

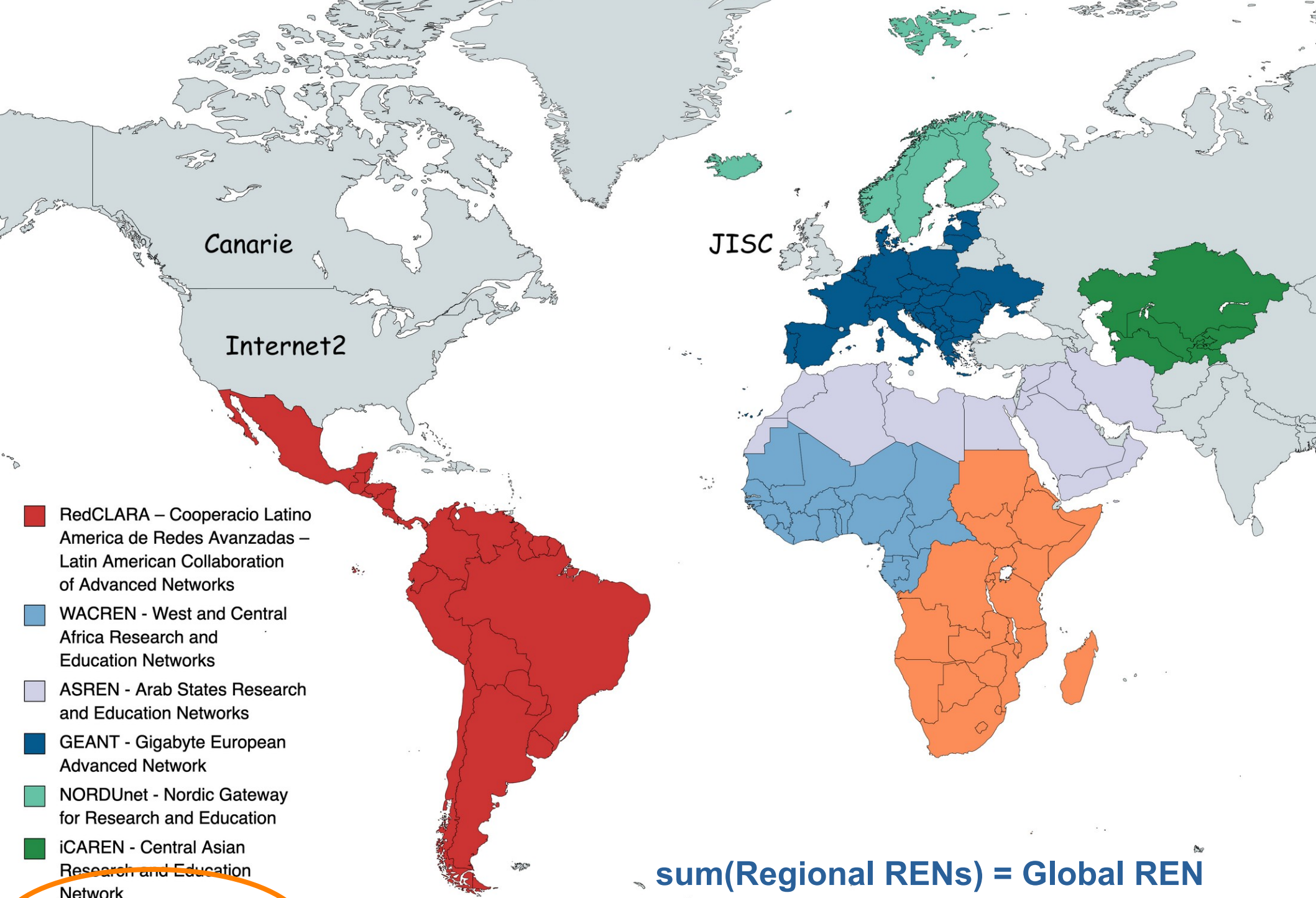


I CAN'T Find YOU! Digital Repositories: Why, How, ...



