



Academic Libraries as Catalysts: Amplifying Research Visibility and SDGs Impact in South African Higher Education

Nelson Mandela University Research Day, 12 September 2025

Introduction

- ❑ Libraries are no longer just repositories - they are strategic enablers of research excellence.
 - ❑ In the context of South Africa's development goals and global SDGs, libraries play a pivotal role in shaping research visibility and societal impact.
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Libraries and the SDGs

- ❑ Libraries support SDG 4 (Quality Education), SDG 9 (Industry, Innovation, Infrastructure), and SDG 17 (Partnerships).
- ❑ By curating, disseminating, and preserving research, libraries help translate academic work into societal benefit.
- ❑ Example: Open access to climate research supports SDG 13 (Climate Action).



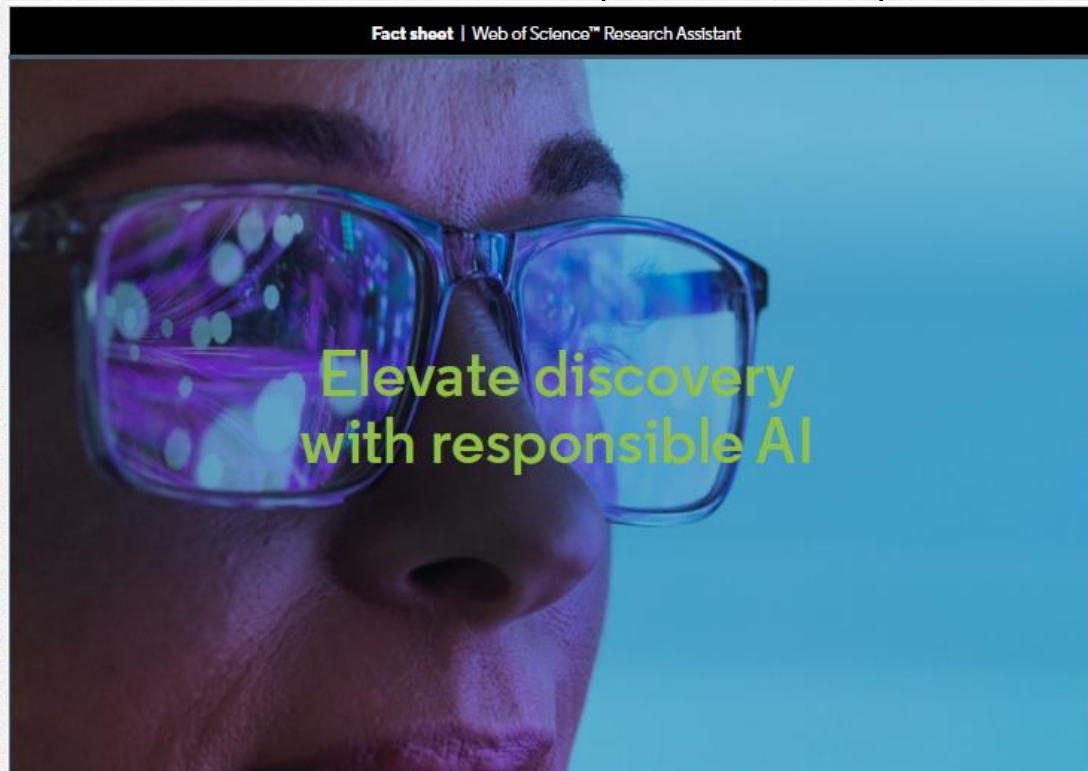
Key Trends in SA Higher Education



- ❑ Growth of Open Access publishing and institutional repositories.
- ❑ Increasing adoption of research metrics and altmetrics.
- ❑ Integration of research information systems (e.g., ORCID, DOIs (publications, Datasets), RIMS).
- ❑ Emphasis on research impact in national funding frameworks (e.g., DHET, NRF, NDP 2030).

Tools Empowering Libraries & Research

- ❑ Repositories: DSpace, Dataverse, Fedora...
- ❑ Discovery Platforms: WorldCat, Google Scholar, Scopus.
- ❑ Impact Tools: Altmetric Explorer, Dimensions, PlumX.
- ❑ AI Writing Tools: Scopus AI, Trinka, WoS Research Assistant
- ❑ Collaboration Tools: ORCID, Crossref, DataCite, OSF.



