

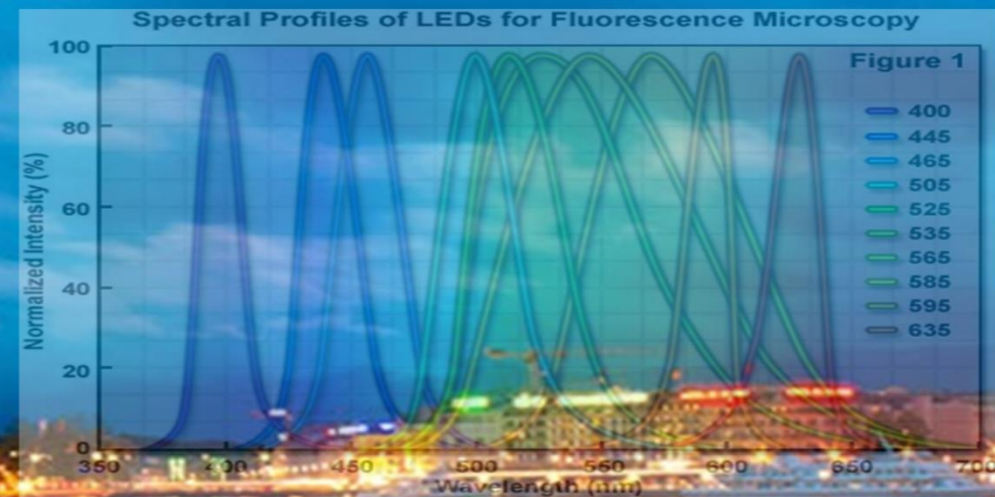
# WELCOME TO THE 4<sup>TH</sup> SWISS BIOIMAGING MEETING!

GENEVA, SEPTEMBER 16<sup>TH</sup>, 2016

ZEISS



ROPER SCIENTIFIC<sup>™</sup>  
PRINCETON INSTRUMENTS - PHOTOMETRICS



**BiImaging**  
core facility  
Faculté de Médecine  
Université de Genève



**BIOIMAGING  
CENTER**



**UNIVERSITÉ  
DE GENÈVE**



**Core Facilities In Switzerland**  
Microscopy at its best!



<http://www.swissbioimaging.org/>



# Free Wifi Network: **guest-unige**

## To use this service:

- Connect your mobile device to the SSID '**guest-unige**';
- Make sure your browser accepts pop-up windows and javascript to run;
- In your browser doing an HTTP / HTTPS request to any URL (eg the University website: <http://www.unige.ch>);
- Your request will be intercepted, and you will be directed to an e-portal where you can register and authenticate.





# Free Wifi Network: guest-unige



**Bienvenue sur le réseau Wi-Fi public et gratuit de l'Université de Genève.**  
**Pour vous connecter au Wi-Fi gratuit, cliquez ci-dessous :**

Welcome to the free public WiFi network at the University of Geneva. To connect, click below :

[connect](#)

**On the following page,  
click on the «connect» button**



Please enter your mobile phone number and click "Register".  
You will then receive your personal code via SMS.

Mobile phone:

[Register](#)

[No mobile phone or can't receive our SMS?](#)

[Or do you already have a code?](#)

powered by **monzoon**

**You will receive a code via SMS,  
you need to enter on the next screen and click  
The «login» button**

LIGHT SHEET  
MICROSCOPY

MESOSCOPIC  
IMAGING  
TECHNIQUE

MULTIPHOTON  
MICROSCOPY

MULTIPHOTON  
TOMOGRAPHY

PLATE SCANNER

BIOLUMINESCENCE  
AND INTRAVITAL  
IMAGING

CONFOCAL LASER  
SCANNING  
MICROSCOPY (CLSM)

CONFOCAL  
SPINNING DISK  
MICROSCOPY  
(NIPKOW)

EVANESCENT WAVE  
MICROSCOPY (TIRF)