For Research and Education Networking

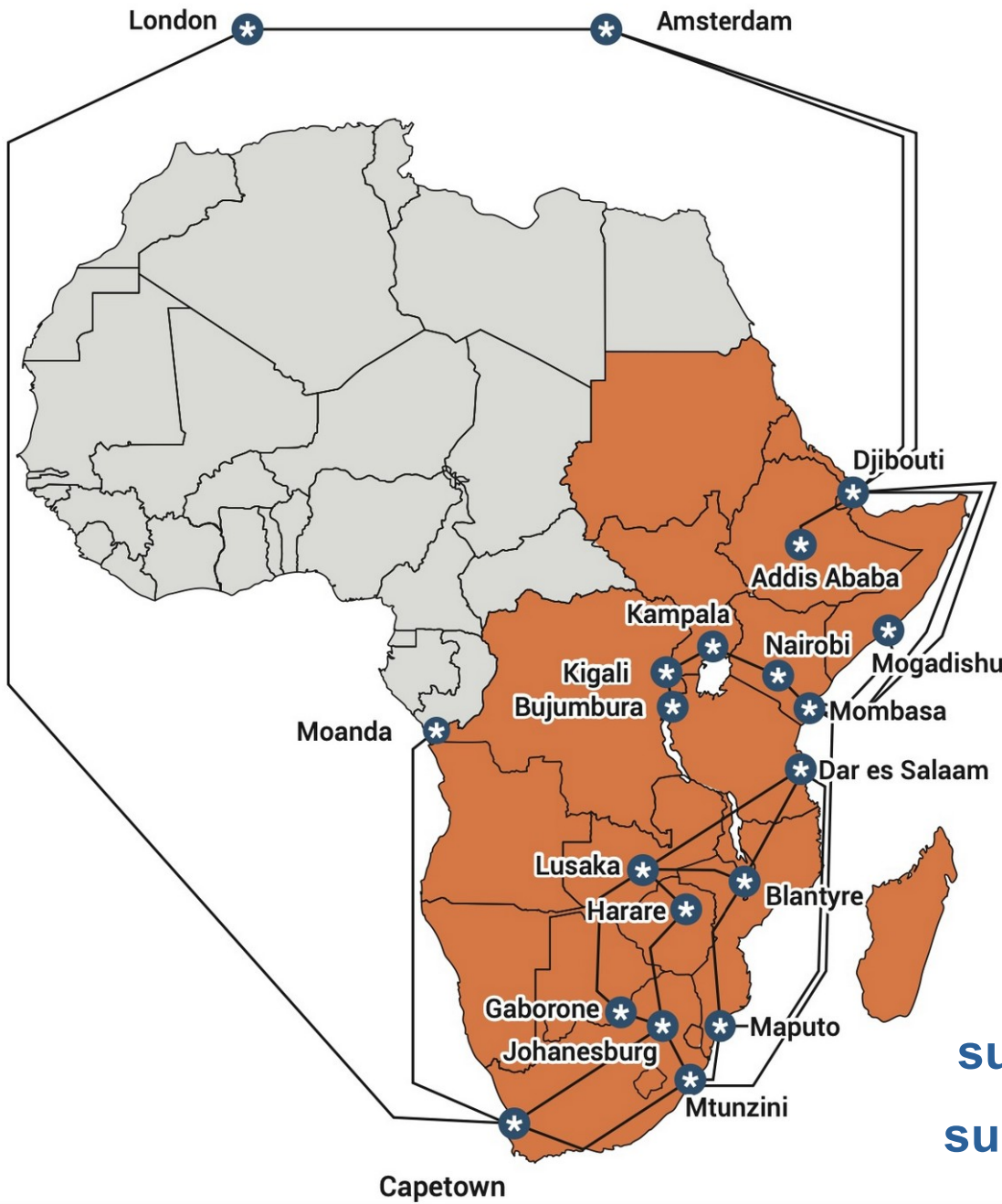
Prof. Madara Ogot, CEO



- RedCLARA – Cooperacio Latino America de Redes Avanzadas – Latin American Collaboration of Advanced Networks
- WACREN - West and Central Africa Research and Education Networks
- ASREN - Arab States Research and Education Networks
- GEANT - Gigabyte European Advanced Network
- NORDUnet - Nordic Gateway for Research and Education
- iCAREN - Central Asian Research and Education Network
- **UbuntuNet Alliance for Research and Education Networking**

sum(Regional RENs) = Global REN

UbuntuNet Network 3



sum(Universities) = National REN
sum(National RENs) = Regional REN
sum(Regional RENs) = Global REN