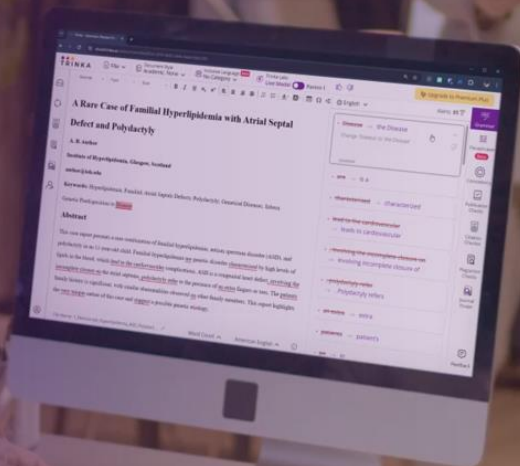


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as an "Emerging Visionary" for
Generative AI Technologies.

DocuMark: Anti-cheating Solution for Academic Integrity

Identify AI content and
safeguard university reputation

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What makes DocuMark Different?

- ✓ Students review & verify their AI use
- ✓ Reduces teachers' stress of AI detection
- ✓ Re-focus on learning outcomes

overall score

Reflects the student's effort and amount of reviews done on copied & AI content; just like a plagiarism score.

source of writing

Provides clear insights on how the content is created by identifying the sources and prompts used.

verification & ownership

Students either verify the unchanged AI content or put in the efforts to review and revise their AI content substantially, thereby taking ownership before submission.

CheatGuard pattern analytics engine

Flags cheating behavioral signals such as error rates, thinking pauses & frequency, backspace use, and repeated corrections.

AI & HEIs for Sustainable Development

HEIs are uniquely positioned to lead the charge in using AI to accelerate progress toward the SDGs. According to the UN HESI Action Group:

- ❑ **AI is reshaping education:** Generative AI tools like ChatGPT are prompting HEIs to rethink teaching, research, and administration.
- ❑ **SDG urgency:** Only 15% of SDG targets are on track for 2030, with nearly half showing no progress or regression.
- ❑ **HEIs as changemakers:** They can harness AI to tackle global challenges – SDGs 1-17



SA's Academic Libraries & SDGs Impact

- ❑ Promote open access to research and data
- ❑ Facilitate community development through the dissemination of publicly funded research outputs – publications and datasets.
- ❑ Encouraging sustainable practices in education and research.

Therefore, all South African academic libraries should actively align their services and outreach with the UN's Sustainable Development Goals (SDGs), particularly through community engagement, access to information, and digital inclusion

Promoting Open Access: Democratizing Knowledge

- ❑ **Institutional Repositories:** that archive theses, articles, and datasets (WiredSpace & Wits Open Data Vault)
- ❑ **Open Journal Systems:** a support platform that publishes institutional peer-reviewed research without paywalls – Wits Open Journals (WOJs platform still to be launched)
- ❑ Publishing through the **SANLiC Transformative Agreements**
- ❑ **Research Data Management:** to train researchers or postgraduate students on FAIR data principles (Findable, Accessible, Interoperable, Reusable), i.e., **Wits Doctoral Academy** and **GOLD** (Wits Graduate Online Learning and Development) programme – **Wits Open Data Vault Platform** (to be launched in October 2025)

Improved Discoverability of Institutional Research Outputs (SDG resources)

- ❑ Tagging and indexing research outputs with SDG-related keywords (e.g., “climate resilience,” “gender equity,” “clean energy”) helps the research community to find relevant content faster.
- ❑ Linking metadata to SDG indicators allows tracking contributions to specific goals.
- ❑ Enhanced cataloguing of grey literature, datasets, and community projects ensures that non-traditional knowledge is also accessible (e.g., including Archives and Special Collections)
- ❑ Persistent identifiers (like DOIs and ORCID iDs) help track the impact of SDG research across disciplines and borders.
- ❑ Analytics from metadata can reveal trends, gaps, and emerging areas in SDGs research activities.



