

African Biolmaging Consortium

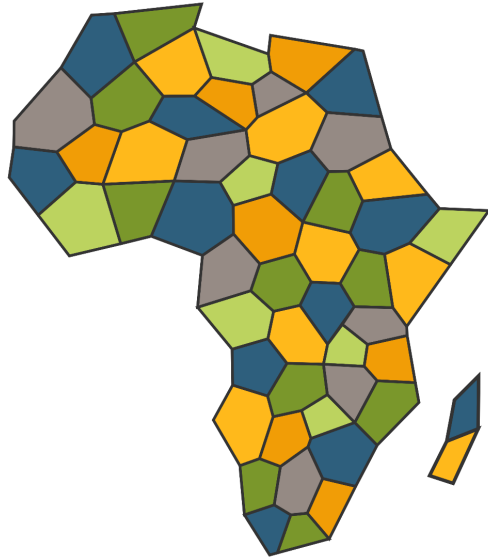
Growing a pan-African bioimaging community

ABIC: A new initiative towards establishing an African
bioimaging community

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Zewail City of Science and Technology, Egypt
ABIC executive committee member

What is ABIC? Why ABIC?



African BioImaging Consortium

Growing a pan-African bioimaging community

What is ABIC?



African BioImaging Consortium

Growing a pan-African bioimaging community

The start:

March 2021:

18 Researchers; 8 African countries

May 2022:

~180 Researchers, 19 African countries

- Community-driven
- Open to all career stages
- Range of expertise and fields
- International partners



Building African research capacity
in Africa, for Africa

Why ABIC?

The state of microscopy across Africa

Challenges:

