



# Vector Biology

Max Planck Institute for Infection Biology

YARA REIS

Lab Manager

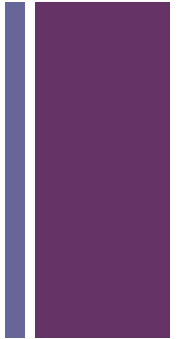


MAX-PLANCK-GESELLSCHAFT



# Summary

ELN Workshop, 14-15<sup>th</sup> March 2016 Harnack Haus Berlin



- What we were looking for
- What Labguru Offers
- Where we are Now
- Challenges: Establishing and Running
- What is missing
- Q&A



# + VECTOR BIOLOGY Group



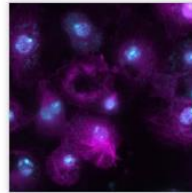
① Caroline Kiuru



① Prof. Elena Levashina



① Evans Rono



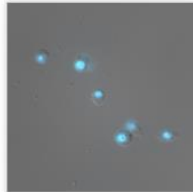
① Dr. Ewa Chrostek



① Dr. Giulia Costa



① Lena Lampe



① Dr. Maiara Severo



① Markus Gildenhard



① Mosquito EAL

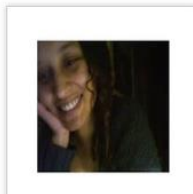


① Philip Huegli

■ PI- Elena Levashina



① Suzana Zakovic



① Dr. Yara Reis

■ At the MPIIB since September of 2011

■ Started with 5 members, now we are 17

(plus Masters & Hiwi students)



# + What we were looking for

- (Lab) User friendly – intuitive data insertion
- Project Overview *plus* general Lab organization
- Reasonable price

# labguru



# + Where we are Now



## ■ DATABASES & ORDERING

- VB Collections (Plasmids, Primers, Antibodies)
- Material & Reagents (history, quotes, performance reports, company catalogue)
- Specimens and Infections (e.g. [malaria-infected mosquitoes](#) or mice)
- [Calendar](#) for Events (e.g. retreat, labmeetings, JC), Experiments, Tasks
- Specimens database ([Mosquitoes](#), Parasites, Bacteria, Rodent)





e-Notebook

VB- Specimens Ordering

Order P.falciparum infectio...

25.02.2016 (closes 17.02.16)

## 25.02.2016 (closes 17.02.16)

Signed by Yara Reis on 2016-03-07

This experiment is a duplicate of [18.02.2016 \(closes 10.02.16\)](#) which was witnessed by at February 16, 2016

Lena Lampe

[Duplicate](#) [Print](#) [Save as protocol](#) [Revert Signature](#) [Witness](#)

**Project** [VB- Specimens Ordering](#)

**Folder** [Order P.falciparum infections 2016](#)

### Description

order tag	infection date	mosquito strain	parasite strain	amount cages	amount of feeders	intensity	application	special requirements
GC260216F	26.02.16	7b	NF54	2 x Big1	2	6-8% (same culture in both feeder)	spz dissections	Same protocol as oocysts counts: sorting and no boost BF. Kai's S3
LL250216F	25.02.16	S1	NF54	2 x c2	2 (1x control and 1x infected BM)	4-5%	time points	Please infect at 12.00 One normal blood meal and one infected
LL250216F	25.02.16	S1	NF54	C2	1	7%	time points	
LL260216F	26.02.16	S1	NF54	2 x c2	2 ( 1 infected and one control BM)	4-5%	time points	Please infect at 12.00 One normal BM and one infected



# Tasks

+ add task

## Title \*

GC260216F

## Due by

Feb 26, 2016 10:46

## Assign to

Moskito EAL

Ewa Chrostek

Giulia Costa

Lena Lampe

Maiara Severo

Markus Gildenhard

Moskito EAL

Philip Huegli

## notification

Notify both assigner and assignee

## Send

### notification at

Mar 07, 2016 10:47

Save

Cancel

# Tasks

+ add task

## Title \*

GC260216F

## Due by

Feb 26, 2016 10:46

## Assign to

Moskito EAL

## Description

mosquito strain and special comments..

