



BAOBAB LIMS

07/02/2019

Edition 1, Volume 1

Welcome to our very first edition of the Baobab LIMS newsletter. Before we get into the nitty-gritty, first some background on Baobab LIMS. This Laboratory Information Management system is an **open-source** tool for biobanks and biorepositories developed by **African researchers** at SANBI - UWC as part of the B3Africa framework (www.b3africa.org).

While the software has its roots in human **biobanking workflows**, the system can be extended to other applications such as plant, animal, and microbe repositories.

For the technical readers, Baobab LIMS is based on the Plone web content management framework and is a client-server-based tool, accessed through the internet on a standard web browser, or as a standalone local installation.

MEET THE TEAM

The who's who of Baobab LIMS

"If I have seen further, it is by standing on the shoulders of giants." – Isaac Newton

The Baobab LIMS team is led by Alan Christoffels, the Director of SANBI. Talented **developers** at the core include Hocine Bendou, Quinton Coert and Ziphosakhe Mashologu and are supported by the super **SANBI crew** of Peter van Heusden, Eugene de Beste and Thoba Lose. Dominique Anderson, the project analyst, is at the core of training and client interfacing. Baobab LIMS is built,

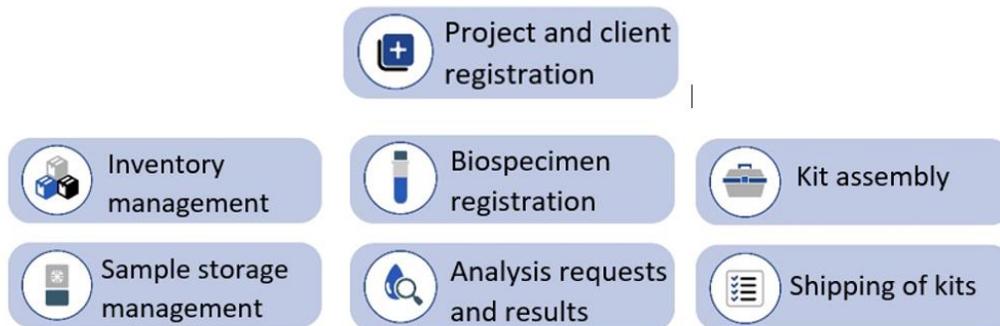


and continues to improve through inputs from **teams of users**, such as the NSB biobank team, the PRECISE network, Makerere University in Uganda, Institute Pasteur Tunis, Institute Pasteur Côte d'Ivoire and CPGR in Cape Town. Baobab LIMS is strengthened by its community, and we welcome you to join this community.

BAOBAB LIMS MODULES

The core functionalities of Baobab LIMS

*“Big whirls have little whirls,
That feed on their velocity;
And little whirls have lesser whirls,
And so on to viscosity.” — Lewis Fry Richardson*



BAOBAB LIMS ENHANCEMENTS

New functionalities and enhancements in Baobab LIMS

“In IT, there is nothing like ‘all of a sudden’.” — Sachin Kodagali

New **enhanced functionalities** are designed to further extend the software and its application to the real-world of biorepositories. **Development of APIs**, and modules for **MIABIS compliance** (donor information, anatomical site information and disease ontology) were among the first of such enhancements. Next in, the **inter-departmental shipping module** for biospecimens and throughput-enhancing **batching of biospecimens** are all part of Baobab LIMS v 1.5.

WATCH THIS SPACE.... a simple installation for production mode is on its way. And while we can't let the cat out the bag just yet, follow us on twitter (@BaobabLIMS) for more up and coming brilliance.

In-between awesome enhancements, the Baobab LIMS team is **squashing bugs**, so if you come across any issues, please report them to us on github (see links below) or fire off a mail to help@baobablms.org.

BAOBAB LIMS TRAINING

Training activities for 2018

“Tell me and I forget, teach me and I may remember, involve me and I learn.” – Benjamin Franklin

Shortly after a BCNet training week in December 2017 in Lyon, Cape Town welcomed the fantastic trio from **Makerere University** in Uganda, consisting of Carolyne Atugonza, Dafala Kezimpira and Gerald Mboowa. Ismael Kone from **Institute Pasteur Côte d’Ivoire** was welcomed to SANBI and worked extensively with the Baobab LIMS developer team. He has subsequently been translating Baobab LIMS into a French version --- **“Oh! une version française de l’outil Baobab LIMS!!”**.

The **PRECISE network**, with a multinational team of 12 touched down at Cape Town International Airport and spent a week on customized training with the Baobab LIMS team.

