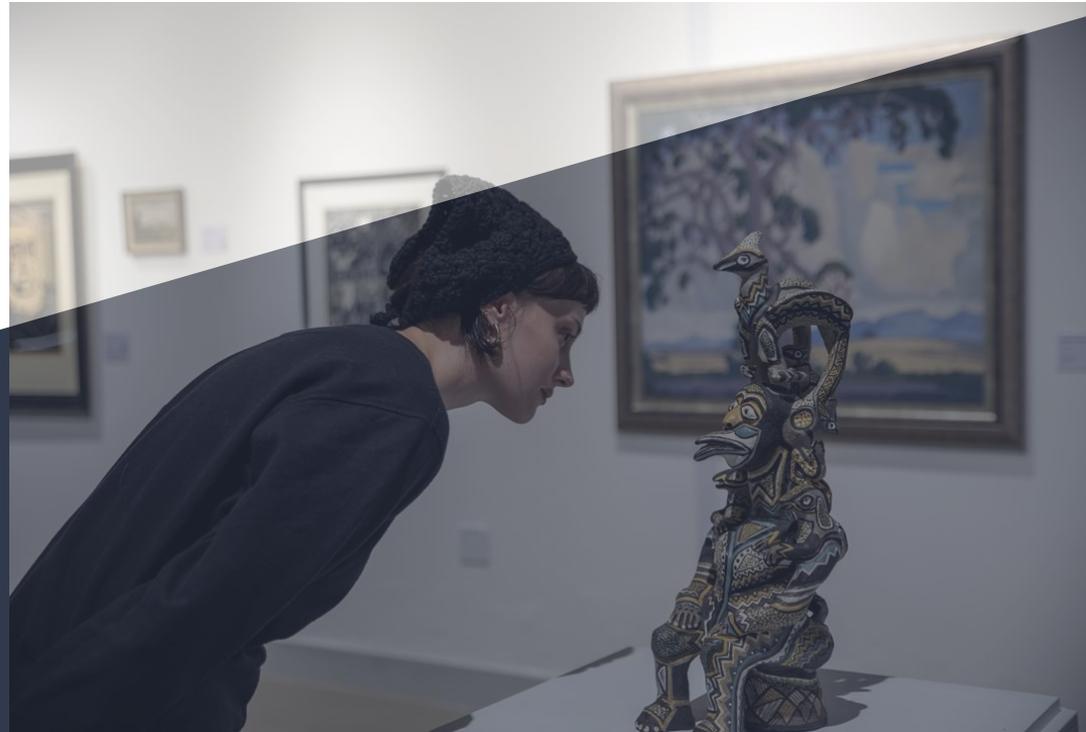


University of Pretoria Museums Research and Academic Engagement Report

August 2023



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA



Statement

The University of Pretoria (UP) museum collections and archives serve as important academic resources. For more than a century students, staff, faculty, national and international researchers have used these unique and special institutional collections to generate new knowledge and to drive intellectual curiosity.

Research conducted in and by the museums directly supports and contributes to academic programmes that span multiple disciplines for teaching, learning and research purposes. Innovative and creative connections between museums and scholarly knowledge are made possible by the museum exhibitions in galleries, collections and archives, which serve as settings for formal and informal education. It is a dynamic, collaborative, transparent, and open-ended process. Museum research is work in progress.

This brief report highlights academic engagement and research with the museum collections and archives, and maps an outline of the ecosystem of museum curatorial, conservation and collection's research. The UP Museums serve as unique cultural and educational repositories that research, interpret, maintain, collect and conserve the history and heritage of the institution they represent.



Definition: Museum Research

“**Museum Research** is multi-faceted, discursive, complex process of deliberate and critical enquiry undertaken across all areas of museum work. Research is conducted by museum professionals, researchers, undergraduate and postgraduate students, the audience and/or other stakeholders.

Museum research may be collections-based, object-based, discipline-based, practice-based or practice-led. Research encompasses museum theory and practice and involves objects or exhibitions.

Museum research aims to develop and amplify knowledge, creativity and make an impact that augments professional work and is accessible to global audiences, while co-creating and generating new understandings about the past and the present.”

ICOM *Dictionary of Museology* 2023:471



Core Curatorial Competencies

Core curatorial competencies is a statement of the domains in which curator's work, the duties they perform, both as professionals and practitioners, and the applied skills that they must possess, to be considered qualified and competent museum curators.

The core competencies define who a curator is, what they do and why curatorship is critical in university museums and collections within higher education.

