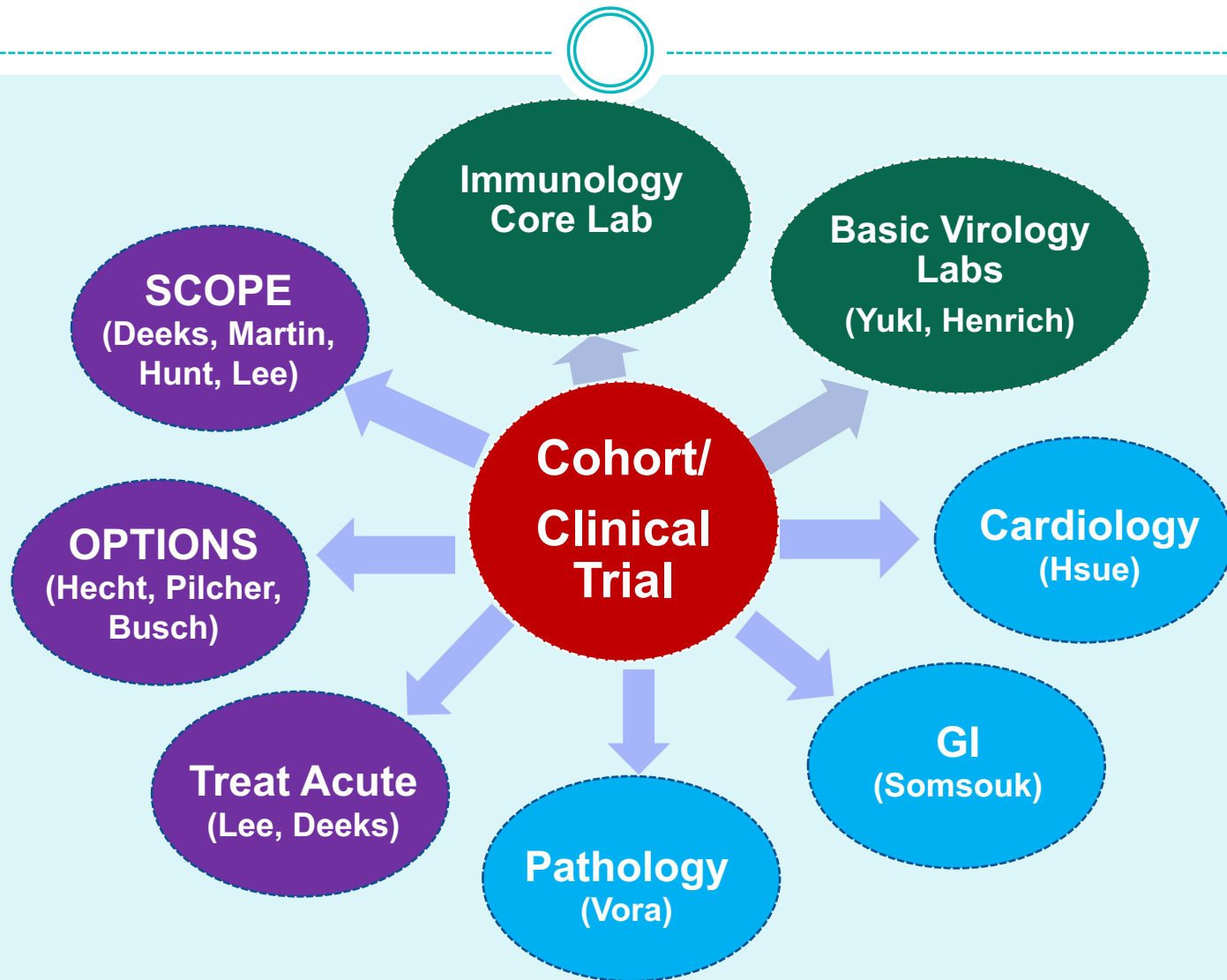


# UCSF Translational HIV Research



# Productivity Mostly Attributable to Data and Biological Specimens from the Cohorts

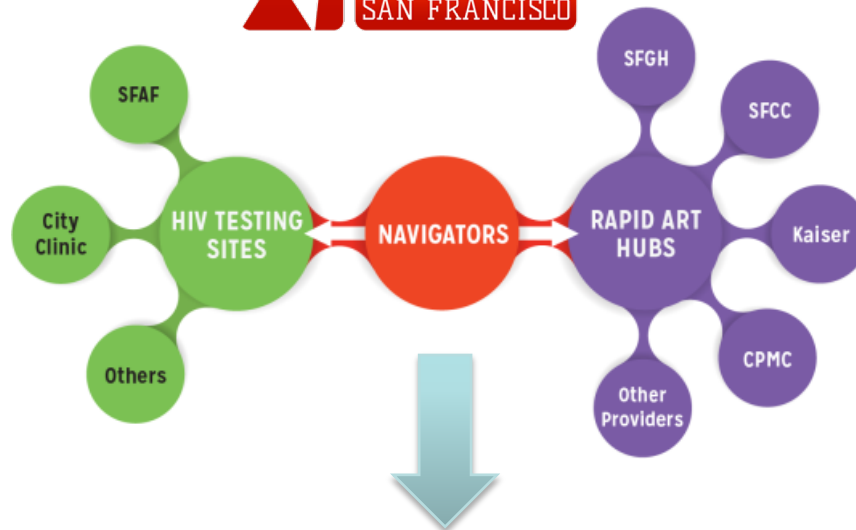
	<b>SCOPE</b>	<b>UARTO</b>	<b>ISS Clinic</b>
No. of subjects	1938	750	22,087
Location	San Francisco	Mbarara, Uganda	Mbarara, Uganda
Cohort type	Dynamic	Fixed	Dynamic
Entry Criteria	Demand-driven collection of both prototypical & rare clinical phenotypes	Consecutive ART starters at a prototypical municipal ART clinic	All patients at a prototypical municipal ART clinic
Paper-based measurements	Research-dedicated	Research-dedicated	During course of clinical care
Biologic specimens	Serum, plasma, PBMCs, saliva	Serum, plasma, PBMCs, saliva	--
Follow-up	4 months	4 months	Clinically-driven
Special procedures	Gut & lymph node biopsies, apheresis	Real time adherence monitoring	Active tracking of drop outs

# San Francisco Cohorts

- **SCOPE: Chronically HIV-infected patients**
  - Enriched for “extreme phenotypes” (elite controllers, viremic non-progressors, immunologic non-responders, etc).
  - Key Faculty: Steve Deeks, Jeff Martin, Peter Hunt