Co-funded by



and member NRENs



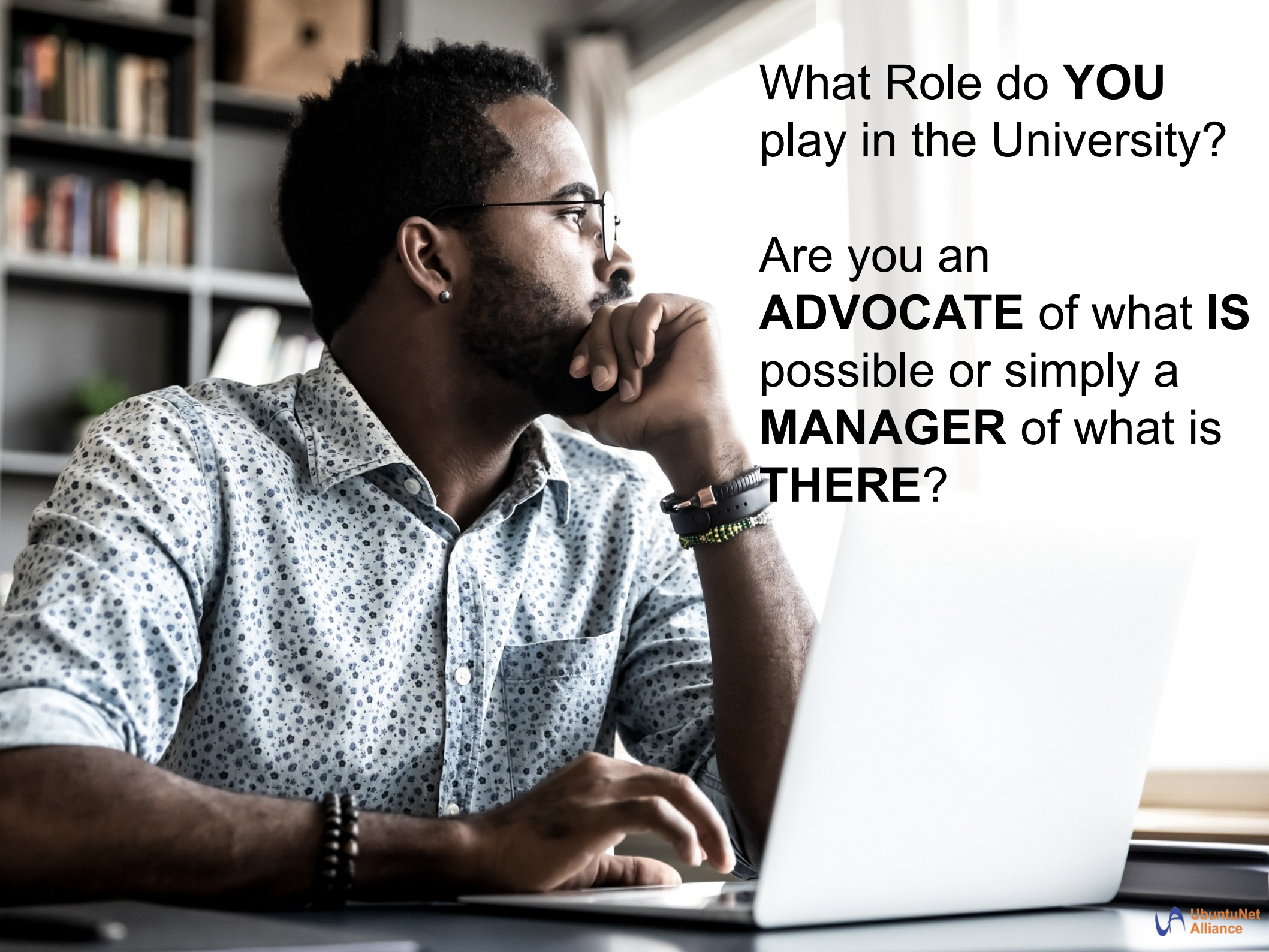
The logo for the Open Science Webinar Series features the text "Open Science" in a large, blue, sans-serif font, with "Webinar Series" underneath. To the left is the "Africa rXiv" logo, which consists of a stylized map of Africa with horizontal stripes in red, yellow, green, and blue. Below the logo, it says "Presented by UbuntuNet Alliance" and "Access 2 Perspectives", and "Supported by ORCID". The background is white with blue abstract shapes and a pattern of blue dots in the top right corner. The text "Zoom, 2-3x per month" is at the bottom.



Training librarians on Repository establishment and OS

What Role do **YOU**
play in the University?





What Role do **YOU**
play in the University?

Are you an
ADVOCATE of what **IS**
possible or simply a
MANAGER of what is
THERE?



Think Big!



Research output in an open access,
digital repository, discoverable and
accessible

I CAN'T FIND YOU!
Invisible! Basically non-existent!

**Why can't everyone put
their research online so that
it can be found and used?**



Research output in an open access,
digital repository, discoverable and
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I CAN'T FIND YOU!
Invisible! Basically non-existent!



Raise up your hand if your institution has a repository

Why should a university set up a digital repository?



Offers numerous benefits for a university, including **enhanced accessibility, preservation, and visibility** of its scholarly work

It is a **strategic move** that preserves and showcases a **university's intellectual output** and aligns with global trends towards **open access**

Supports the university's mission of **advancing knowledge** and enhancing its impact on the academic community and beyond

Why should a university set up a digital repository?

Enhanced Accessibility



Global Reach: Digital repositories provide global access to the university's research outputs, allowing scholars and researchers worldwide to discover and use the materials.

24/7 Availability: Unlike physical libraries, digital repositories are accessible 24/7, providing uninterrupted access to information

Why should a university set up a digital repository?

Preservation of Academic Content



Long-term Preservation: Digital repositories ensure the long-term preservation of scholarly work, protecting it from physical deterioration and loss

Disaster Recovery: Digital backups and redundancies can safeguard content against natural disasters and other risks

Why should a university set up a digital repository?

