

# Agenda: Biorepository Users Working Group Recommendations



**Saturday, May 18, 2013, 9:15 - 10:45 am**

Session Chairs: Robert Hewitt, SFR/ESBB, France  
Chana Rabiner, NIH/NCI, U.S.A.

Working Group Chairs: Akin Abayomi, University of Stellenbosch & NHLS, R.S.A.  
Alan Christoffels, South African National Bioinformatics Institute, R.S.A.

**9:15 – 9:20      Introductions**

**9:20 – 9:50      Biobanking Survey & Biospecimen Deposit**

*Tay Croxton, Institute of Human Virology, Nigeria*  
*Beverly van Rooyen, University of Stellenbosch, R.S.A.*  
*Carmen Swanepoel, University of Stellenbosch & NHLS, R.S.A.*

**9:50 – 10:30      MTA & Biospecimen Release**

*Christine Beiswanger, Coriell Institute, U.S.A.*  
*Emilomo Ogbe, Institute of Human Virology, Nigeria*  
*Beverley van Rooyen, University of Stellenbosch, R.S.A.*

**10:30 – 10:45      H3A Consortium & H3ABioNet Standardization**

*Alan Christoffels, South African National Bioinformatics Institute, R.S.A.*  
*Judit Kumuthini, Centre for Proteomics and Genomics Research, R.S.A.*

# Biorepository Survey

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H3 Africa Consortium  
Accra, Ghana  
May 16-18, 2013



wellcome trust

# Content

1. Aims of survey
2. Survey responses
3. Use of survey responses
4. What next?

# Aims of Biorepository Survey

1. Develop standardized SOPs/documents to ensure consistency and aid H3A research groups on best methods for
  - a) Sample collection
  - b) Sample processing
  - c) Sample storage
  - d) Sample transport

# Aims of Biorepository Survey

2. **Collect information** from research groups on
  - a. Types of samples sent
  - b. Sample collection and processing requirements
  - c. Sample transport (regulations, permits)
  - d. Local laws & regulations governing sample sharing

# Aims of Biorepository Survey

3. Identify **biorepository capabilities** and **infrastructural requirements** for handling, processing, and storing samples types identified; devise strategies to address gaps.
4. Estimate **number of samples** to be received by the biorepository in preparations for supply **forecasting**, shipping contracts, infrastructure and overall capacity.