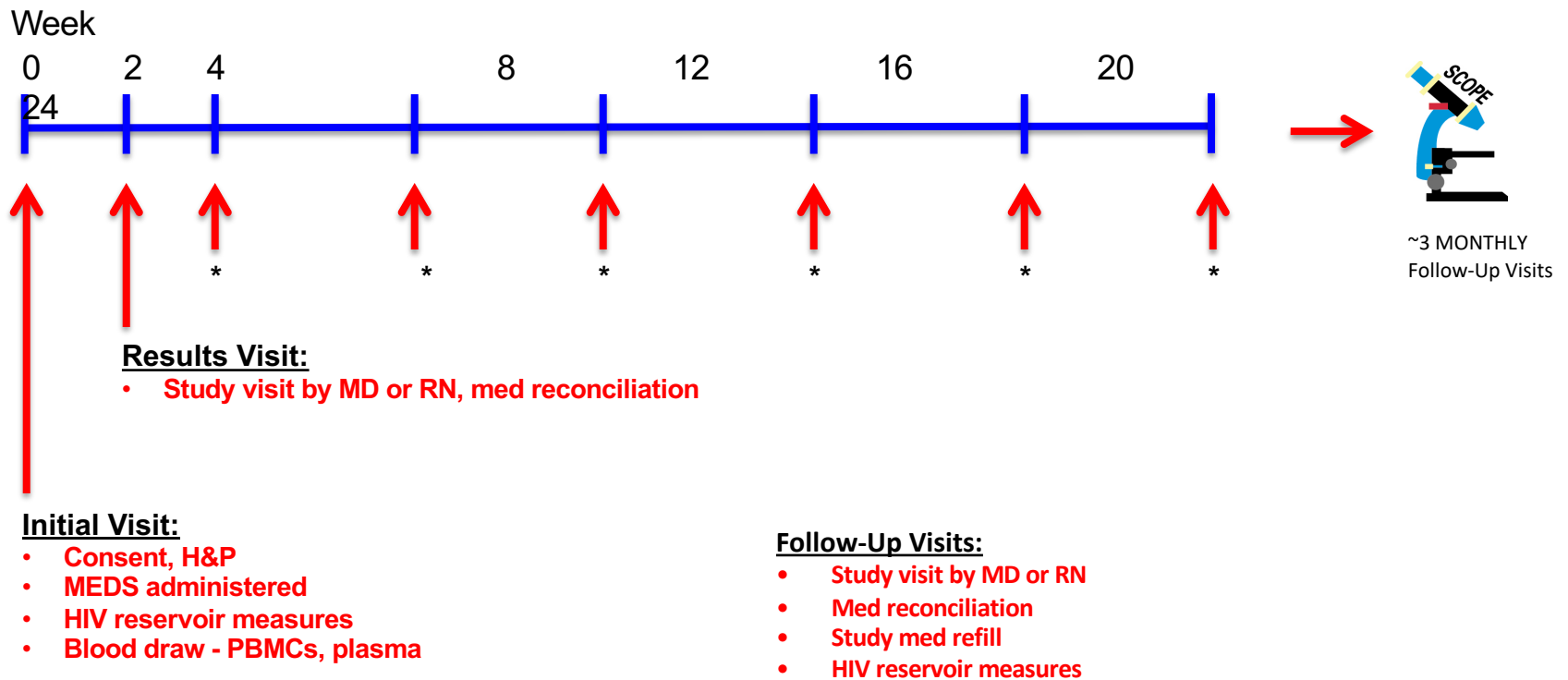
*Cohort/specimens/data now merged with . . .*

- **OPTIONS (historic): Recently HIV-infected patients**
  - Boutique Cohorts: Transmission pairs, Highly exposed HIV-uninfected patients
  - Key Faculty: Rick Hecht, Chris Pilcher, Michael Busch
- **Treat Acute (new): Acutely HIV-infected patients**
  - “Getting to Zero” SF campaign, <100 days from estimated date of HIV infection, PreP failures, HIV-1 Ab neg/plasma VL positive
  - Key faculty: Sulggi Lee, Steve Deeks, Tim Henrich