FLUORESCENCE  
CORRELATION  
SPECTROSCOPY (FCS)

HIGH CONTENT  
SCREENING (HCS)

SLIDE SCANNER

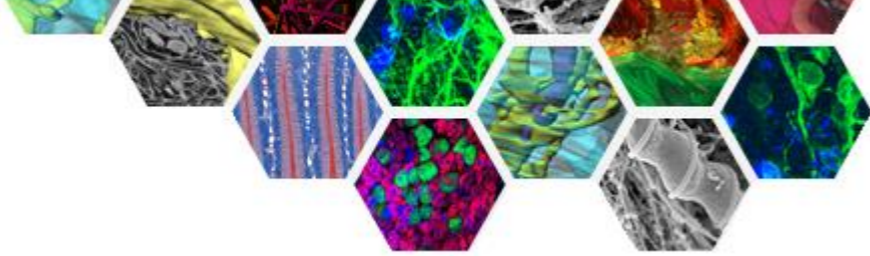
SUPER RESOLUTION  
MICROSCOPY

WIDEFIELD  
MICROSCOPY

LASER CAPTURE

TRANSMISSION  
ELECTRON  
MICROSCOPY (TEM)

SCANNING  
ELECTRON  
MICROSCOPY (SEM)



# Swiss Bioimaging Network: a (very) brief overview



**14 core facilities on 6 different cities**

**Over 200 systems**

**Over 3000 active users**

**Over 50 dedicated personnel**

<http://www.swissbioimaging.org/>

# Swiss Bioimaging Platforms: The Geneva case

## Bioimaging Center (Faculty of Science)



**2.5 dedicated personnel**

*Looking for: A (cryo)-TEM specialist*

**317 different users from 95 different groups**

**14 systems** (Confocal, STED, widefield, TEM, SEM)

Plus 4 PC workplaces with imaging software

*≈ 14'000 hours of use*

**Research and expertise in bioluminescence and chemoluminescence microscopy**

## Bioimaging Core Facility (Faculty of Medicine)



**2.2 dedicated personnel**

(+1 in November)

**352 different users from 98 different groups**

**16 systems** (Confocal, widefield, scanners, LMD)

**- 16'768 hours of use -**

**8 PC workstations**

(Amira, Imaris, MetaMorph, Definiens, Huygens, Matlab, etc..)

**- 4'328 hours of use -**

(Period: oct. 2015- sept.2016)

# Swiss Bioimaging Meetings

**2013**

**Facility for Advanced Imaging & Microscopy, FMI**

*CLEM \**  
*Super-Resolution Microscopy \**  
*IRIS reservation system \**  
*High-throughput image analysis \**  
*Visit of the platform \**

**Basel**

**Zurich**

**2015**

**ScopeM, ETH**

*Data handling & data storage \**  
*CMOS imaging \**  
*Image processing challenges \**  
*Visit of the platform \**

Bern

Fribourg

**Lausanne**

**Geneva**

**2016**

**Bioimaging Center & Bioimaging Core Facility, UNIGE**

**2014**

**Cellular Imaging Facility (CIF), UNIL**

*Light Sheet Microscopy \**  
*CLEM \**  
*FIB/SEM \**  
*Visit of the platform \**

# 4<sup>th</sup> Swiss Bioimaging Core Facility Day Program



**9:30 – 10:00 Get together, coffee**

10:00 – 10:30 Welcome & Introduction

10:30– 11:00 Thomas Wagner (Photometrics).

*Backside Illuminated sCMOS Camera with 95 Percent Quantum Efficiency*

11:00– 11:15 Open questions & Discussion

11:15– 11:45 Paul Guichard (Unige).

