

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

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VU-CIDRZ AITRP Partners

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

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:

- Implementation of the **Zambia electronic perinatal record system** for comprehensive prenatal and delivery care. *Int J Gynaecol Obstet.* 2011; 113:131-6.
- HIV incidence rates and risk factors for urban women in Zambia: **preparing for a microbicide clinical trial.** *Sex Transm Dis* 2009 Mar;36(3):129-33.
- Early clinical and programmatic outcomes with **tenofovir-based antiretroviral therapy** in Zambia. *J Acquir Immune Defic Syndr.* 2010;54:63-70.
- **Expansion of HIV/AIDS in China:** lessons from Yunnan Province. *Soc Sci Med.* 2007;64:665-75.
- **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
- **Prevalence of syphilis** among antenatal clinic attendees in Karachi: Imperative to begin universal screening in Pakistan. *J Pak Med Assoc.* 2011;61(10):993-97.
- 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:

- **Pakistan:** *J. of Pakistan Medical Assn.* on HIV/AIDS & TB 2006, 2008, & 2013
- **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
- **Jamaica:** Pediatric & Perinatal HIV/AIDS in Jamaica, *West Indian Medical J.* 2008



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:
 - Ciampa PJ, **Tique JA**, et al. Addressing poor retention of infants exposed to HIV: a QI study in rural Mozambique. *J Acquir Immune Defic Syndr* 2012;60:e46-52.
- 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

