ have participated in our in-country training workshops (scientific writing, data management, M&E, Epi-Info, research ethics, grant writing, intro to HIV/TB/STI)
- 44% of our trainees have either been PI or Co-PI on one or more grants from U.S.-based and in-country public and private funders (USAID, WHO, NIH [FIC and NIAID], pharmaceutical firms, and the national MOH).
Trainee Productivity - Publications

AITRP trainees/alumni have generated about 90 manuscripts per grant cycle, incl. *Lancet, BMJ, JAMA, N Engl J Med, AIDS, JAIDS* on diverse topics, examples:

- **Antiretroviral Drug Resistance Mutations** Among Treated and Treatment-Naive Patients in Pakistan: Diversity of the HIV Type 1 pol Gene. *AIDS Res Hum Retrovir.* 2011;27:1277-82
- Comparison of visual inspection with acetic acid and cervical cytology to detect high-grade cervical neoplasia among HIV-infected women in India. *Int J Cancer.* 2012;130(1):234-40.

Special AITRP alumni-led Issues:
- **China**: AITRP alumni (UCLA, UNC, & UAB) special suppl., HIV in China. *AIDS* 2007
- **Zambia**: UNZA faculty and M.Med students led & contributed to special trainee issue of the *Medical J. of Zambia* 2011
Capacity Building-Zambia

- **31 trainees** completed MPH or MSc degrees; all have returned to work in Zambia, incl. Drs. Moses Sinkala, Isaac Zulu, Kasonde Mwinga, Kasonde Bowa.
- >500 Zambians trained in-country through our intensive workshops; >45 Zambians have been trained in short courses at VU and UAB.
- Zambian trainees have collectively been primary author or co-author 200+ publications in prestigious journals such as JAIDS, JAMA, and AIDS.
- AITRP program instrumental in engaging trained Zambian investigators in large-scale evaluations, incl. leadership in PEPFAR, HPTN, IMPAACT.
- Since 2006, **CDC/PEPFAR supplements** for UNZA capacity building: M.Med curriculum, Research Methods, dissertation awards, & faculty mentoring.
- UNZA (Mulla) and VU/UAB awarded the **Medical Education Partnership Initiative (MEPI)** with AITRP alumni in formative roles.
- The Global Network for Women's & Children's Health award to AKU (Pakistan) & now to CIDRZ a direct result of AITRP; both PIs AITRP alumni.
- Many AITRP publications with FICRS-F & IRSDA K-recipients co-authoring.
Capacity Building: China

- **8 trainees** received a MPH, PhD, or DrPH degree from VU or UAB or completed post-doctoral training.
- 10 in-country training courses on TB/AIDS program management, research methods, & science writing.
- **Han-Zhu Qian, MD, PhD** with >70 articles, mentors AITRP students, serves as Co-PI/project director on 2 NIH grants
  - Multi-component HIV intervention[s]... for Chinese MSM: *(MP3)* (NIH R01)
  - Expanding testing, linkage, & Rx for HIV prevention... MSM in China (NIH R34)
- **Yan Xiao, MD, DrPH**, served as Chief Manager of China Global Fund AIDS Round 5 at NCAIDS/China CDC
  - Building Capacity in Evidence-based HIV Prev. Res. for MSM in China (NIH R01)
- **Dr. Yifei Hu**, Assistant Professor, NCAIDS, an AITRP post-doc. Dr. Hu was awarded a FIC Clinical Research Fellowship (FICRS-F)
Capacity Building: Pakistan

- **12 trainees** received MPH or MSc degrees.
- Current AITRP leadership led by our former trainees, Drs. Sharaf Ali Shah (BRIDGE), Arshad Altaf (BRIDGE), and Omrana Pasha (AKU).
- Largest US grant support ever by the AKU is **Global Network for Women's & Children's Health** (NICHD U01), PI: Dr. Omrana Pasha (AITRP alumna).
- **Pakistan Institute of Public Health Research (PIPHR)** affiliated with Karachi University & established by Dr. Sharaf Ali Shah.
  - To develop the public health infrastructure and human resources in Pakistan.
  - Provides short & long term training in collaboration with US & other partners.
  - RCR course developed via a supplement award from FIC.
- **Sharaf Ali Shah, MBBS, DDV, MSPH**: Exec. Dir. of BRIDGE Consultants Foundation; 6 book chapters and >28 articles on HIV epidemiology and prevention; funded from GFATM & WHO/Stop TB.
- **Arshad Altaf, MBBS, MPH**: served as a Senior Provincial Surveillance Officer in HIV/AIDS Surveillance Project; published 32 PubMed articles on HIV.
- **Dr. Syed Asad Ali, MBBS, MPH**: AKU Asst Prof. secured 3 grants, incl. FIC-GRIP R01
Capacity Building: India

- Training on **HIV-cancer interactions**, esp. HPV-HIV, screening.
- NARI, Pune: (AITRP Alum) **Vik Sahasrabuddhe** received NCI R21 grant with Dr. Mehendale basis for research & training activities via **3 supplements from NIH (NCI, FIC, OAR) & ICMR co-funding**.
- Characterized the usefulness and accuracy of visual inspection with acetic acid (VIA) and HPV-based screening for cervical cancer in HIV+ women. AITRP played a major role in helping Indian trainees and their mentors secure independent research funding through the ICMR-NIH program.
- ‘Intramural-to-India’ (I-to-I) program funded by NIH OAR to AITRP alumni in late 2011. ICMR will co-fund in early 2012.
  - Evaluate novel HPV-based biomarkers for cervical cancer prevention in HIV-infected women, by recruiting a cohort of 1000 HIV(+) women at NARI in Pune and NIE in Chennai.
Capacity Building: Mozambique

- 3 long-term trainees: 2 MPH students at UEM, & 1 MPH at VU;
- In-country workshops in ethics in medical research with Dr. Mohsin Sidat. Dean, UEM SoM & Quality Improvement research
- Current AITRP trainee Dr. José Tique focusing on QI research:
- Training for UEM faculty and students on data management, research methods, and scientific writing.
- PEPFAR projects → training & thesis research projects:
  - *Scaling up comprehensive positive prevention in the Republic of Mozambique. CDC Global AIDS Program* (1U2GPS002770)
  - *Strategic planning and capacity building for strategic information activities in Mozambique. CDC Global AIDS Program* (U2GPS002829);
  - *Strengthening Communities through Integrated Programming (SCIP) in Mozambique. USAID* (656-A-00-09-00141-00).
Lessons learned

• Focus on 1-2 institutions per country
• Use in-country selection committee
• Link to on-going research efforts upon their return
• Do not extract people already doing research (LSHTM distance learning MSc an excellent option)
• Take people for another round (Webster Kasongo example of MPH at UAB and PhD at VU 5 yrs later)
• Focus in-country training on discrete skill-building and follow-up, incl. grant/paper writing/ethics
• Partner across US universities to maximize efficiency & minimize overlap in same country
• Razor focus on research capacity building