*Cryo-electron microscopy*

11:45– 12:00 Open questions & Discussion

**12:00– 13:30 Sandwich lunch**

13:30– 13:45 Introductory remarks

13:45– 14:15 Daniel SAGE (EPFL)

*Context of bioimaging informatics, ImageJ plugins, Deconvolution, tracking*

14:15– 14:30 Virginie UHLMANN (PhD student, EPFL)

*Active contour, segmentation*

14:30– 14:45 Laurène DONATI (PhD student, EPFL)

*Inverse problems for digital optics*

**14:45– 15:15 Coffee break**

15:15– 15:45 Georg Draude (Chroma)

*Optical filters for advanced microscopy*

15:45– 16:00 Ury Belyaev (Bern Univ.)

*Development of a cloud Huygens Remote Manager (HRM) deconvolution service*

16:00 – 16:45 Round table about future plans. Closing Remarks

**17:30 – 19:30 Social Event: “Cocktail dinatoire” at the Domaine de Penthes (<http://www.penthes.ch/>)**





## Swiss Bioimaging Network:

# What are your future expectations?

**To share expertises** about cutting-edge technologies ●

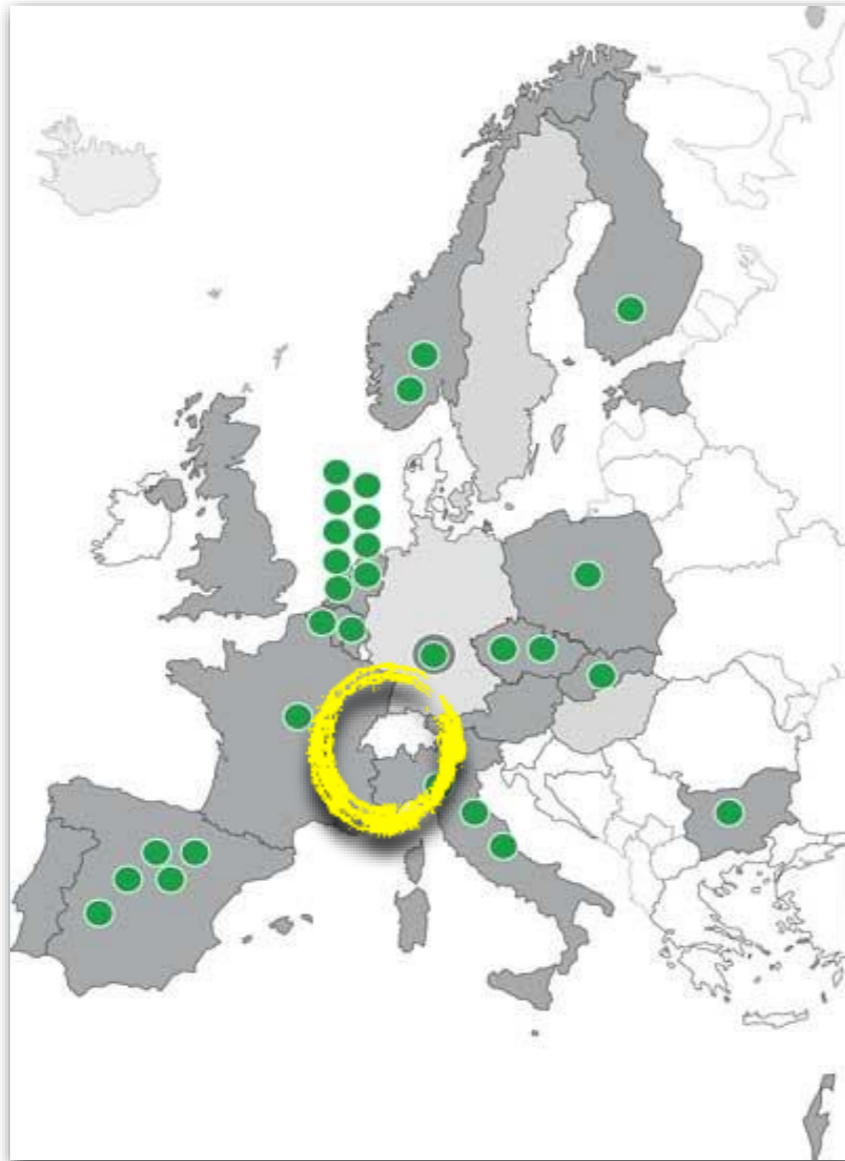
**To share tools** developed in image treatment and analysis ●  
(common platform for data exchange? To integrate an another network? ...)