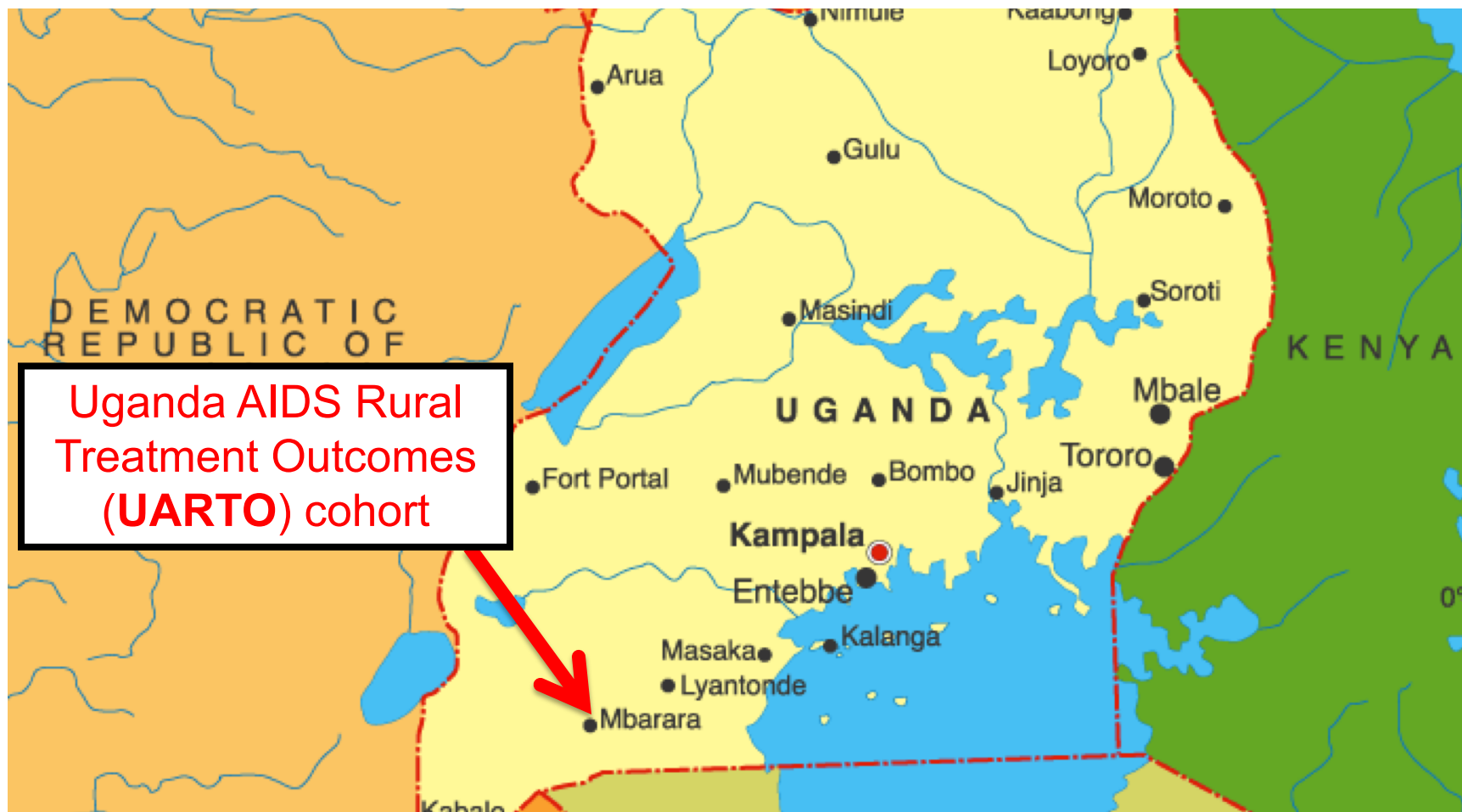


# UCSF Treat Acute HIV Study

# Extensive Monthly Longitudinal Visits



# UARTO – Ugandan Cohort

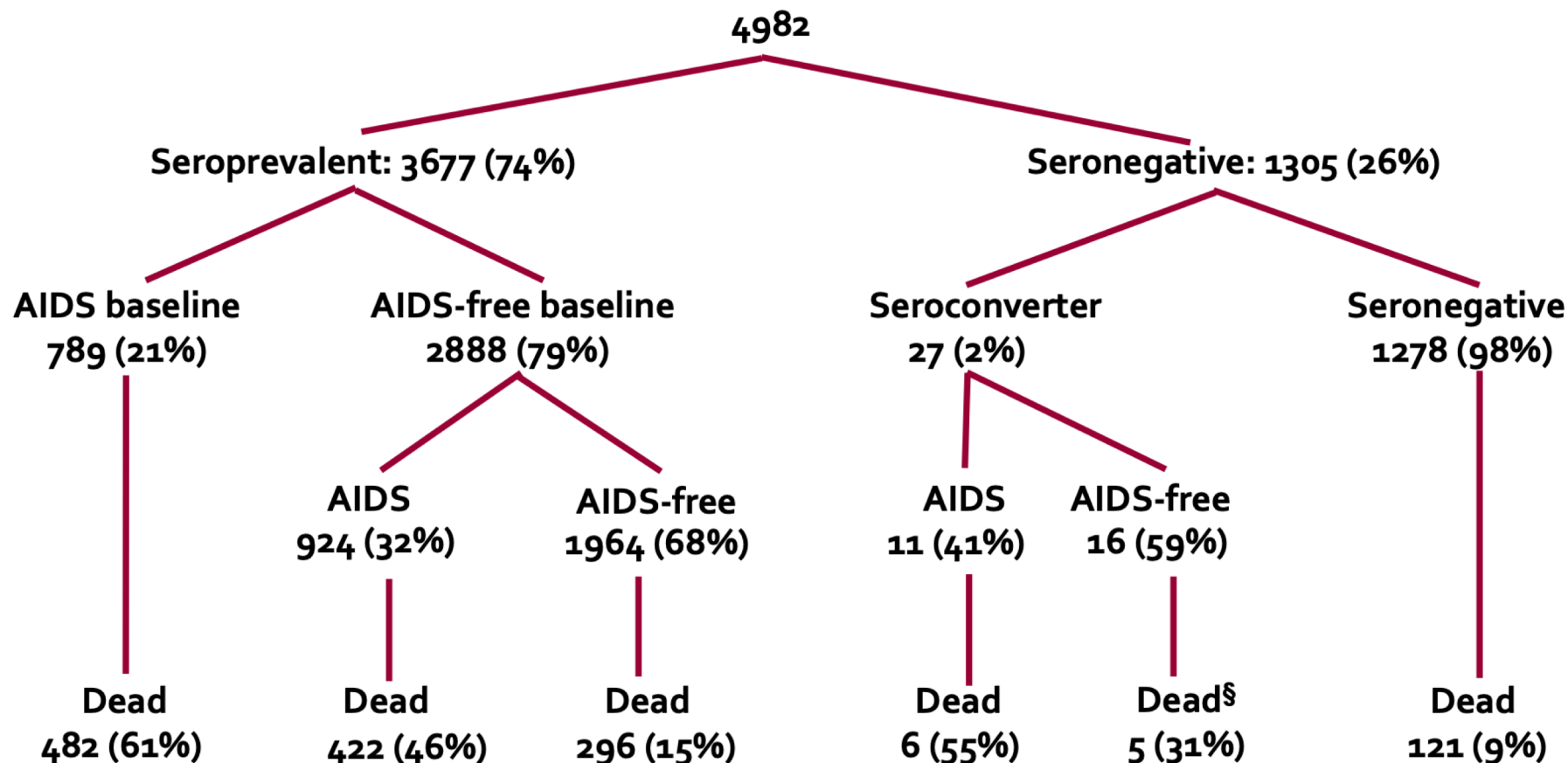


# Clinical Cohorts

- **WIHS: Multi-center cohort of HIV-infected women and risk-matched HIV-negative controls**
  - Currently: 3677 HIV+ women and 1305 HIV- women
  - Key Faculty: Phyllis Tien, Nadia Roan
- Recent merge of WIHS with MACS (men) 2019
- Now expansion to southern states