Training

Local expertise

Language barriers

Funding & Resources

Access to
microscopes

Poor information
sharing

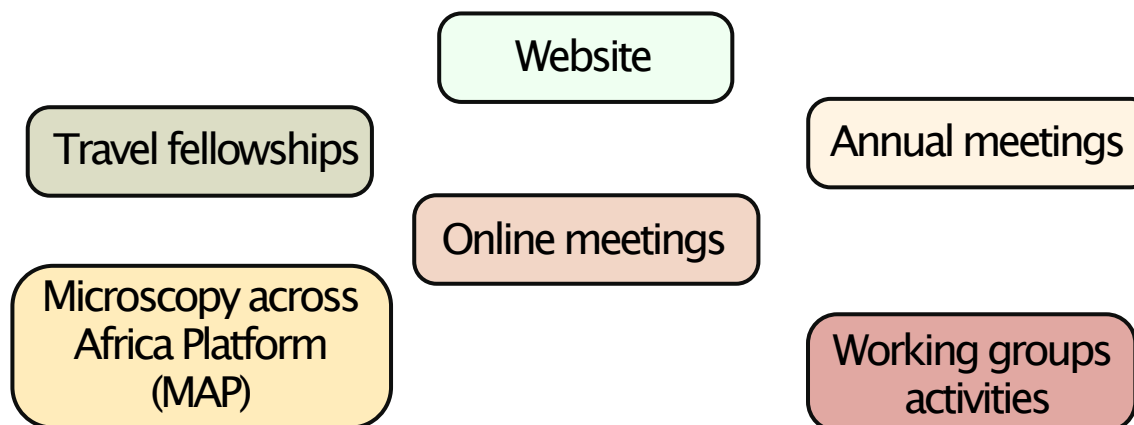




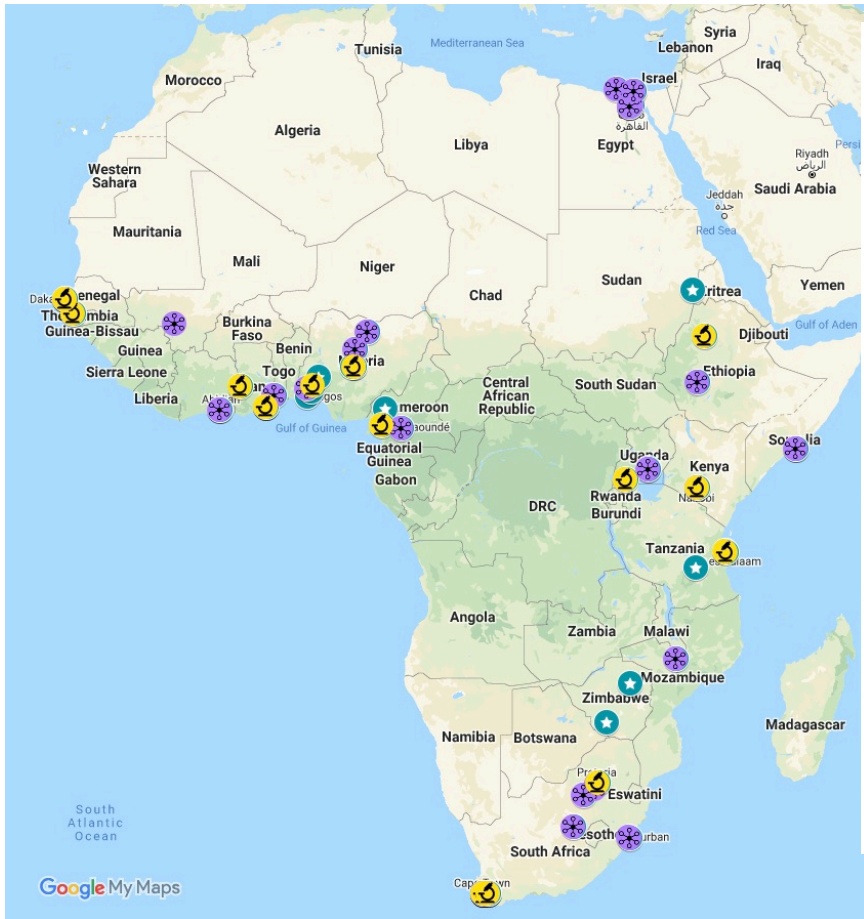
African BioImaging Consortium

Growing a pan-African bioimaging community

Strategies for building imaging capacity in Africa



Microscopy across Africa platform (MAP): an open community database



ABIC Community Database

Please submit your details to be added to the database.

[Sign in to Google](#) to save your progress. [Learn more](#)

***Required**

Full name *

Your answer

Email *

Your answer

Please indicate if you want your email address to be displayed as a resource *

☐ Yes
☐ No

Institute or affiliation *

Your answer

Website or social media profile

Your answer

Research field of interest

Your answer

Position or role (please select all that apply) *

☐ Post-graduate student
☐ Post-doctoral research fellow
☐ Research group leader
☐ Staff scientist
☐ Core facility staff
☐ Biologist
☐ Microscopist
☐ Image analyst
☐ Other: _____

Which imaging technique(s) do you use in your research?

☐ Transmitted light microscopy
☐ Widefield/ epifluorescence microscopy
☐ Confocal microscopy
☐ Super-resolution microscopy
☐ High-content screening microscopy
☐ Electron microscopy
☐ None
☐ Other: _____

Are there microscopes available at your institute available for collaborators or external users?

☐ Transmitted light microscope
☐ Widefield/ epifluorescence microscope
☐ Confocal microscope
☐ Super-resolution microscope
☐ High-content screening microscope
☐ Electron microscope
☐ None
☐ Other: _____

Increase **visibility** and **accessibility** of African imaging scientists and infrastructure

Microscopy across Africa platform (MAP)

