

#### CIHR International Infectious Disease & Global Health Training Program Canada • Colombia • India • Kenya







# CIHR's STIHR Program

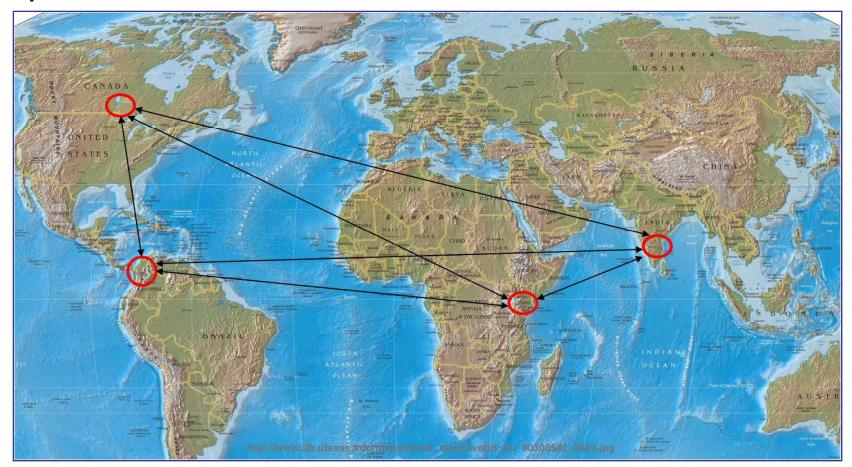
- Strategic Training in Health Research
- Established in 2002
- Renewal process in 2008
- Multiple themes
- Criteria
  - Excellence in mentorship
  - Multi-disciplinary
  - Innovative and effective
  - Raise national standards for training







#### International Infectious Disease and Global Health Training Program Four Continents: One Shared Experience











- HIV/AIDS
- Global Health
- Emerging Infectious Diseases







**Objectives** 

- Train <u>outstanding leaders</u> in infectious diseases and global health research.
- To create a novel and stimulating <u>multidisciplinary</u> and <u>truly</u> <u>international</u> research training environment.
- To harness the unique opportunity offered by the <u>critical mass</u> of infectious diseases and global health infrastructure.
- To make available <u>collaborative international research sites</u> for the trainees' primary research projects, sites for research practica and major course offerings.
- To offered a <u>shared learning environment</u> between sites.