Increased Visibility and Impact



Citation and Collaboration:

Increased visibility of research can lead to higher citation rates and opportunities for collaboration with other researchers and institutions

Showcasing Research:

Repositories act as a showcase for the university's research achievements, enhancing its reputation and attracting funding and partnerships

Why should a university set up a digital repository?

Support for Open Access



Promoting Open Science:

Digital repositories support open access initiatives, making research freely available to the public and promoting transparency in science

Compliance with Policies:

Many funding agencies require open access to research outputs. A digital repository helps meet these requirements

Why should a university set up a digital repository?

Centralized Repository of Knowledge



Organized Data Management:

A centralized digital repository ensures all research outputs are organized and easily searchable, improving data management and retrieval

Comprehensive Archiving:

It acts as a comprehensive archive of the university's scholarly work, including theses, dissertations, articles, and conference papers

Why should a university set up a digital repository?

Enhanced Discoverability



Metadata Integration: By using standardized metadata, digital repositories improve the discoverability of research through search engines and academic databases

Interoperability: Integration with other systems and repositories through protocols like OAI-PMH enhances discoverability and data sharing

Why should a university set up a digital repository?

Supporting Education and Learning



Resource for Teaching: Digital repositories provide a wealth of resources that can be used for teaching and learning, enhancing the educational experience for students

Student Research Visibility: Hosting student theses and dissertations in the repository increases their visibility and impact

Why should a university set up a digital repository?

Cost Efficiency



Reduced Physical Storage

Needs: By digitizing content, universities can reduce the costs associated with physical storage and maintenance

Efficient Resource

Allocation: Digital repositories allow for more efficient allocation of resources by reducing the need for physical handling and distribution of materials

The FAIR Principles

Why are They Important?



The **FAIR Principles** are crucial because they ensure that data can be easily found, accessed, and used by both humans and machines

Enhances the **efficiency** and **effectiveness** of research, as data can be shared, reused, and built upon, leading to new discoveries and innovations

By adhering to these principles, researchers and institutions can contribute to a more **open and collaborative scientific community**

Implementing the FAIR Principles in digital document repositories significantly enhances the **usability** and **accessibility** of your data



Assign Persistent Identifiers:

Use globally unique and persistent identifiers (like DOIs) for your data and metadata

Create Rich Metadata: Describe your data with rich **metadata** that includes clear, relevant details, eg Metadata standards like **Dublin Core**

Register in Searchable Resources:

Ensure your metadata is indexed in searchable resources like Google Scholar, DataCite,

The FAIR Principles

Accessible



Use Standardized Protocols:

Ensure that your data is retrievable via standardized communication protocols, eg HTTPS, FTP

Metadata Accessibility:

Ensure that your metadata remains accessible even if the data itself is no longer available

This can be achieved by hosting metadata in dedicated metadata repositories

The FAIR Principles

Interoperable



Use Shared Languages:

Implement metadata standards and shared vocabularies, eg RDF, XML, JSON-LD, to ensure that data can be understood and used across different platforms

Adopt Community

Vocabularies: Use domain-specific vocabularies that are widely accepted in your research community to ensure consistency and interoperability



Rich Descriptions: Provide detailed descriptions of your data, including information on conditions related to use

Clear Licensing: Publish your data with a clear, accessible data usage license, eg Creative Commons licenses, to inform users on data use

Community Standards: Ensure that your data meets the standards and best practices of your research community

Metadata



Data about data: Provides information that describes various aspects of a data item, making it easier to understand, use, and manage

Metadata is vital in today's digital world as it provides the context and details necessary to effectively use and manage data resources

By describing the various attributes of a data item, metadata ensures that data is **accessible, understandable, and usable**



Descriptive: Information used for discovery and identification of a data resource. This includes titles, authors, keywords, abstracts, and summaries

Structural: Information that indicates how a resource is organized and interrelated, eg, the table of contents, pagination, and chapters of a book

Administrative: Information to help manage a resource, including metadata for rights management, preservation, and technical details like file type and creation date



Discovery and Identification:
Helps users find and identify resources

Organization and Navigation:
Assists in organizing and navigating resources. For example, website metadata helps in structuring content for better user experience

Interoperability: Ensures that resources can be used across different systems. Metadata standards like **Dublin Core** facilitate data sharing and integration



Rights Management: Provides information on the rights and permissions associated with a resource, eg licenses and copyright information

Helps users find and identify resources, eg, library catalogs use metadata to help users find books and articles

Preservation: Assists in the long-term maintenance of digital resources. Metadata can include information on how a resource was created, used, and any necessary preservation actions



Organization and Navigation:

Assists in organizing and navigating resources. For example, website metadata helps in structuring content for better user experience information

Interoperability: Ensures that resources can be used across different systems. Metadata standards like Dublin Core facilitate data sharing and integration.