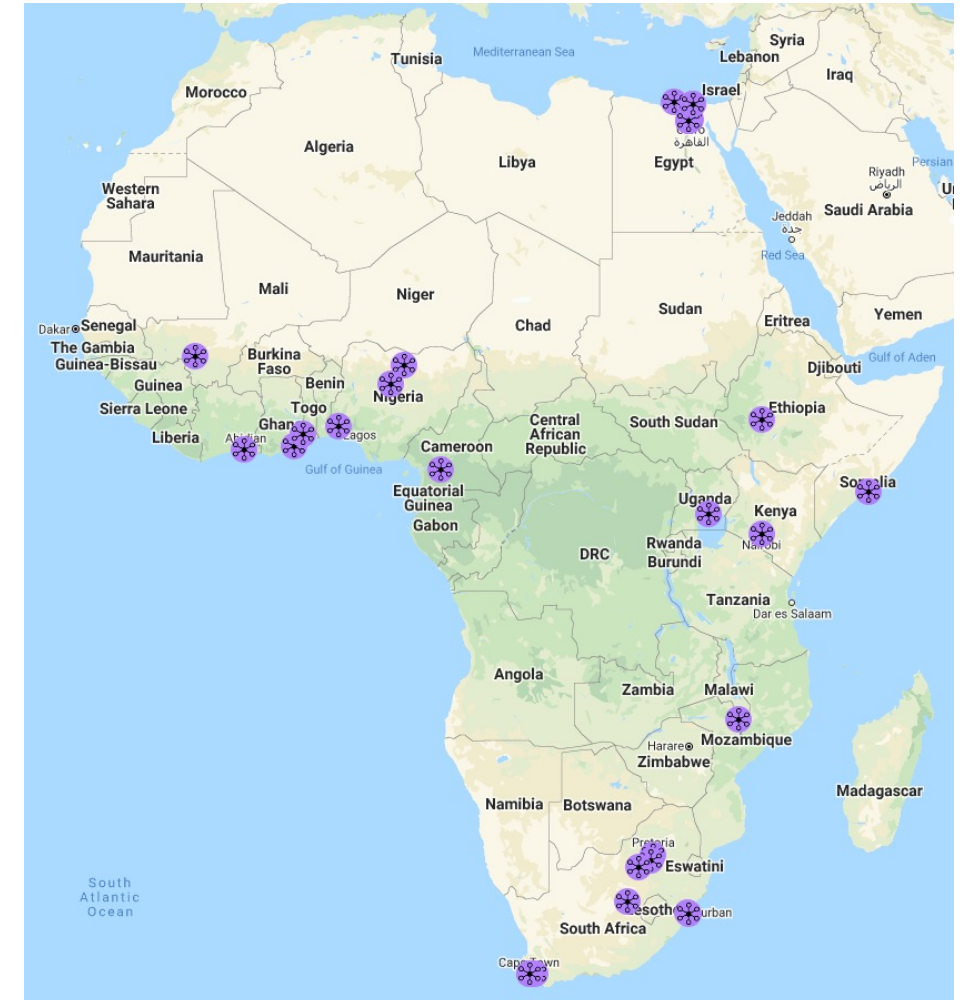
Infrastructure (community-sourced data):

Outside of South Africa :

- 16 Facilities: from clinical to modern optical imaging
- 9 Accessible confocal facilities

South Africa :

- 10 Facilities, across 8 Institutes (out of 26 public universities & research institutes)
- Confocal, Super-resolution, Light sheet microscopes