Facilitating Interdisciplinary Collaboration (Dimension, Altmetric Explorer)

Metadata harmonization across disciplines (e.g., education, economics, public health) enables the development of integrated SDG solutions.

- ❑ Linked data and semantic web technologies allow libraries to connect diverse resources into meaningful **knowledge bases**.
- ❑ Metadata-driven discovery tools can recommend SDG-aligned collaborators, projects, or funding opportunities.
- ❑ Metadata dashboards can help institutions monitor their contributions to sustainability goals.



SA HEIs Libraries - Implementation of open publishing platforms



OpenUCT

[Communities & Collections](#) [Browse OpenUCT](#) ▾ [Statistics](#)

[Log In](#) ▾

All of OpenUCT

Search the repository ...

Search

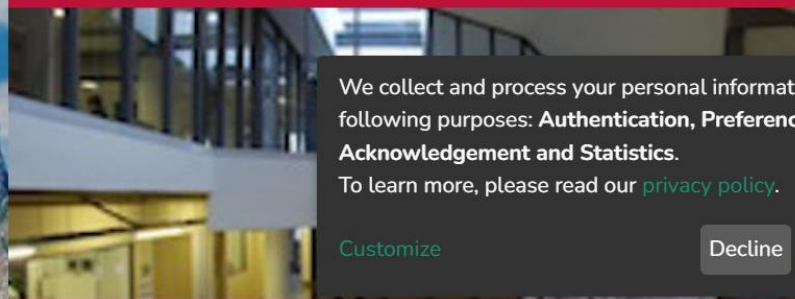
OpenUCT is the open access institutional repository of the University of Cape Town (UCT). It preserves and makes UCT scholarly outputs digitally and freely available, including theses and dissertations, journal articles, book chapters, technical and research reports, as well as open educational resources.

Research Output



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Theses & Dissertations



[View collections](#) ➔

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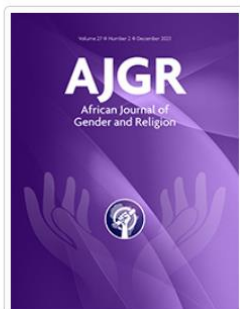
[Decline](#)

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OJS JOURNALS

The UJ Library and UJ Press support open access publishing and the dissemination of information through open access platforms. Part of our mission at the UJ Library and UJ Press is to support research in any way that we can. We host journals for any institution and support editors in hosting and managing their journals. The UJ Library Open Journal System (OJS) is the digital platform on which these journals are hosted and managed by UJ Press. Journals who wish to join the platform may contact the press for assistance an inclusion criteria (ujpress@uj.ac.za).



African Journal of Gender and Religion

The *AJGR* is an online, peer-reviewed, open-access journal for the transdisciplinary study of gender and religion in Africa. The *AJGR* is housed in The Desmond Tutu Centre for Religion and Social Justice at the University of the Western Cape. The journal seeks ...

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African Journal of Political Science

The *African Journal of Political Science* is the flagship publication of the African Association of Political Science. It is an open-access and strictly peer-reviewed academic journal dedicated to the study of the political in all its dimensions and permutatio ...

[View Journal](#) | [Current Issue](#) | [Submissions](#)

21 Journals titles managed by UJ Libraries & UJ Press

Nelson Mandela University

Almetric Analytics



Publications & Datasets



Nelson Mandela University

Port Elizabeth, South Africa

[View Details](#)

Publications

11,353

Datasets

1,880

Grants

7,017

Patents

248

Clinical Trials

6

Funding amount
USD 94.38 M



Rhodes University

Grahamstown, South Africa

[View Details](#)