In September, Baobab LIMS jumped on a plane and headed for Freetown, Sierra Leone to deliver a basic training for participants of the **4th African Conference on Emerging Infectious Diseases and Biosecurity**, hosted by the GET consortium. Finally, in December 2018, Baobab LIMS delivered its final training for the year in Lagos, Nigeria to a super enthusiastic **biobank and biosecurity** team.

Do you need training, basic, customized, or IT-related? Why not fire off a mail to dominique@sanbi.ac.za to discuss some options.



USER CORNER

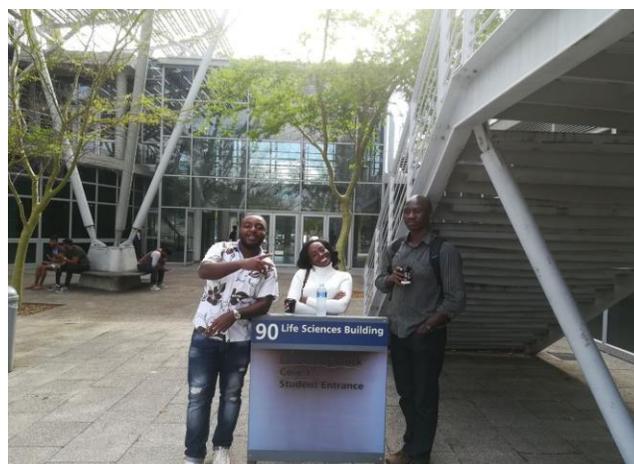
Articles from our fabulous users

“I think it’s very important to have a feedback loop, where you’re constantly thinking about what you’ve done and how you could be doing it better.” – Elon Musk

In this edition of the Baobab LIMS newsletter, we feature IBRH3AU Biorepository at Makerere University in Uganda. Thanks to **Carolyn Atugonza** for writing this piece for our first edition. We love working with this team and applaud their **‘train the trainer’** approach. Well done team!!

IBRH3AU Biorepository is an Integrated Biorepository under the H3Africa Biorepository Initiative located at **Makerere University College of Health Sciences (MakCHS)** a Center of Academic Excellence, Health Care and Collaborative Research. IBRH3AU provides a resource of well characterized and **annotated quality biospecimens** to be used by future studies. This resource is utilised by communicable and non-communicable disease researchers in an African population. In August 2015, the Baobab LIMS was represented as one of the modules in an integrated biobank suite of tools (www.bibbox.org) under the B3Africa project of which IBRH3AU is a case study. Under the project, IBRH3AU had the opportunity of exploring the Baobab LIMS, a free open-source Laboratory Information Management System (LIMS) designed for the collection, processing and storage of human biospecimens.

With a growing interest in the LIMS, staff under the B3Africa project had the



opportunity to be trained by developers of the Baobab LIMS at the “Set up and Use of Baobab” training conducted at SANBI, South Africa. Upon return from the training a pilot study was conducted in the Molecular biology lab, an arm of the IBRH3AU biobanking facility in an effort to extend the usability of the system in customised environment at IBRH3AU. It was a great success!

The Baobab team in Uganda, then had a great opportunity to conduct a training of the staff at the Molecular Biology Lab.



Today the Baobab LIMS has been adopted as the LIMS of choice and has been customised to meet specific needs of in the Molecular lab. Currently **five staff are fully trained** to utilise the LIMS for all the research studies that are conducted in the lab. The different modules including biospecimen kit assembly, biospecimen shipping, storage management, analysis requests, reporting and invoicing have enabled the lab to observe best practices for human biobanking.

Baobab LIMS has **improved efficiency** for work and enabled **real time monitoring** and **improved quality control**. In addition, workflows that have been customised for the lab are properly managed and turnaround time for results has been improved as well. With the success observed in the Molecular lab, IBRH3AU hopes to extend the opportunity to utilise the Baobab LIMS to all its other arms.



LINKS

Links to online information

“Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information on it.” — Samuel Johnson

Follow us on twitter

@BaobabLIMS

Online documentation

<https://media.readthedocs.org/pdf/baobab-lims/latest/baobab-lims.pdf>

Website

www.baobablms.org

Get the code (and more)

<https://github.com/BaobabLims>

Send us an email

Training – dominique@sanbi.ac.za

Helpdesk – help@baobablms.org

Subscribe to our newsletter by following the link

<https://sanbi.us20.list-manage.com/subscribe?u=eb48b3f6730bc2dcb76a24fa7&id=e8875dcf22>