Metadata

Importance



Improves Data Quality:

Enhances the accuracy, reliability, and usability of data

Facilitates Data Sharing:

Makes it easier to share and reuse data across different platforms and communities

Supports Data Management:

Helps in organizing, preserving, and managing data resources effectively

I am CONVINCED

What steps should I take?

1. Planning and Preparation



Define Objectives: Clearly outline the repository's goals and objectives. What types of content will it store, eg, theses, research papers, datasets

Stakeholder Engagement: Engage with key stakeholders, including faculty, librarians, IT staff, and administrators, to gather input and support

Develop a Policy Framework: Establish policies for content submission, metadata standards, access rights, and preservation, including guidelines for copyright and intellectual property

I am CONVINCED

What steps should I take?

2. Selecting a Platform



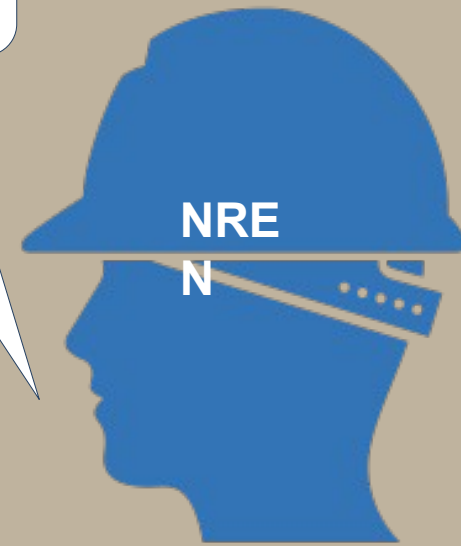
Evaluate Software Options:

Choose a repository platform, eg DSpace, EPrints, Fedora Commons, and Invenio

Assess Technical

Requirements: Ensure the platform supports necessary features like metadata management, user authentication, and scalability

I CAN do this for you



I am **CONVINCED**
What steps should I
take?

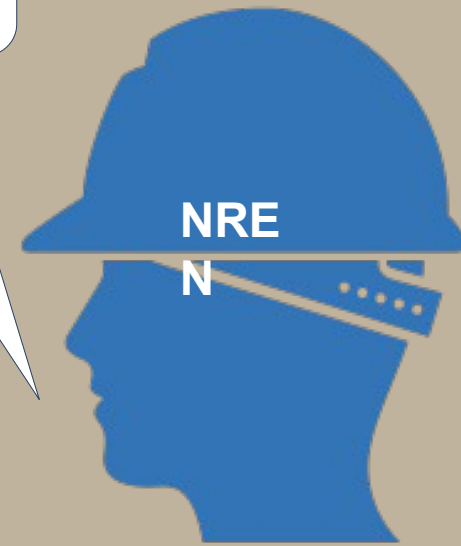
3. Infrastructure Setup



Hardware and Hosting: Set up the necessary hardware infrastructure with sufficient storage capacity and backup systems

Software Installation: Install and configure the chosen repository software

I CAN do this for you



I am **CONVINCED**
What steps should I
take?

4. Metadata and Content Organization



Metadata Schema

Development: Define the metadata schema you will use (e.g., Dublin Core)

Customize fields to meet your needs

Content Organization:

Develop a taxonomy or classification system to organize content. Create categories and subcategories for easy navigation

I am CONVINCED

What steps should I take?

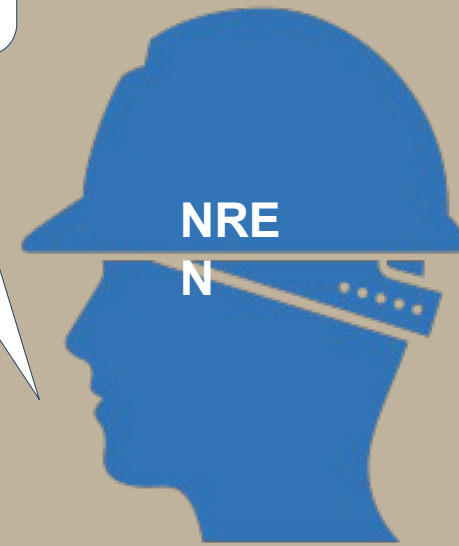
5. User Access and Authentication



User Roles and Permissions:
Define user roles and permissions for content submission, review, and access

Authentication Mechanism:
Implement an authentication mechanism to control access, including single sign-on and federated identity management

I CAN do this for you



I am **CONVINCED**
What steps should I
take?

6. Content Submission and Workflow



Submission Workflow: Design a workflow for content submission, review, and approval. Ensure it is user-friendly and efficient

Training and Support: Provide training and support for users on how to submit content and use the repository

I am **CONVINCED**
What steps should I
take?

7. Digitization and Migration



Digitization Process: Develop a process for digitizing physical content. Use high-quality scanners and ensure proper file formats

Content Migration: If migrating from another system, plan and execute the migration of existing content to the new repository

I am **CONVINCED**
What steps should I
take?