Publications

16,039

Datasets

994

Grants

7,561

Patents

54

Clinical Trials

2

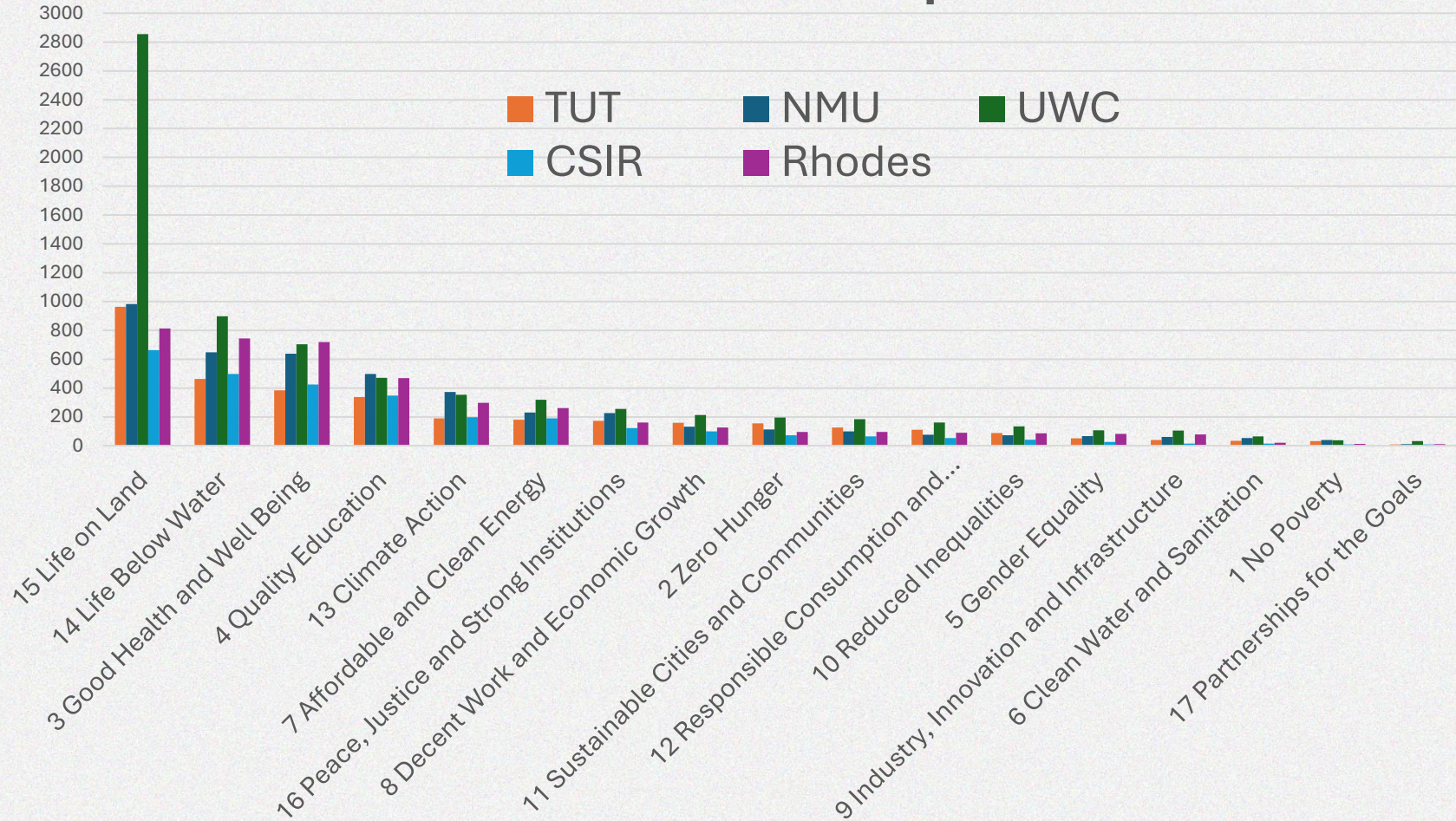
Funding amount
USD 112.14 M

Source: 2025/09/11

 **Dimensions**
A Digital Science Solution



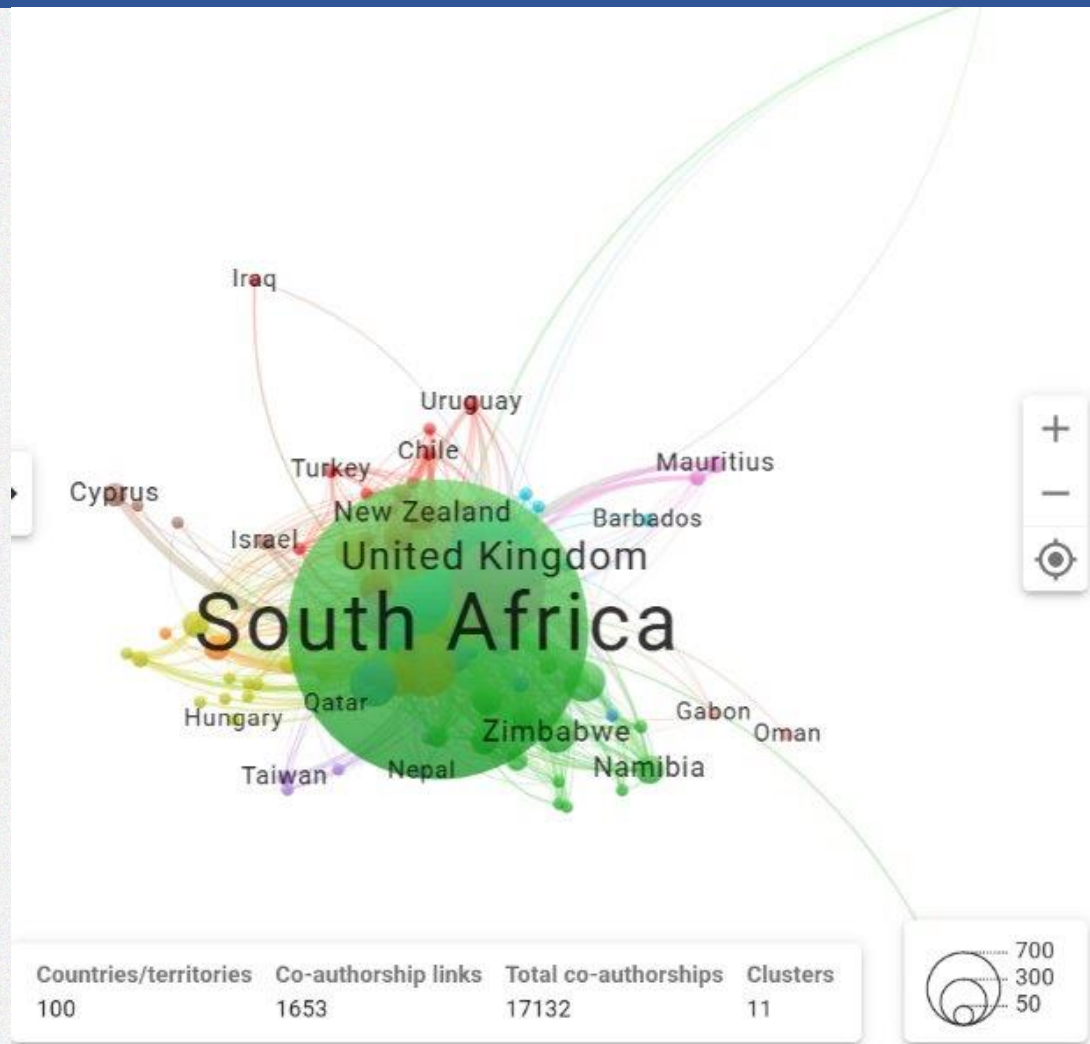
SDGS Tracked & Impact



Source: 2025/09/11



NMU vs Others



Source: 2025/09/11



NMU: Alternative Metrics