# Clinical Cohorts

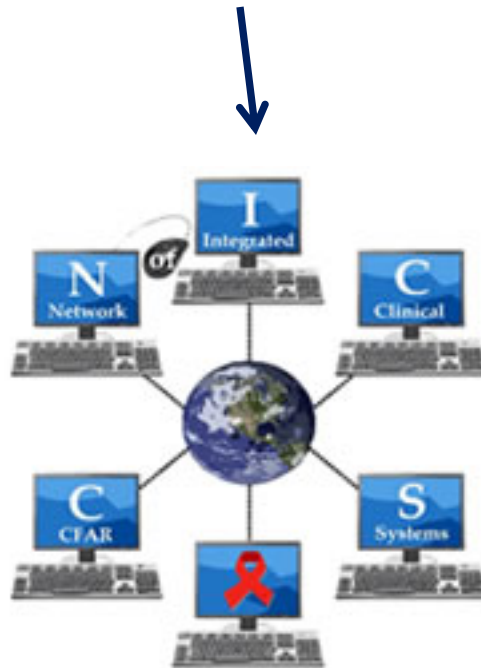


\* HIV & AIDS status as of the end of visit 47 (3/31/18). Deaths via NDI (through 12/31/14 for site 4 & 12/31/16 for all other sites) and through 3/31/18 via other reports