## Email

### notification

Notify both assigner and assignee

## Send

### notification at

Mar 07, 2016 10:47

Save

Cancel

requirements

ocol as oocysts  
rting and no  
Cai's S3

ect at 12.00  
al blood meal  
fected

ect at 12.00  
al BM and one





# Calendar - Tasks [Reset](#)

Connect to [Google Calendar](#) [New Event](#)

[Views](#) | [Print](#)

today < >

March 2016

month week day

Mon	Tue	Wed	Thu	Fri	Sat	Sun
29 06:00 PH030316S1(task)	1	2	3 06:00 PH040316S1(task)	4 06:00 PH070316S1(task) 06:00 PH070316S1(task)	5 04:15 GC100316S1(task)	6 13:57 LL070316S1 (task)
7 06:00 PH100316S1(task) 11:11 ?LL080316S1(task)	8	9	10 06:00 PH110316S1(task) 08:30 GC1603167b(task)	11	12 08:30 GC170316S1(task) 08:45 GC1403167b(task)	13
14	15	16	17 07:45 GC2303167b(task)	18 07:00 GC230316S1 (task)	19 02:45 GC240316S1(task)	20
21	22	23	24	25 07:15 GC300316S1(task)	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10





# + Where we are Now



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# + Where we are Now



## ■ PROJECTS OVERVIEW - ELN

- Lab Activities & Dashboard
- Presentation “Tools” (e.g. LabMeeting)
- Elena can follow Results and comment from...
- Combines different Data Format
- Regular backup/ reporting
- Linking with orders, plasmids, stocks, papers, figures, etc..





# ZOOM into Emma's e-Notebook



The screenshot shows the labguru e-Notebook interface. The top navigation bar includes the labguru logo, user profile (Emma Campbell), and menu items like Home, e-Notebook, Knowledgebase, Inventory, and Storage & Equipment. The main content area is titled 'Research Projects' and features a 'New Experiment' button and a 'New Project' button. Below this, there is a list of 'My projects' with two entries: 'The role of RMP5 (subunits of RNA polymerase II) in transcriptional regulation' (Mar 07, 2016) and 'Function and Expression Analysis of Gibberellin Oxidases in Apple' (Feb 24, 2016). On the right side, there is a sidebar with an 'Invite members to your lab' section containing an email input field and a 'Send invitations' button. Below that is a 'Tags' section with a list of tags like Antibody, Cell Lines, DFF, ECL, Enzyme, Harmful, Hormone, Label, Liquid, Microscopic, PCR, Toxic, Plastic, Phosphatase, Laser-capture, CO2, Peptide, NMR, and Experiments. A vertical purple bar with the word 'GUIDES' is overlaid on the right side of the screenshot.



# + Challenges: Establishing and Running



- In the beginning:
  - Setup/Transfer Databases (primers, plasmids, Abs)
  - Convince People to Use it!!
  
- Still ongoing...
  - Linking and Tagging
  - Storage Inventory (Stocks and aliquots in use)
  - Papers Library (PubMed & EndNote)
  - Convince People to Use it!!

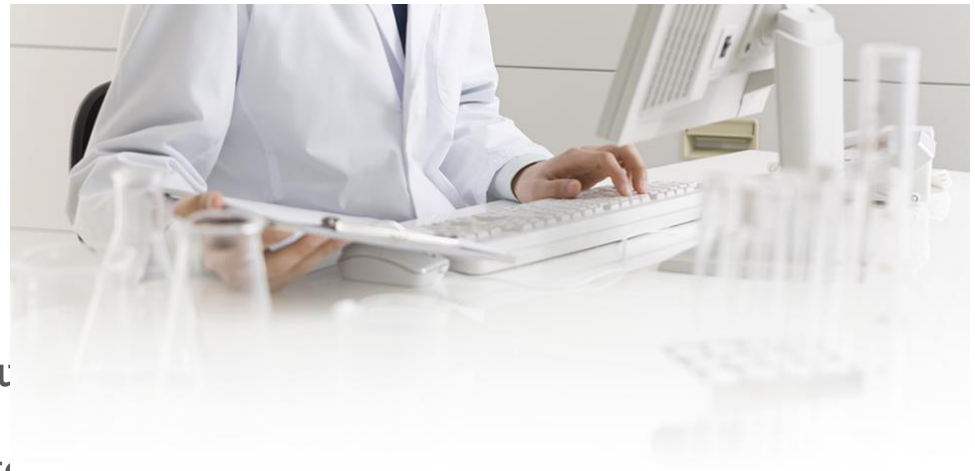




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Finding Reagents

# + Challenges: Establishing and Running



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# What is missing/ can be improved



- Data access involves a lot of clicking
- Calendar synchronization with Google calendar can be improved
- Scrolling and loading of contents is slow and formatting can improve (text / tables / figures)
- DNA tools have improved greatly, but..
- Occasional system crashes

Online Support



# + Future Steps

- Managing Large Datasets (e.g. SQL )
- Doodle-like Tool
- Presentation Tools
- Labeling Samples (printer & scanner)
- Electronic Notebook





+ Thank you for your attention

■ Questions?

Vector Biology

Max Planck Institute for Infection Biology

YARA REIS

Lab Manager



MAX-PLANCK-GESELLSCHAFT