Total mentions

74,321



Outputs with attention

3,785



Total outputs tracked

5,217

Attention breakdown



Social media

59,094 mentions



News and blogs

11,947 mentions



Policy, patents and guidelines

1,838 mentions



Other sources

1,288 mentions



Academic sources

154 mentions

Source: 2025/09/11



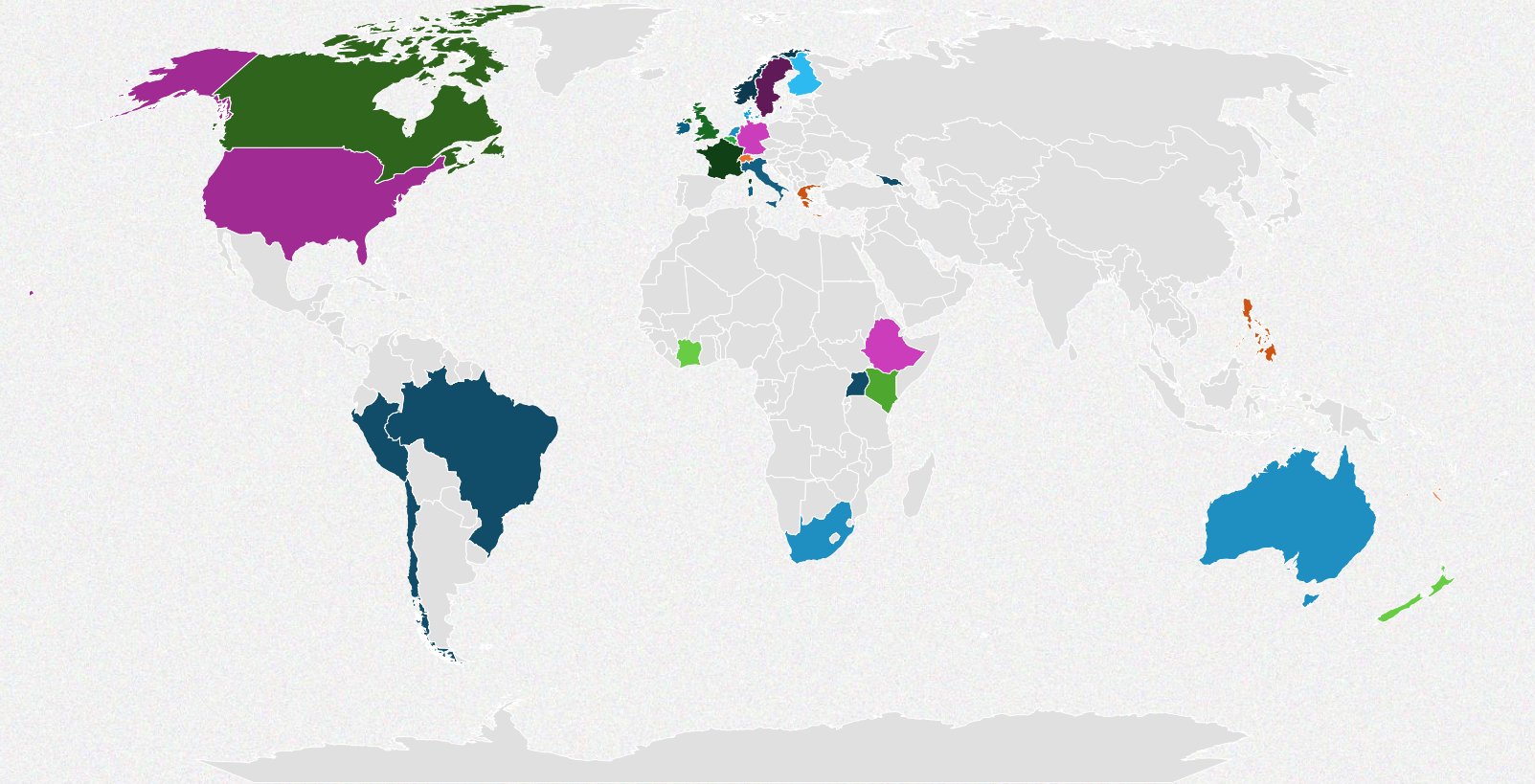
Dimensions