§ Three seroconverters found at death



# Domestic Cohort Linkages



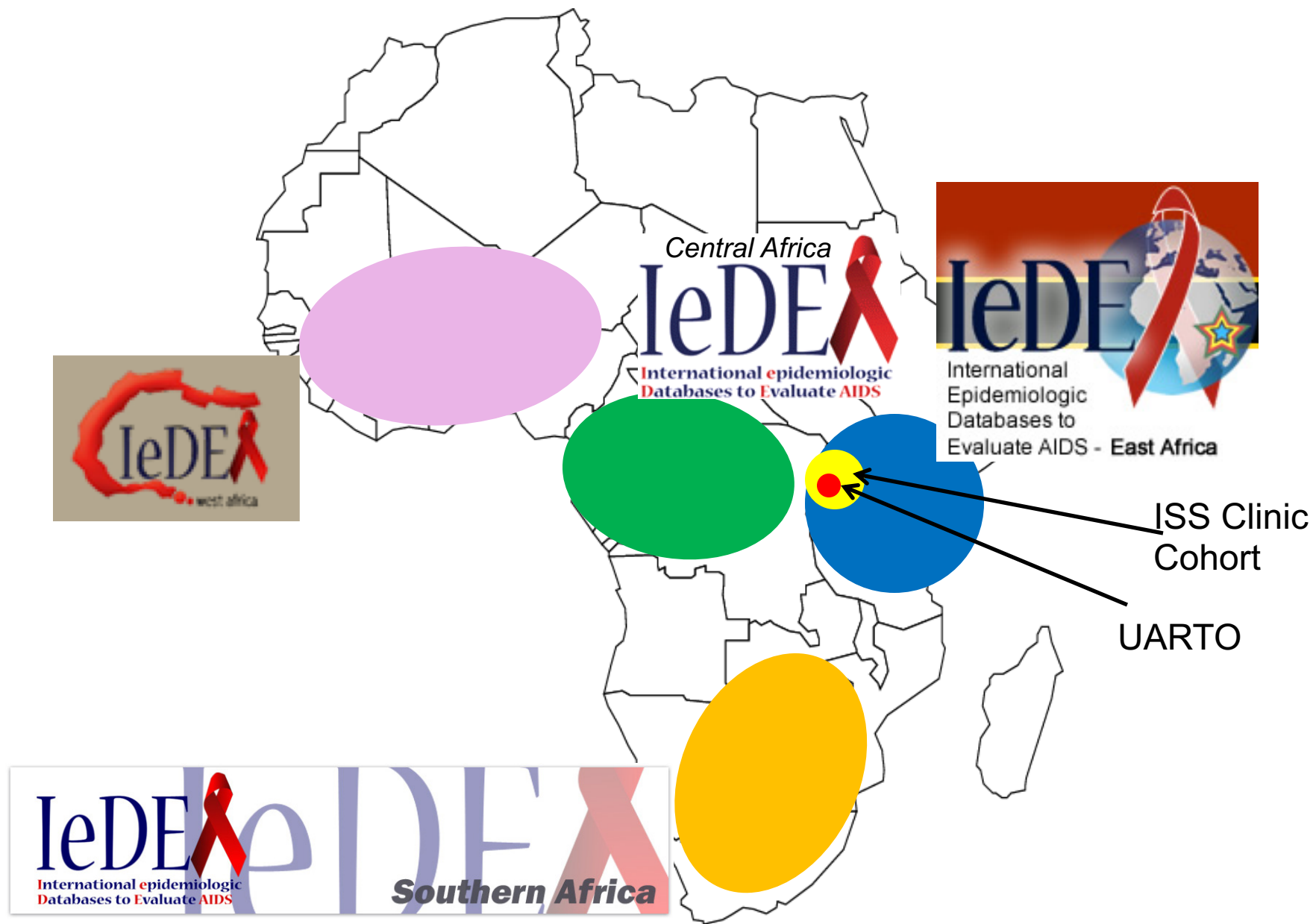
## Sites

Baltimore, MD	Galveston, TX	Pittsburgh, PA
Birmingham, AL	Greensboro, NC	Portland, OR
Boston, MA	Honolulu, HI	Providence, RI
Brook, NY	Houston, TX	Rochester, NY
Brooklyn, NY	Indianapolis, IN	Sacramento, CA
Buffalo, NY	Iowa City, IA	San Diego, CA
Chapel Hill, NC	Kansas City, MO	San Juan, PR
Chicago, IL	Los Angeles, CA	San Francisco, CA
Cincinnati, OH	Miami, FL	San Leandro, CA
Cleveland, OH	Minneapolis, MN	San Rafael, CA
Columbus, OH	Nashville, TN	Seattle, WA
Dallas, TX	New Orleans, LA	St. Louis, MO
Denver, CO	New York, NY	Stanford, CA
Detroit, MI	Oakland, CA	Stony Brook, NY
Durham, NC	Omaha, NE	Tampa, FL
	Philadelphia, PA	Torrance, CA
		Washington, DC

## Canada

British Columbia: Vancouver  
 Ontario: Hamilton, Kingston, London, Ottawa, Sudbury,  
 Thunder Bay, Toronto  
 Quebec: Montreal  
 Southern Alberta

# International Cohort Linkages



# Other Research Networks

- **ACTG (AIDS Clinical Trials Group)**
  - Diane Havlir (TB TSG Vice Chair)
  - Peter Hunt (Inflammation/End-organ Disease Chair)
- **CNICS (CFAR Network of Integrated Clinical Systems)**
  - Linked electronic medical records across multiple HIV clinics
  - Specimens available to link biomarkers to rare clinical outcomes