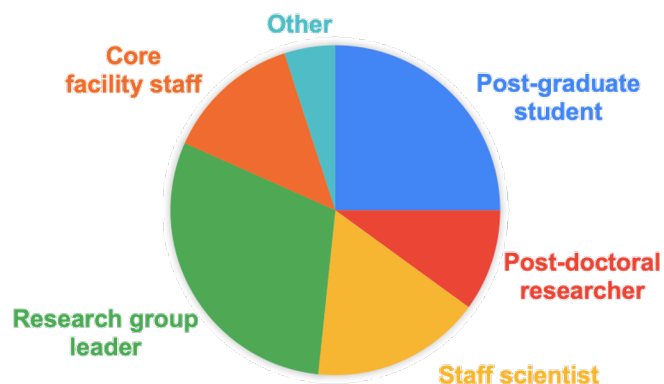




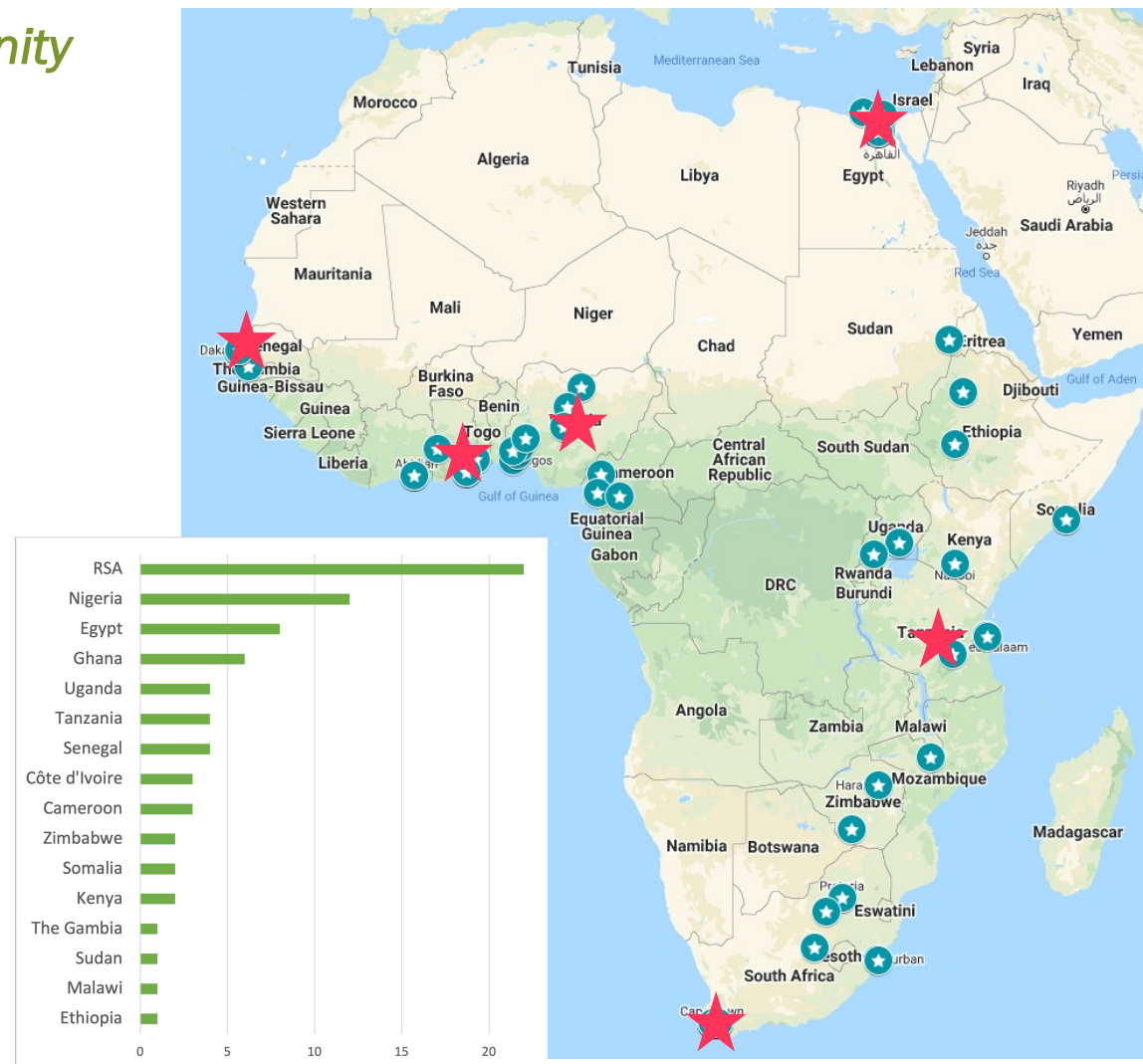
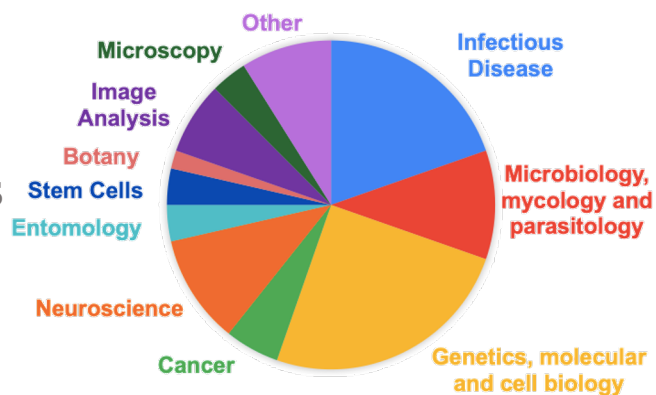
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Career Stages