A Digital Science Solution



NMU: Alternative Metrics

Policies by Contries



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Source: 2025/09/11

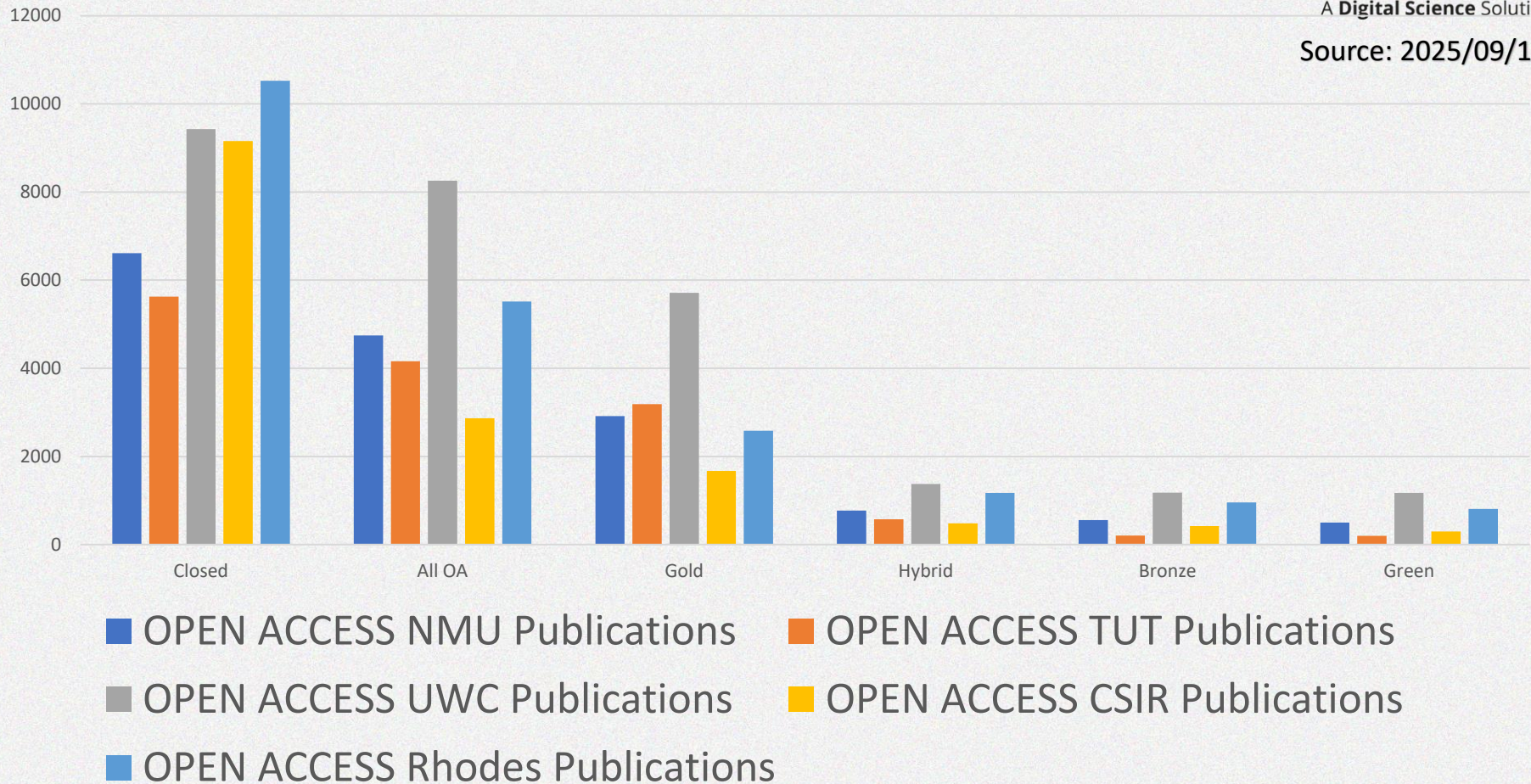


Open Access Publications

MNU vs Others

 **Dimensions**
A Digital Science Solution

Source: 2025/09/11



University of Wits: Library Strategy to Enhance RVI

- ☐ Researchers
- ☐ Schools
- ☐ Faculties
- ☐ University



Wits Retrospective *Research Outputs*

PUBLICATIONS	DATASETS	GRANTS	PATENTS	CLINICAL TRIALS	P
75,319	57,120	20,749	734	362	0



University of the Witwatersrand
Johannesburg, South Africa
[View Details](#)

Publications	Datasets	Grants	Patents	Clinical Trials
75,319	57,120	20,749	734	362
Funding amount USD 1.16 B				