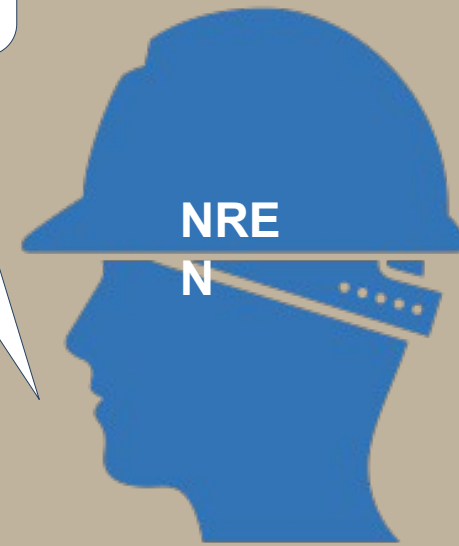
8. Testing and Quality Assurance



Test Functionality: Thoroughly test the repository's functionality, including metadata search, content submission, and user access

Quality Assurance: Ensure the repository meets quality standards and fix any issues before the official launch

I **CAN** help you with this.



I am **CONVINCED**
What steps should I
take?

9. Launch and Promotion



Soft Launch: Conduct a soft launch to gather feedback from a limited group of users

Official Launch: Announce the official launch of the repository. Use university communication channels to promote it

I am **CONVINCED**
What steps should I
take?

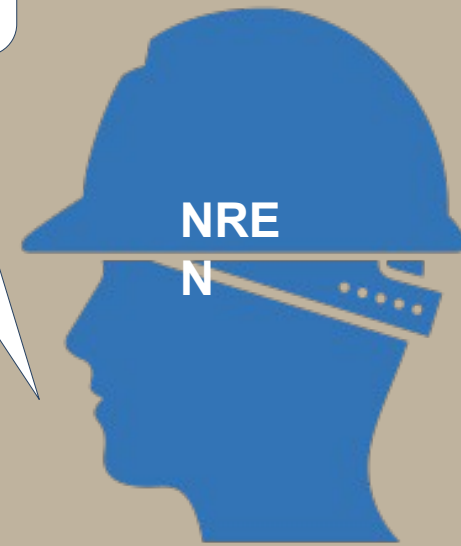
10. Ongoing Maintenance and Support



Regular Updates: Keep the repository software and infrastructure updated to ensure security and performance.

User Support: Provide ongoing support to users and address any issues that arise

I **CAN** help you with
this.





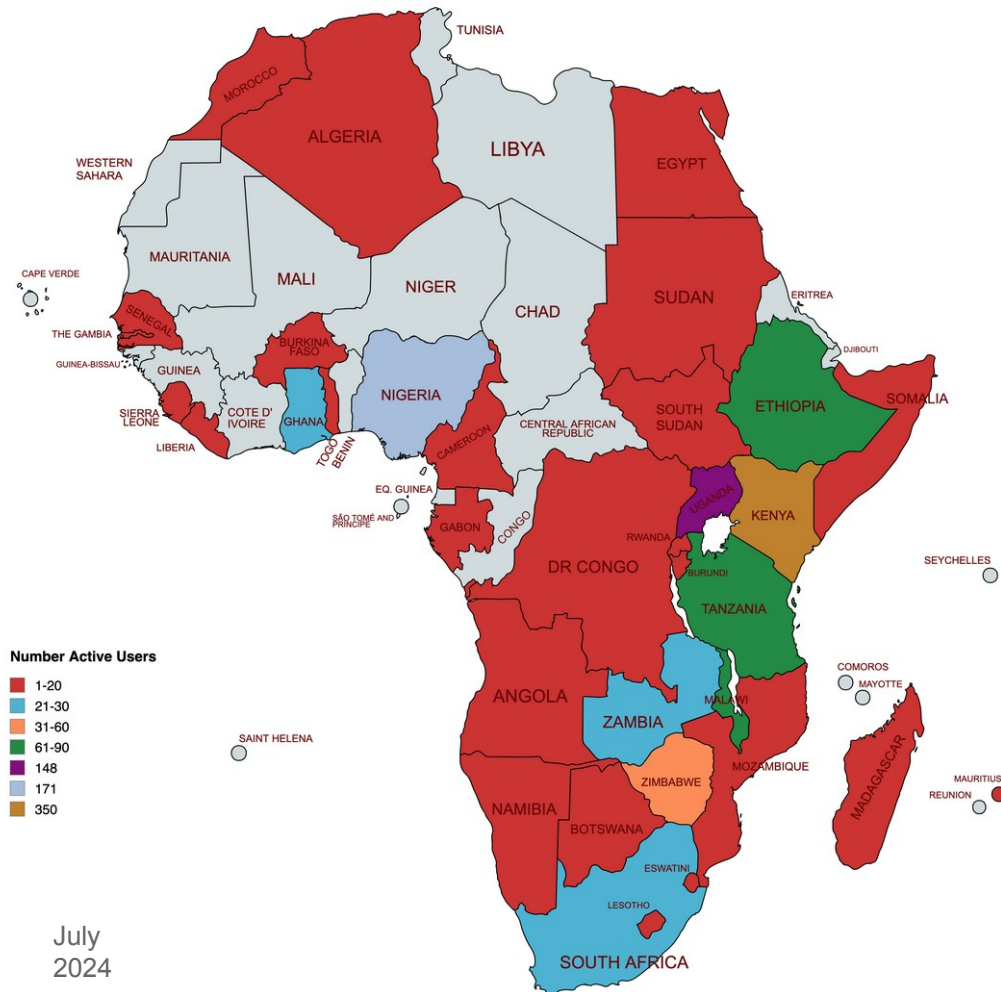
The screenshot displays the Utafiti Africa website interface. At the top left, the UbuntuNet Alliance logo and 'Utafiti Africa' text are visible. The main content area is titled 'Latest Opportunities' and features a table with columns for 'Closing Date' and 'Opportunity/Maximum Award'. Each row includes a 'More' button. The table lists various funding opportunities, such as 'The Hereditary Disease Foundation Postdoctoral Researcher Fellowships' and 'Global Professorships 2024'. To the right of the table is a sidebar with filters for 'Where are you?' (All countries), 'What is your discipline?' (All disciplines), and 'Select Funding Type' (Awards, Development Project Grant, Equipment Grant, Fellowship - Masters, Fellowship - PhD, MPhil/PhD, Post-Doc, Research Fellows, Research Grant, Training Grant, Travel Grant, Undergraduate). A 'Filter' button is located at the bottom of the sidebar. An 'All Opportunities' button is positioned at the bottom center of the table area.