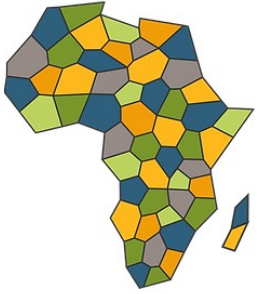


Research Areas



May 2022: ~180 Researchers, 19 African countries

Online Community Hub



African Biolmaging Consortium

Get In Touch



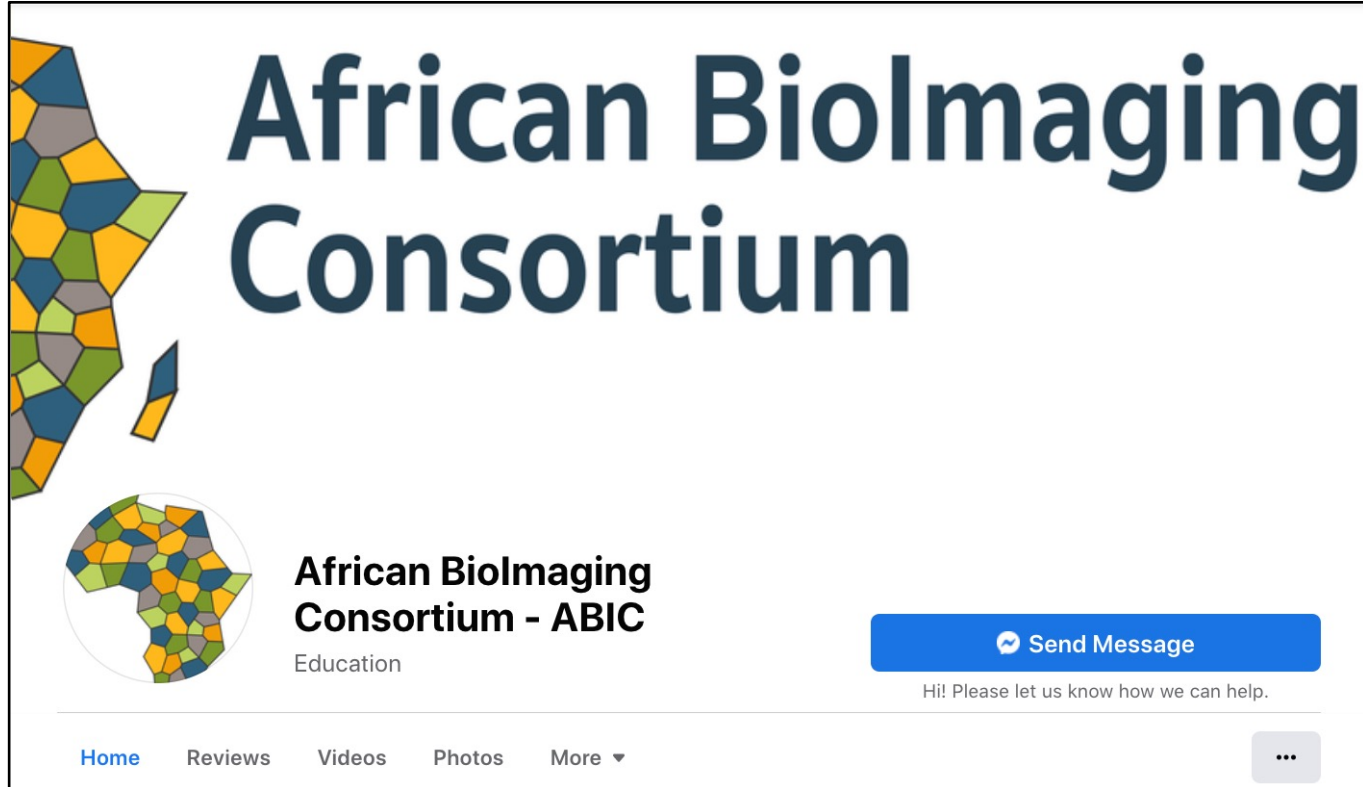
[Home](#) [About](#) [Resource Hub](#) [Opportunities](#) [Community Meeting](#) [Community Network](#) [Working Groups](#) [Get Involved](#) [Contact](#)