# Biorepository Survey Responses: Sample Types & Required Processing

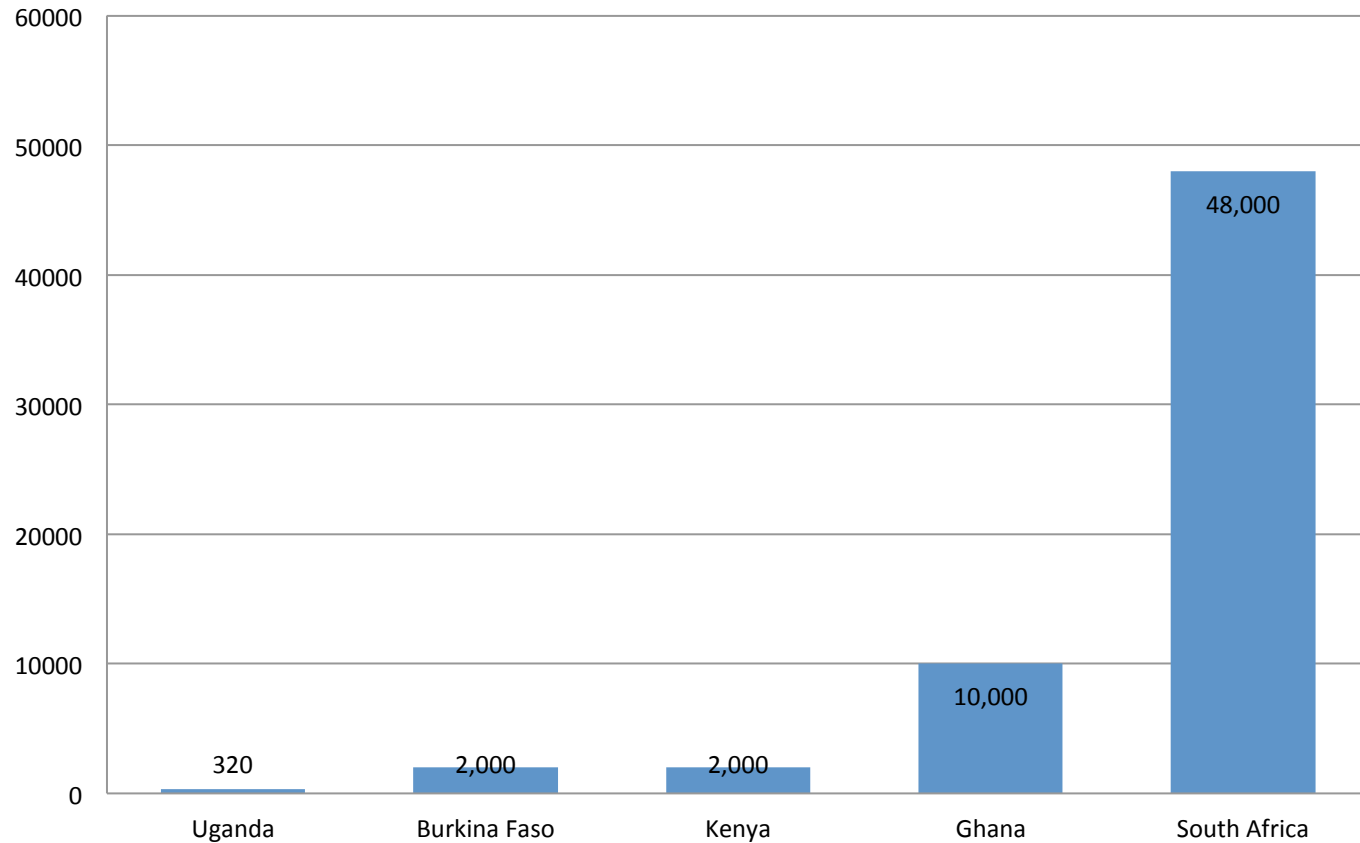
## Confirmed

- Whole Blood
  - Plasma
  - Serum
  - DNA
  - RNA
- Oral Fluid
  - DNA
  - RNA

## Potential

- Fixed/Fresh Tissue?
- Cells?
- Urine?
- Sputum?
- Stool/microbiome?
- Other?

# Number of Sample by Country





# Biorepository Survey Responses: Summary of Sample Activity

	Receive		Store
Dr. Adu/Ojo	8,000 DNA		8,000 DNA
Dr. Matuvo	160 WB	Process →	160 DNA, 160 RNA
Dr. Mayosi	6,000 WB	Process →	6,000 DNA, 6,000 RNA, 6,000 Plasma
	6,000 Oral Fluid	Process →	6,000 DNA, 6,000 RNA
	6,000 Clotted	Process →	6,000 Serum
Dr. Ramsay	12,000 DNA		12,000 DNA
<b>Total</b>	<b>20,000 DNA</b> <b>6,160 WB</b> <b>6,000 Oral Fluid</b> <b>6,000 Clotted</b>		<b>26,160 DNA</b> <b>6,160 RNA</b> <b>6,000 Plasma</b> <b>6,000 Serum</b>

# Biorepository Survey Responses: Documents

- MTAs from IHVN, Nigeria, as well as Wits and Stellenbosch University, SA (Country vs. Institute)
- Consent form from Matovu group, Uganda
- Ethics policies from Ramsay and Mayosi group
- Link to Uganda National Council of Science and Technology website ([www.uncst.go.ug](http://www.uncst.go.ug))
- Import/Export requirements for SA



# Current Developments: Sample Collection & Processing

- Identify the **appropriate tubes, reagents and kits** to use for collection of intended specimen types and associated processing.
- **Develop/harmonize SOPs** across the two biorepositories in accordance with best practices for sample collection, processing and manufacturers' recommendations.



# Current Developments: Sample Transport

- Identified relevant **IATA shipping regulations** and requirements.
- **Developing/harmonizing SOPs** among the two biorepositories in accordance with best practices for sample transport and IATA regulations.
- Working closely with **couriers** to assist with import/export permits.
- We appreciate any information investigators have surrounding sample transfer requirements for their countries. (E.g. Nigeria MTA countrywide but in South Africa more institutionalized)



# Current Developments: Quality Assurance

- **Harmonize** QC methods according to international standards and best practices.
- Implement **monitoring procedures**
- Take action in a timely and effective manner



# Possible Shipping Conditions

- Ambient Temperature (+20°C to +30°C)
- Cold Packs (+2°C to +8°C or -20°C)
- Dry Ice (-70°C)
- LN<sub>2</sub> Dry Shippers (below -150°C)



**Depends on:**

- Intended Analysis
- Analytes /Molecules Measured
- Sample type
- Collection tubes

# What's next?

- Biorepositories need to educate researchers but, in turn, researchers need to educate biorepositories.
- Short term – survey feedback will allow us to develop SOPs for our pilot studies which will, in turn, help us to standardise conditions. (3 months)
- We need ongoing feedback from researchers on your requirements for sample use.
- This information will allow us to continually work on harmonizing SOPs for sample collection, processing and storage.

# Contact Info

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