  - Key Faculty: Steve Deeks, Peter Hunt, Jeff Martin

# Innovation: Linkage to CNICS Specimen Repository

- March 25, 1987 to 2019
- 8 contributing sites
  - CWRU
  - JHU
  - UCSD
  - UNC
  - Fenway
  - UAB
  - UCSF
  - UW
- 1,043,374 aliquots
  - from 139,148 unique timepoints
    - from 18,188 HIV-infected patients



# Core Metrics: 2012-2013

Item	Number
<b>Projects</b>	
Total	144
International	33
<b>Users</b>	
Total	205
UCSF CFAR	69
Other CFARs	57
Non-CFAR	79
Early Stage Investigators	38
<b>Publications*</b>	60
<b>Conference Presentations</b>	58

\* including submitted

# Biospecimen Inventory

Participant Classification	Number of Participants with at least 1 applicable timepoint	Number of Timepoints with at least 1 available aliquot	Total Number of Available Aliquots
Elite Controller--Confirmed	60	448	4637
Viremic Controller--Confirmed	116	734	8687
"Generic" Controller--Confirmed	168	1425	16122
Non-Controller	279	844	8793
HAART Suppressed	622	4038	47298
Elite Controller--Awaiting Further Observation	35	64	700
Viremic Controller--Awaiting Further Observation	87	172	2130
"Generic" Controller--Awaiting Further Observation	109	227	2696

## Rapid distribution

**2012:**  
**48 separate specimen shipments to investigators**

Specimen Type	No. Unique Timepoints
Plasma	2080
Serum	450
Viable PBMC	947
Non-viable PBMC	768