African Biolmaging Consortium

Strengthening the microscopy community in Africa

The African Biolmaging Consortium (ABIC) was founded as a catalyst to empower and grow life science research in Africa by addressing needs for training, education, and accessibility of microscopy technologies. As a community-driven and community-guided initiative, ABIC seeks to

Community engagement on social media





African Biolmaging Consortium

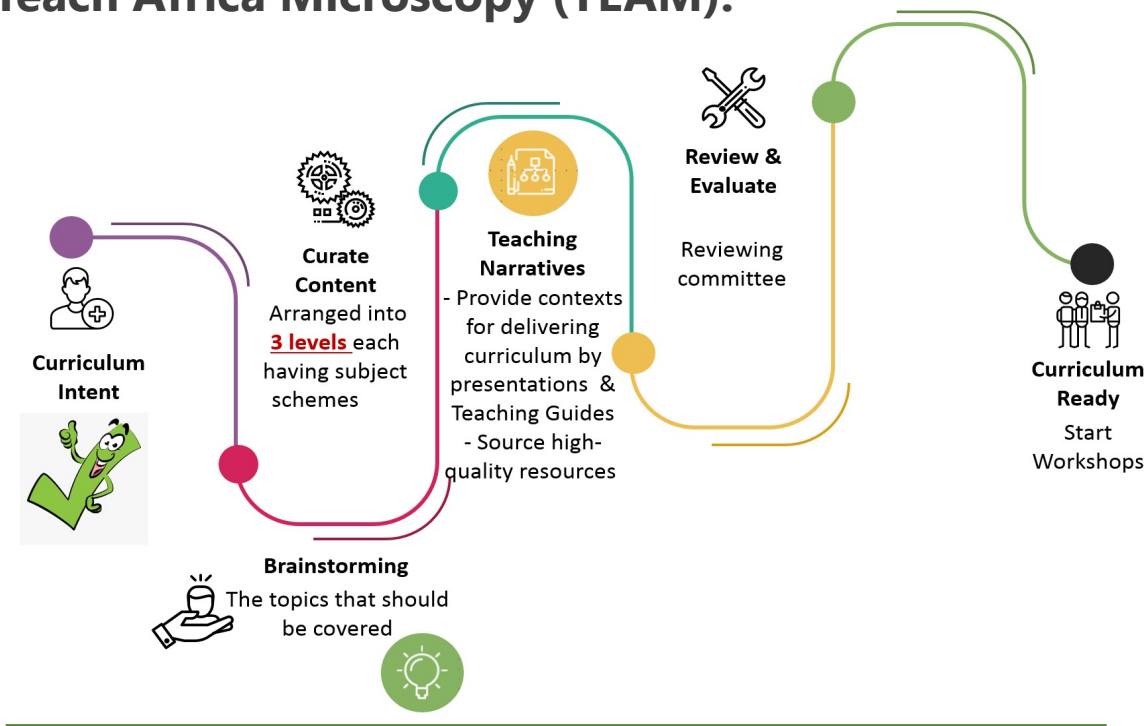
Community-led working groups



Focus topics:

- Training, Education & Awareness
- Infrastructure & Access

Teach Africa Microscopy (TEAM):



Survey of African Microscopy Infrastructure:

- Detailed equipment
- Challenges
- Funding



African Biomaging Consortium

Growing a pan-African bioimaging community



Expanding Global Access
to Biomaging program

Travel fellowships

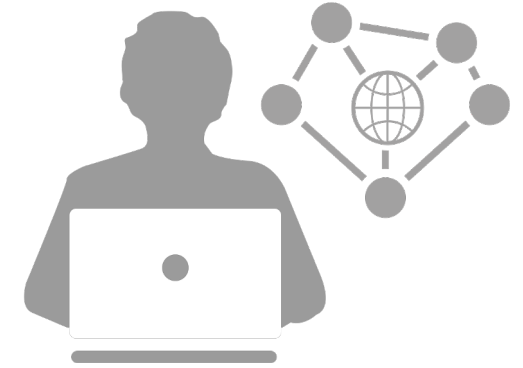
- **Facilitate access** to microscopy infrastructure
- Encourage **collaboration** and **resource sharing**
- **8 awards over three years**
 - Competitive funding awards
 - Flights & accommodation (~2 weeks)
- **Two categories**
 - **Pilot study grants:** access to resources for *new ventures* into bioimaging
 - **Collaboration grants:** trips to *existing or new collaborators* where imaging resources can be used
- First call ~ September 2022





African Biolmaging Consortium

Growing a pan-African bioimaging community



Community Events

- **Annual Community Meeting**
 - Hybrid event
 - Research symposia, group brainstorming, networking, and working group focus sessions
- **First meeting: Cape Town meeting, 15 -18 October 2022**
 - Part of event series

AMI
Africa Microscopy Initiative



IMAGING AFRICA



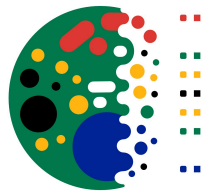
• “ABIC Short Talks” Online events

- Boost community engagement
- Facilitate networking

• With partners & guests:

- Commercial vendors,
- Global partners, i.e.: TReND in Africa; Global Biolmaging; Advanced Imaging Center (AIC) at HHMI Janelia, RMS, BINA, Latin America Biolmaging

Regional & Global Community Partnerships

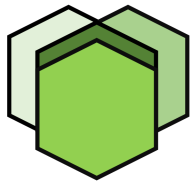


**South African
BioImaging**



Microscopy Society of Southern Africa

Mikroskopie Vereniging van Suidelike Afrika



AFINMIC
African Inclusive Microscopy

West Africa Users' Group

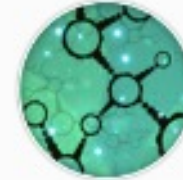


LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



**BioImaging
North America**

**GLOBAL
BIOIMAGING**
growing collaboration



FRANCE-BIOIMAGING



EURO-BIOIMAGING



African Biolmaging Consortium

Growing a pan-African bioimaging community

Executive Committee

Caron Jacobs – University of Cape Town

Michael Reiche - University of Cape Town

Menattallah Elserafy - Zewail City of Science and Technology

Mahmoud Maina - Univ. Sussex & Yobe State University

Working Group Co-ordinators

Yaw Aniwe - University of Ghana, WACCBIP

Lize Engelbrecht - Stellenbosch University

Mai Rahmoon - Zewail City of Science and Technology

Scientific Advisory Board

Gordon Awandare - University of Ghana, WACCBIP

Teng-Leong Chew - HHMI Janelia AIC

Leonel Malacrida - Institut Pasteur

Montevideo, Universidad de la Republica

Michelle Peckham - University of Leeds

Spencer Shorte - Institut Pasteur Korea



Expanding Global Access
to Biolmaging program