Closing Date	Opportunity/Maximum Award	
December 2, 2024	The Hereditary Disease Foundation Postdoctoral Researcher Fellowships, Hereditary Disease Foundation, \$100,000	More
October 23, 2024	Global Professorships 2024, British Academy, £900,000	More
November 6, 2024	ODA Global Innovation Fellowships 2024, British Academy, £150,000	More
July 18, 2024	Pfizer Research Grant – Request for Proposals (RFP) Interventional Research Studies with Elranatamab, Pfizer, \$2 million	More
September 10, 2024	Clinical Research Training Scholarship in ALS, Holloway Family Fund Established to Expand AFTD's Research Initiatives, \$65,000	More
September 10, 2024	Clinical Research Training Scholarship in ALS, ALS Association, \$65,000	More
September 10, 2024	Clinical Research Training Scholarship in Parkinson's Disease, American Academy of Neurology, \$65,000	More
	A-T Children's Project Research Grant, A-T Children's Project, 75,000 USD	More
July 11, 2024	Africa Science Entrepreneurship Program 2024 Call for Participants – International Science Partnerships Fund (ISPF), National Research Foundation, CAD 4 million	More
July 11, 2024	KIX Call for Proposals: GPE KIX Regional Observatories on Education System Resilience, International Development Research Centre, CAD 4 million	More

Save the address
NOW! Set up your
free account

Continuously **updated**,
searchable database of
research funding
opportunities through which
UbuntuNet aims to be a catalyst
for increased funded, impactful
research across the continent

Researchers can narrow their
search by selecting their country
and discipline to view only grants
they are interested in and eligible
for



DP Deputy Vice Chancellor Research Production... Funding News & Opportunities No. 21 of 2024
 To: all@uonbi.ac.ke,
 Reply-To: Deputy Vice Chancellor Research Production and Extension

Open Funding Opportunities

The following new funding opportunities have been added to the funding Opportunities Portal. Please contact our office if you need help preparing your proposals. Also, note that some of the opportunities have very tight deadlines.

Title: working with Luxembourg researchers

Funder: UK Research and Innovation

URL: <https://research.ubuntunet.net/opportunity/esrc-working-with-luxembourg-researchers/>

Deadline: Repeating

Maximum Award: £1,000,000

Title: African Graduate Fellowships at the American University of Cairo

Funder: American University of Cairo

URL: <https://research.ubuntunet.net/opportunity/african-graduate-fellowships-at-the-american-university-of-cairo/>

Deadline: January 15 and October 15 annually

Title: Innovative Pilot Mental Health Services Research Not Involving Clinical Trials

Funder: National Institutes of Health

URL: <https://research.ubuntunet.net/opportunity/innovative-pilot-mental-health-services-research-not-involving-clinical-trials/>