**To improve our visibility and communication** ●  
(regular updates of our common website, job announcements, meetings, ...)

**Others?** ●  
(who will organize the next meeting?, ...)

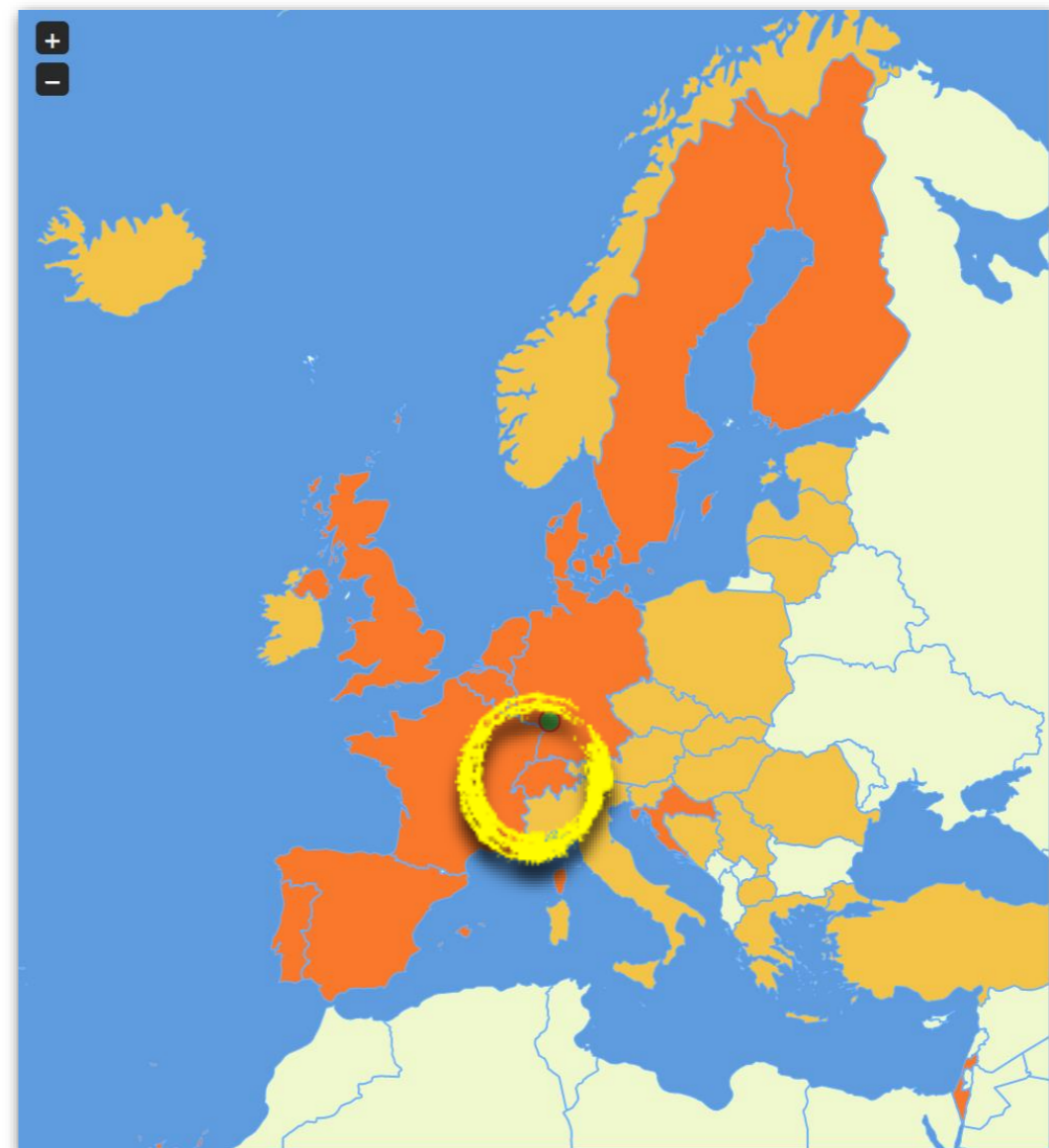


# Swiss Bioimaging Network: we and others...



« Hardware »