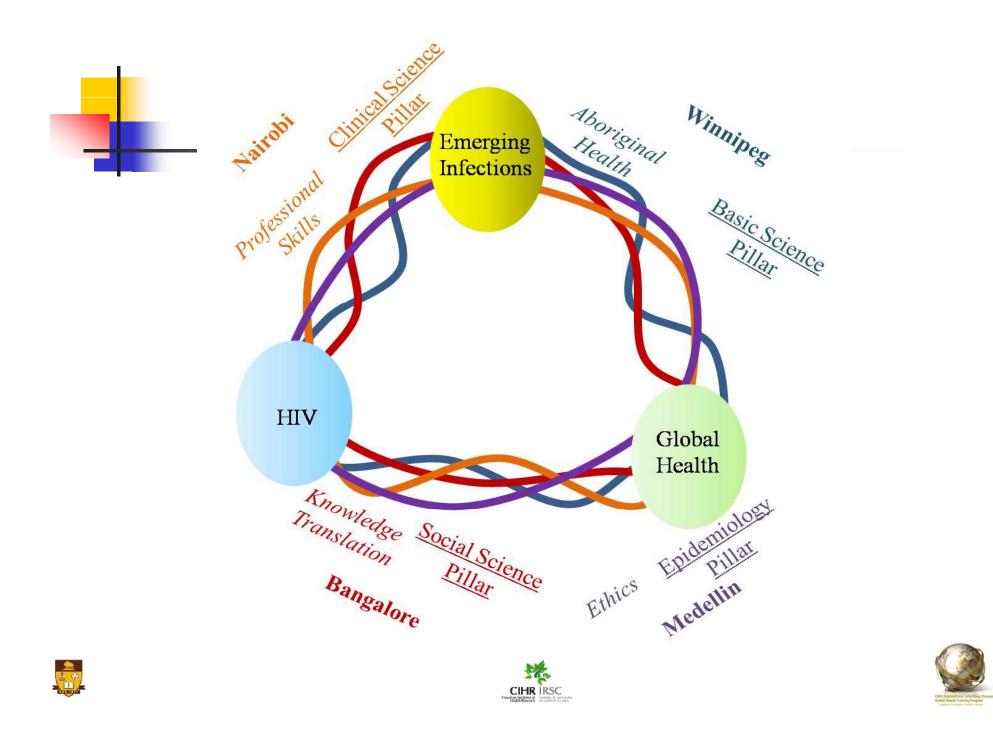
#### Purpose

- Change careers
  - International focus
  - Multidisciplinary approach
- Create networks
  - Linking between existing major research programs
  - Create networks within the training program
- Change lives
  - Of trainees
  - Of those they serve









#### **IID&GH Training Program and Partners**



## Program Advisory Committee

#### Major Stakeholders

- Academia
- Industry
- Government
- First Nations
- Not-for-profit Sector
- Community
- International Sites
- First meeting May 12, 2010
- Second meeting Oct 14, 2011







#### Leadership



#### **Key Leaders**

 Keith Fowke, Francis Plummer, Stephen Moses, John Wylie, Javier Mignone





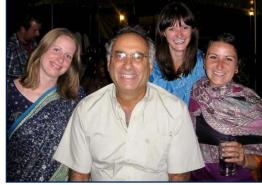
#### Site Coordinators

 Keith Fowke, Stephen Moses, Julius Oyugi, Carlos Rojas













#### Mentors

| Ross Upshur             | Eric Meslin          | Catherine Cook    | Brenda Elias     |
|-------------------------|----------------------|-------------------|------------------|
| Kathi Avery Kinew       | Michael Eze          | Mike Drebot       | Sharon Bruce     |
| Robbin Lindsay          | T. Blake Ball        | Carole Beaudoin   | Pat Martens      |
| Stephanie Booth         | Walter Jaoko         | Omu Anzala        | David Knox       |
| Elijah Martim<br>Songok | Solomon Mpoke        | B.M. Ramesh       | Margaret Fast    |
| Sushena Reza-Paul       | María Teresa Rugeles | Joanne Embree     | Chris Green      |
| Larry Gelmon            | Pam Orr              | Darryl Hoban      | Michael Williams |
| George Zhanel           | Xiaojian Yao         | Xi Yang           | Darren Fast      |
| Linda Larcombe          | Jude Uzonna          | Kevin Coombs      | Joyce Slater     |
| Sam Kung                | Benson Estambale     | Lázaro A. Vélez G | Robert Lorway    |









- PhD students, PDF and clinical fellows
- Positions available for local and international trainees
  - 2-4 PhD trainees at each international site
- International network of trainees and mentors



Trainees









Trainees:



- Round 1-22, Round 2–12, one left program total 33
- Colombia 2, India 7, Kenya 4, Canada 20
- Basic/clinical 22, Epi/Social 11
- PhD 25, PDF 7, Clinical Fellow 1



• 76% (16/21) of CDNs have external salary awards











#### Meet some trainees



James Sainsbury Home Country: New Zealand Degrees: University of Manitoba, Postdoctoral Fellow, Victoria University of Wellington, PhD, BSc(Hons) Victoria University of Wellington, BSc. Supervisor: Dr. Frank Plummer Project Title: Characterisation of a novel candidate gene for the HIV-1 Resistance Phenotype in the Pumwani Sex Worker Cohort.