Deadline: October 16, 2024; February 16, 2025

Maximum award: \$1,350,000

Title: AJ Banks Travel Bursary

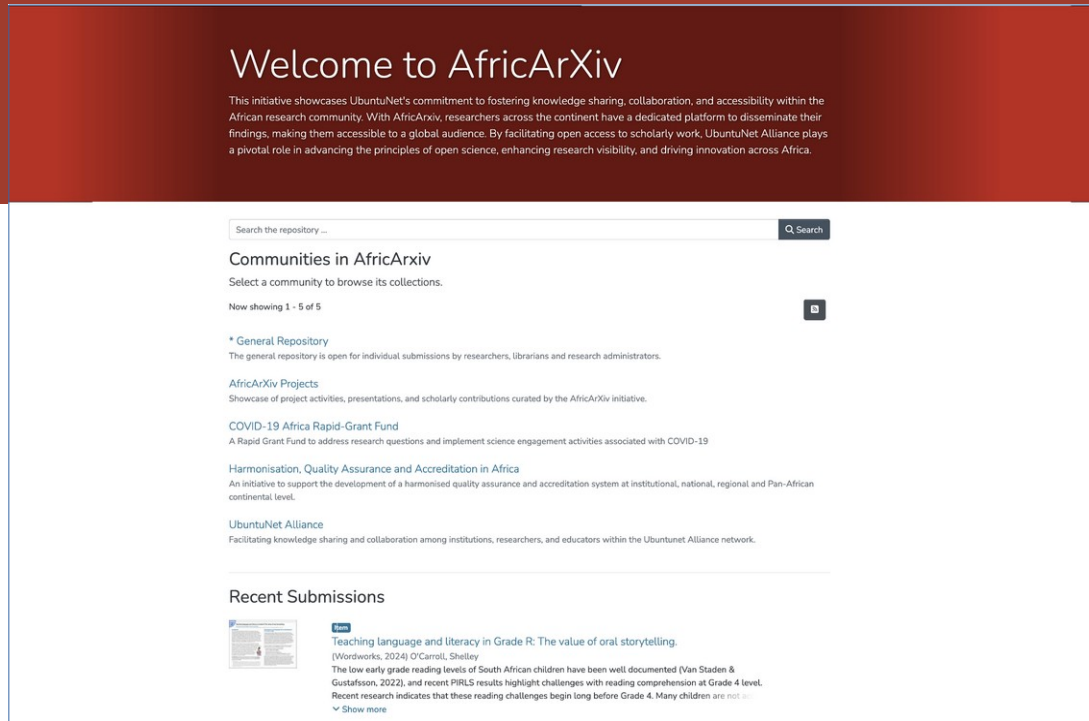
Funder: The Society of Chemical Industry

URL: <https://research.ubuntunet.net/opportunity/aj-banks-travel-bursary/>

Deadline: October 31 each year



Opportunities for (co-) development and (co-) deployment of **specialised repositories** dedicated to **African and global needs**, developing valuable, discoverable collections and easing the acquisition of information



Save the address
NOW! Explore

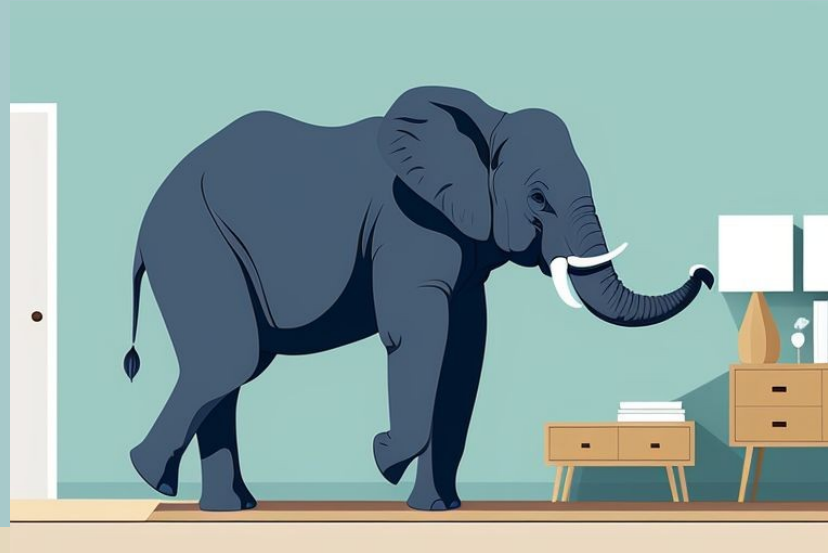
Continental catch-all open-access repository for all data and documents of **academic value**

Specialised collections and **individual archiving**

Institutional repositories: For small institutions whose research output cannot justify the required staff complement and where NRENs do not exist or support hosting of institutional repositories

The ELEPHANT in the ROOM

Required Human Resource



Digital Repository Manager

Data Curator

Metadata Librarian

Rights and Permissions Manager

Database Administrator

Communication and Outreach Specialist

Web Developer

Interoperability Specialist

Digital Preservation Specialist

Digital Archivist



Closing:

How can you be a better **ADVOCATE** of what **IS POSSIBLE** and not simply a **MANAGER** of what **IS THERE?**