

SBMM2023 - Tuesday, the 7th of November of 2023

3h

Bridging Borders in BioImaging

A Global Workshop on Advancing Imaging Technologies through your Network and Imaging Communities

Pre-congress Event of CIASEM/CSBMM 2023 meeting
Tuesday, November 7th 13:00 – 16:30

Organised by:

 Latin America Bioimaging

 SBMM
Sociedade Brasileira de Microscopia e Microanálise

 CIASEM

 EURO-BIOIMAGING

 GLOBAL BIOIMAGING
growing collaboration



Bridging Borders in BioImaging: A Global Workshop on Advancing Imaging Technologies through your Network and Imaging Communities

Summary:

As imaging technologies continue to advance and play a crucial role in research, the demand for skilled technical and scientific staff is at an all-time high. Core facilities have transformed into science enablers, offering not only technical support but also valuable scientific guidance. However, career options and growth within Imaging Core Facilities have not progressed at the same pace.

Founded in 2015, Global BioImaging breaks down geographical barriers, fostering international collaboration among researchers from diverse backgrounds. With partner organizations from over 50 countries, we unite imaging infrastructures worldwide to address shared challenges in the life sciences.

Euro-BioImaging ERIC, a founding member, provides open access to cutting-edge imaging technologies and data services, benefiting researchers globally, especially in the fields of infectious diseases and cancer.

Zooming in on Latin America and the Caribbean, LABI and CEBEM enhance capabilities, promote training opportunities, and encourage collaboration between regional and global partners. In our interactive session, we'll delve into the essence of BioImaging networks, sharing success stories, discussing growth strategies, and understanding the challenges faced in career paths within imaging core facilities.

Don't miss this unique opportunity to unlock the full potential of BioImaging networks and be part of the solution! Join this vibrant Global community and share your views ahead: [TOP5 challenges you identify for career paths in imaging core facilities](#).

Imaging scientists from all fields of expertise are most welcome!

Organisers:

Kildare Miranda - Centro Nacional de Biología Estructural e Bioimagen- CENABIO/UFRJ and Latin America Bioimaging - LABI

Andrés Olivera - Latin America Bioimaging - LABI

Karina Alleva - Centro de Biología Estructural del Mercosur - CEBEM

Johanna Bischof - Euro-BioImaging - EuBI

Yara Reis - Global BioImaging - GBI

Rodrigo Portugal - SBMM

Other Imaging communities represented:

BioImaging North America, including Canada BioImaging (Claire Brown), Mexico BioImaging (Adán Guerrero) and the Argentinian National Microscopy System

Background:

BioImaging has experienced significant growth in the past two decades, creating new career opportunities in research institutes and universities worldwide. As imaging technologies have become more advanced and costly, the demand for specialised technical, scientific, and managerial staff to operate and oversee imaging facilities has become evident and core facilities are becoming a more and more crucial part of the research ecosystem. Lab technicians and core facility staff have evolved into science

enablers, providing not just technical support but also scientific guidance in areas like data acquisition, experimental design, and image analysis. Facility staff members have acquired additional skills in time management, budgeting, accounting, and effective communication with facility users.

Global BioImaging recognizes that scientific, technical, and data challenges transcend geographical boundaries. It serves as a platform for international collaboration, enabling researchers from diverse backgrounds and regions to share their knowledge and expertise, addressing common challenges faced by open-access imaging infrastructures in the life sciences. With 13 partner organizations representing more than 50 countries, Global BioImaging is an international network that unites imaging infrastructures and communities worldwide. Its goal is to tackle the global challenges encountered by the imaging community. The network emphasizes the significance of imaging technologies and research infrastructures in advancing the life sciences. Through activities such as an annual international gathering, working groups, training and job shadowing programs, Global BioImaging promotes international cooperation. It has also facilitated the formation of national imaging networks and infrastructures by connecting imaging communities on a global scale.

One of the founding members of Global BioImaging, Euro-BioImaging ERIC, is the European research infrastructure providing open access to cutting-edge imaging technologies, expertise, training, and image data services. With 173 facilities and over 100 imaging technologies and services, Euro-BioImaging supports researchers globally, particularly in fields like infectious diseases and cancer. The infrastructure also provides data services, such as data analysis, support with data FAIRification and sharing, and collaborates on initiatives related to AI applications and cloud-compatible file formats for image data.

Zooming into the closer community, Latin America Bioimaging (LABI) is a dynamic and collaborative network that aims to foster the advancement of bioimaging capabilities and community engagement. With members of 22 countries, we aim to foster a vibrant and inclusive bioimaging community by nurturing professional growth, facilitating knowledge exchange and promoting collaboration. With 60 core facilities registered and a commitment to promoting access to resources, training and collaboration, LABI

seeks to empower scientists, researchers and professionals in the field of bioimaging. By building partnerships, training programs, working groups and collaborative events, LABI seeks to shape the future of bioimaging in Latin America and contribute to global scientific discovery, healthcare and technological innovation.