Nadia Musimbi Chanzu Home Country: Kenya Degree: University of Nairobi Institute of Tropical and Infectious Diseases, PdD student Masters of Science in Biomedical Science, Kingston University, London, UK Bachelor of Science in Biochemistry from University of Nairobi, Kenya Supervisor: Prof. Walter Mwanda, Prof. Omu Anzala, and Dr. Julius Oyugi Project Title: Secretor Status, FUT2 Polymorphisms and the Risk of Infection by HIV and HPV in Female Sex Workers in Kenya



Natalia Taborda-Vanegas

Home Country: Colombia
Degree: University of Antioquia, Doctoral student in basic sciences
Supervisor: Dr. María Teresa Rugeles
Project Title: Evaluation of genetic and immunological mechanisms involve in resistance to HIV-1 exhibited by chronically infected individuals who control viral replication without antirretrovirals



Jayanna Krishnamurthy Home Country: India Degrees: M.D. Community Medicine, Rajiv Gandhi University of Health Sciences, Bangalore, India; M.B.B.S, Mysore University, Mysore, India Supervisor: Dr. Stephen Moses Project Title: Integrating HIV into General Health Systems; Opportunities and Challenges in Indian context.







## Major Research Project

- The primary research learning experience
- Project developed
  - between supervisor and trainee
  - before entry into Program
- Progress on research
  - If part-time MUST ensure appropriate protective time (that is what stipend if for)
  - Assessed by supervisor in annual report and scientific symposium by program
  - Publications expected







### **Infectious Minds**

- Scientific Discussion Group
- Monthly linked by Video Conferencing
- Topics and guests chosen by trainees
- Expert guest on "hot" topics
- Trainee-led follow-up presentation
  - Trainees from all sites jointly present
- Sessions recorded and available on-line
  - http://stream.bann.umanitoba.ca/media/CIHR
- Javier Mignone leads
- Knowledge Translation via Publications













#### **Research Practicum**

- Purpose: to foster multidisciplinary research
- Must be in a CIHR Pillar unrelated to trainee's primary project or a skill not available in their environment
- International practica are encouraged
- 1-3 Months working for another organization/lab
- IID provides salary Practicum site provides environment
- Examples:
  - HIV geneticist assessing peer review policy at PHAC
  - Geographic epidemiologist learning clinical microbiology skills
  - Epidemiologist doing social research in India



John Wylie leads





# Scientific Symposium

- Trainee presentations and keynote speakers
- National and international experts invited
- Trainees give oral presentations
- Trainees given extensive access to experts
- Networking encouraged so trainees can explore options for next phases of their careers and collaborations









#### Learning Visits



- Trainees at site of Major Course host the learning visits
- Winnipeg: NML, Nine Circles, Whiteshell petrogliffs, Sweat Lodge, Bowling, U of M Centres (MCHP, CAHR, CGPH)
- Bangalore: visit Karnataka Health Promotion Trust (KHPT) projects
- Nairobi: Majengo clinic, KNH, KAVI, UNITID Labs





#### **Seminar Series**

- Visiting speakers series hosted at each site
  - Gardiner Laureate in Global Health Dr. Nicholas White – Oct 19, 2011, Winnipeg
  - Co-sponsored the HIV Mucosal Immunology Symposium, Winnipeg, April 2011
- Trainee networking opportunities









#### Communications

- Video conference capabilities
  - All sites have their own equipment funded by IID&GHTP
  - Enhancing training and research
  - Session recorded and available at
    - http://stream.bann.umanitoba.ca/media/CIHR
- Web site <u>www.iidandghtp.com</u>
  - On-line application information
  - Over 28,500 hits
- Google documents site
  - Document sharing
  - Group activities
- UM Bulletin Article in May 2010







## Major Course Offerings

- Each course would be 2-3 weeks
- Rotate between sites
- Ecology of ID
  - Winnipeg, 2010, 2013
- HIV Interventions
  - Bangalore, 2011



- Nairobi, 2012
- Epidemiology/Aboriginal-Indigenous Peoples Health
  - Medellin, 2013?