Metadata Enrichment

Kidney transplantation in Africa – workforce, capabilities, and perceived barriers

[Cite](#)[Download \(184.5 kB\)](#)[Share](#)[Embed](#)[+ Collect](#)[...](#)

Dataset posted on 2025-06-09, 12:49 authored by [Malcolm Davies](#), Malcolm Davies

This database of African Association of Nephrology (AFRAN) members was collected under conditions of anonymous voluntary participation using AFRAN SoME (social media) platforms. The database describes training and clinical practice in kidney transplantation, local transplantation programme capability, and perceived barriers to kidney transplantation on the African continent

HISTORY

- 2025-06-09 - First online date, Posted date

GROUP AFFILIATED WITH

- Faculty of Health Science

LANGUAGE

Eng

SUSTAINABLE DEVELOPMENT GOAL (SDG)

- SDG-3: Good health and well-being

AUTHOR URL

0000-0003-0367-3051

USAGE METRICS [↗](#)

8
views

1
downloads

0
citations



CATEGORIES

- [Health sciences](#)
- [Health services and systems](#)

KEYWORDS

Kidney transplantation

Transplantation nephrologist

Transplantation programme activity

Barriers to transplantation

Nephrologist training

Africa

LICENCE



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Expanding the research of Wits Research Publications



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Welcome WIReDSpace(to Wits Institutional Repository on DSpace)

For queries relating to content and technical issues, please contact IR specialists via this email address : openscholarship.library@wits.ac.za, Tel: 011 717 4652 or 011 717 1954



Wits Open Data Vault: FigShare

**Wits Open Data Vault**

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**Wits Open Data Vault**

Discover research from **University of the Witwatersrand**



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10,844 posts | 813 views | 372 downloads | [more stats...](#)

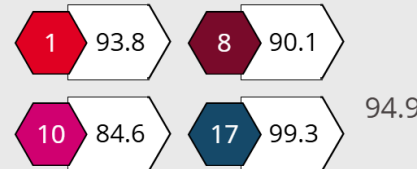
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Wits vs. other SA HEIs – 2025: SDGs Rankings

1

=23

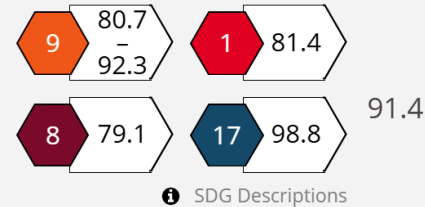
University of
Johannesburg
📍 South Africa



2

63

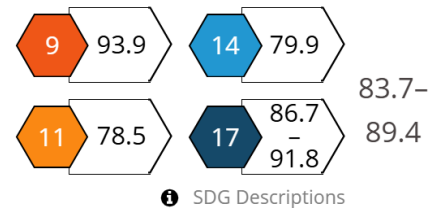
University of Pretoria
📍 South Africa



3

101–
200

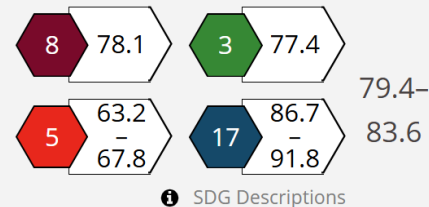
University of Cape Town
📍 South Africa
[Explore](#)



4

201–
300

University of the
Witwatersrand
📍 South Africa



Managing Access to Open Repositories in the Age of Generative AI

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With slides and input from
Kathleen Shearer and Paul Walk



Confederation of
Open Access Repositories

Managing Access to Open Repositories in the Age of Generative AI

<https://mastodon.online/@martinklein>

Open Repositories, Chicago, June 17 2025



Pacific Northwest
NATIONAL LABORATORY

1



Case Studies

- ❑ University of Pretoria: SDGs Hub-aligned repositories tagging and indexing
- ❑ Stellenbosch University: Integration of PURE with library repository systems.
- ❑ UCT Libraries OJS, UJ Libraries OJS, UP OJS, and Stellenbosch OJS publishing platforms.
- ❑ African Open Research Visibility and Impact Check Tool (L. Matizirofa, PhD Thesis)



Thank You

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ORCID