**Eurobioimaging**

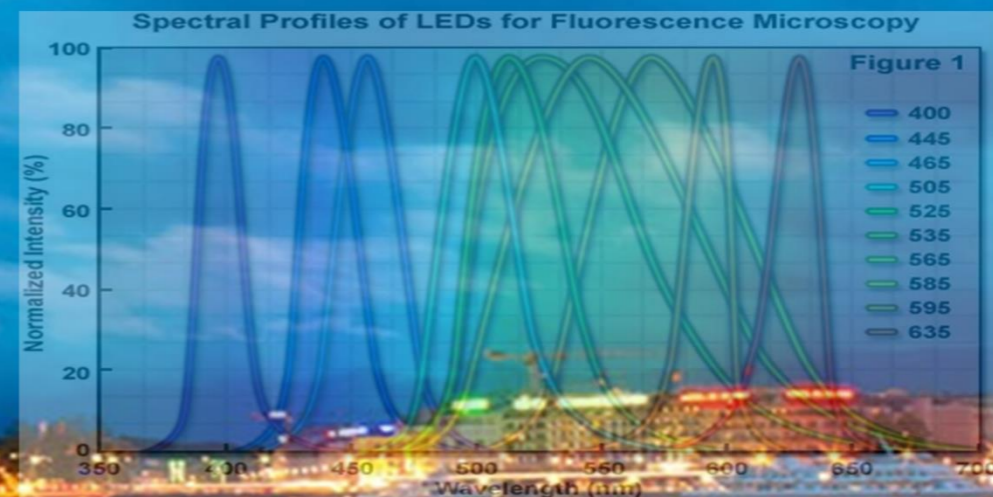


VS

« Software »

**Neubias**

# THANKS FOR YOUR PARTICIPATION !



# 17:30- 19:30 Social Event: « Cocktail dinatoire » at the Domaine de Penthes

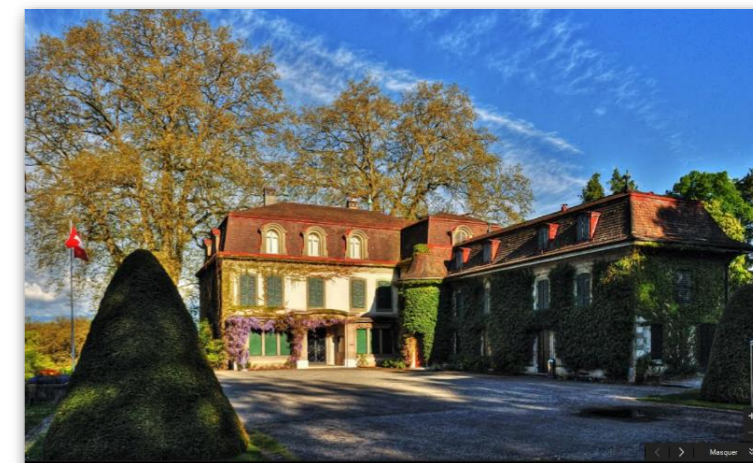


**CMU > Domaine de Penthes:**  
Bus 5 direction “Aéroport”  
Then stop at “Nation”  
**Bus V or Z direction “Bois-Chatton”, stop at “Penthes”**  
7 min. walking

**Domaine de Penthes > Cornavin:**  
7min. walking  
**Bus V or Z at “Penthes”**  
Stop at “Cornavin”

# Here!

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