CEBEM, a collaborative network in South America, strengthens Structural Biology and Bioimaging capacities across Mercosur countries (Brazil, Argentina, Uruguay, Paraguay) and associate state Chile. CEBEM aims to consolidate a regional scientific network, integrating skills and infrastructure, promoting exchange between researchers, and generating synergies to improve the quality of life of people and the planet. CEBEM's mission includes: (a) training human resources through high-quality courses integrated within a regional school; (b) providing active support for the exchange of students and research scientists; (c) integrating local capacities optimizing the use of sophisticated equipment; (d) identifying multicenter research projects in Structural Biology and Bioimaging seeking high-impact science; (e) supporting groups in Structural Biology, Bioimaging and Integrative Bioimaging emerging in South America.

During this engaging session, we will delve deeper into the topics that matter most to Bioimaging communities of all scales. Join us to explore the challenges we face, celebrate success stories, understand strategies to build community and impact locally and around the globe, and foster fruitful discussions. The interactive nature of the session ensures that we understand the needs, requirements, and accomplishments of the participants.

Together, we will explore the activities and opportunities offered by influential organizations such as Global Bioimaging, Euro-Bioimaging, LABI and CEBEM. Discover how these initiatives provide access to cutting-edge imaging technologies, funding opportunities, effective data management, remote access capabilities, comprehensive training programs, and diverse career paths. By connecting with researchers from different regions and backgrounds, imaging scientists can access a wealth of knowledge and expertise, opening doors to innovative research and breakthroughs.

So, don't miss this opportunity to make a difference, unlock the full potential of BioImaging, and be an integral part of our vibrant global community! [Together, we can drive advancements in the life sciences and tackle shared challenges to create a brighter future for imaging research.](#)

For further information and contact, relevant websites and social media platforms are provided.

Latin America BioImaging (LABI)

Contact: latambioimaging@gmail.com

Website: <https://labi.lat>

Twitter: @LatamBioimaging

Euro BioImaging (EuBI)

Contact: info@eurobioimaging.eu

Website: <https://www.eurobioimaging.eu/>

Twitter: @EuroBioImaging

Global BioImaging (GBI)

Contact: globalbioimaging@embl.de

Website: <https://globalbioimaging.org/>

Twitter: @GlobalBioImage

CEBEM

Contact: info@cebem-lat.org

Website: <https://www.cebem-lat.org>

Twitter: @red_cebem

SBMM

Contact: sbmm@sbmm.org.br

Website: <https://sbmm.org.br/>

Twitter: @SBMMicroanalyse

Session Details

Interactive Activities for a 2-hour Community Session on BioImaging and Career Paths:

13:00 - 13:15 - Welcome and Introduction to the event

13:15 - 13:35 - Latin America BioImaging as the regional imaging network (Andres Olivera & Kildare Miranda)

Present the short introduction to global collaboration, but focus on LABI and activities in the region, plus motivate the upcoming exercises (focus on core facility staff).

13:45 - 14:15 - Exercise 1: TOP5 Challenges in Career Paths for Imaging Core Facility (30 minutes):

- Instruct participants to individually write down the top five challenges they face in their career paths within Imaging Core Facilities.
- After 7-10 minutes, have participants mix their responses in the middle, take one randomly, and read it out loud.
- Everyone takes one response, and if they take their own, they swap with the person on their right.
- Have participants mark the challenges that are true for their facility or institute as well.
- Facilitate a group discussion on the identified challenges and encourage participants to share their experiences and strategies for overcoming them.

14:15 - 14:45 - Exercise 2: Solutions: Turning Challenges into Strategies and Success Stories (30 minutes):

Divide participants into four groups based on the identified challenges from Exercise 1.

A- Impact & Value

B- Talent Recruitment & retention

C- Training and Professional development

D- the Academic versus the Technical career path - Imaging Scientist

Assign each group one challenge to focus on and brainstorm potential solutions. *(we will provide a template with guiding points to facilitate discussion and share the Venn Diagram)*

Instruct groups to illustrate their solutions with specific strategies and success stories from their experiences or other Imaging Core Facilities.

Allow each group to present their findings to the rest of the participants, fostering a collaborative and knowledge-sharing environment.

14:45 - 15:00 - Short break/Q&A

15:00 - 15:15 Present the role and opportunities from regional network CEBEM (Karina Allewa)

15:15 - 15:30 - Present the role and opportunities from national network SBMM (Rodrigo Portugal)

15:30 - 15:45 - Perspectives and opportunities of a Infrastructure Consortium from Euro-Biolmaging (Johanna Bischof)

15:50 - 16:15 - Global collaboration in Global Biolmaging - Working Groups, Trainings, Imaging4All (Yara Reis)

16:15 - 16:30 - Q&A and Closing (15 minutes):

Open the floor to questions and provide additional clarifications on the topics discussed during the session.

Summarise key takeaways from the interactive activities and encourage participants to stay engaged with the Biolmaging community and its initiatives.

__Thank participants for their contributions and active participation__

Note: The timings provided are approximate and can be adjusted based on the pace and engagement of the participants. The session should maintain an interactive and inclusive atmosphere to encourage collaboration and knowledge-sharing.

Booth/Community room:

Strongly focused on national and regional communities (LABI & CEBEM)

- Meet & Greet scientists and stakeholders from LABI & CEBEM nodes/institutes

Plus GBI: Slides and material available regarding all GBI communities & CZI

- Meet & Greet: EuBI & BINA (Johanna and Claire)