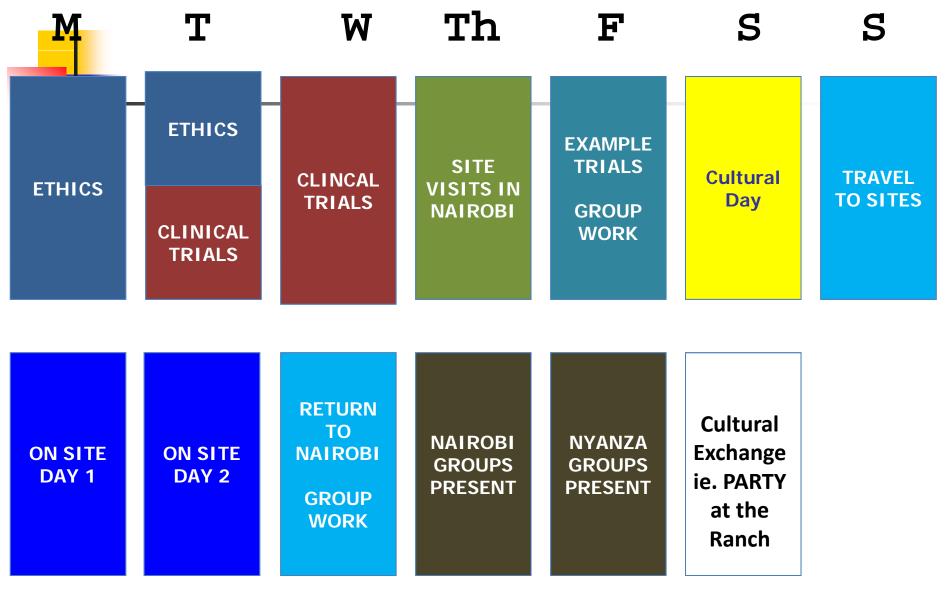


















### Sites - Current Trial

- *Kangemi:* HIV vaccine trial (phase 1)
- *Kariobangi:* Prevention of vaginal infections in FSW
- Thika: Pre-exposure prophylaxis for HIV in discordant couples
- *Siaya:* Presumptive treatment of malaria in pregnancy
- Bondo: Pre-exposure prophylaxis for HIV in high-risk women
- Migori: Cluster randomized trials of integrating ANC-HIV care, HIV care-FP







## **Clinical Trial Sites**

| Field Site             | PI / Mentors   | Current Trial   | <b>Hypothetical Trial for Part II</b>   |
|------------------------|--|---|---|
| Kariobangi,<br>Nairobi | Joshua Kimani,<br>Scott McClelland, Jessie<br>Kwatampora | Prevention of vaginal infections<br>-Phase II                             | Genetically modified Lactobacillus as<br>treatment for BV (HIV as an<br>outcome). |
| Kangemi,<br>Nairobi    | Omu Anzala, Gaudensia<br>Mutua                           | HIV vaccine safety trial<br>- Phase I                                     | Phase III vaccine trial in MSM, FSW (with PrEP/vaccine as an arm)                 |
| Thika                  | Nelly Mugo,<br>Kenneth Ngure                             | PrEP trial in discordant couples  | Safety and efficacy of long-acting<br>PrEP (in combination with<br>contraception) |
| Siaya                  | Joshua Kimani  | Prevention of malaria in pregnancy  | Behavioural intervention to reduce<br>HIV incidence in women aged 18-24.          |
| Bondo                  | Kawango Agot,<br>Fred Owino                              | PrEP trial in high-risk women   | Cluster-randomized trial to improve<br>adherence to PrEP                          |
| Migori                 | Elizabeth Bukusi,<br>Craig Cohen, Maricianah<br>Onono    | Cluster-randomized trial of<br>integrating HIV care with ANC<br>and/or FP | CCR5 gene therapy Phase I safety trial.   |