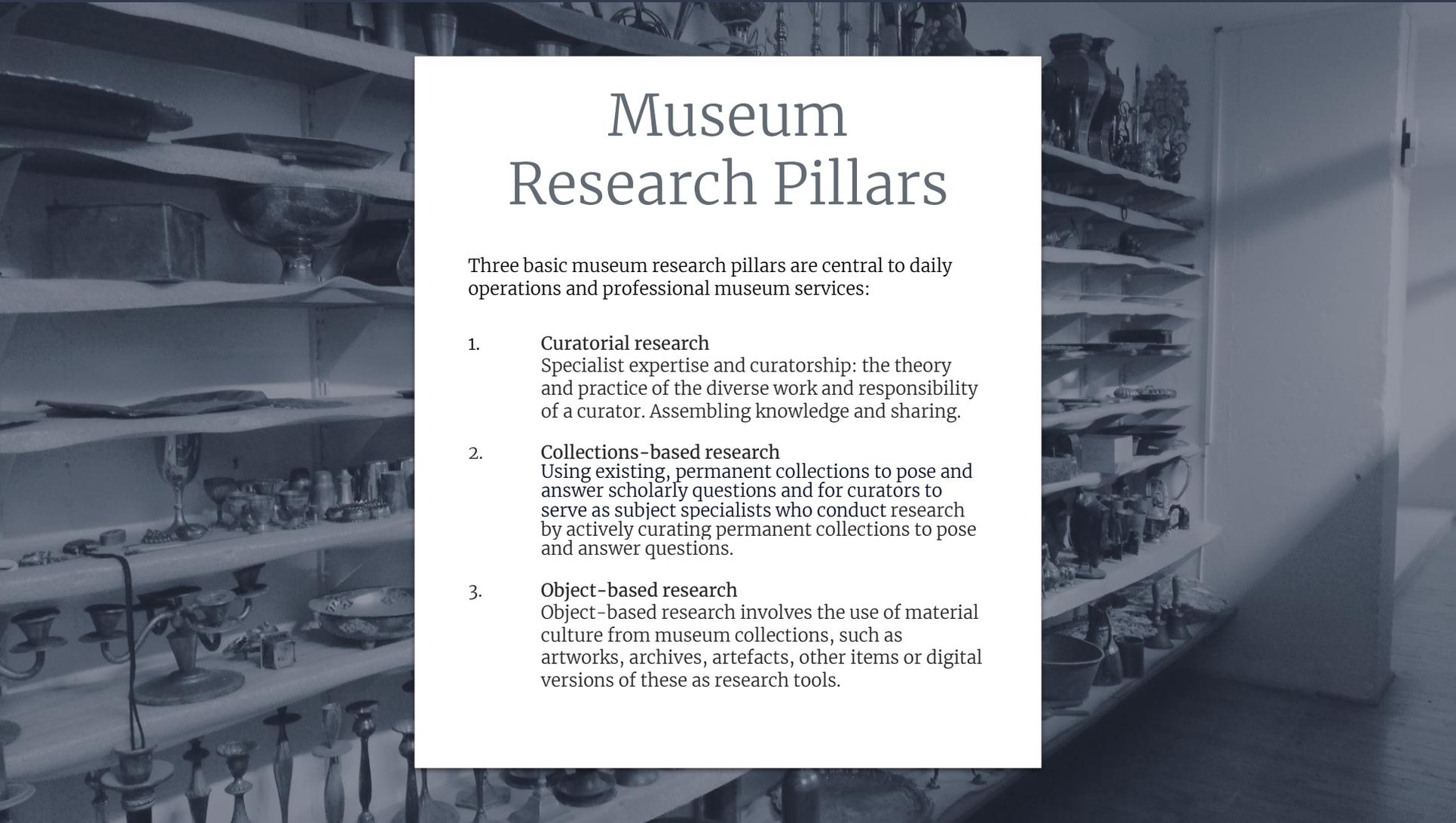
The following **nine core competencies** and related applied professional skills are internationally recognised and essential curatorial core competencies which museum curators as subject-specialists possess:

Within Preservation: (1) collection planning, (2) collecting, (3) collection care;

Within Research: (4) scholarly research, (5) object research, (6) applied research;

Within Communication: (7) exhibition development, (8) education, (9) outreach and advocacy.





Museum Research Pillars

Three basic museum research pillars are central to daily operations and professional museum services:

1. **Curatorial research**
Specialist expertise and curatorship: the theory and practice of the diverse work and responsibility of a curator. Assembling knowledge and sharing.
2. **Collections-based research**
Using existing, permanent collections to pose and answer scholarly questions and for curators to serve as subject specialists who conduct research by actively curating permanent collections to pose and answer questions.
3. **Object-based research**
Object-based research involves the use of material culture from museum collections, such as artworks, archives, artefacts, other items or digital versions of these as research tools.

No. of physical objects in the UP Museums collections used to communicate with as a means to engage, reinterpret, educate and actively research

The UP Museums curate 56 diverse collections comprising of about 19 487 assets, with over 200 000 items (if not more) and an incalculable amount of primary archival documents and photographic material available for research.



Google Arts & Culture as an expanding DIGITAL research resource

This global online resource has begun to revolutionise research and academia by opening free and wider access to previously unattainable collections and promotes multi-institutional learning. This platform is free, accessible, fast, and an easy learning tool for students. It also has the potential to explore and advance open scholarship. Google Arts decentralises art and culture by excluding barriers such as location and cost, researchers can access collections that may be difficult to access geographically.

The UP Museums are strategically using the Google Arts application as part of an ongoing digital transformation strategy and currently have 1,046 digitised works and **five online exhibitions**. A partnership agreement with the Google Cultural Institute was signed in June 2020 as a reaction to the effects of the Covid-19 pandemic, lack of adequate new gallery spaces for high value permanent collections. In this way museums pivoted the institutional art and culture resources into the virtual space.

The UP Museums became the first university museum in Africa to join this major global platform and the first museum in South Africa to create a curated Pocket Gallery.

Google Arts & Culture (now called the infinite online museum) features research content from around the world. Over 2,000 leading museums and archives have partnered with the Google Cultural Institute.

Online Curated Exhibitions

The Ultimate University Museum: An introduction to the University of Pretoria Museums.

Art Beyond Walls: A walk through the University of Pretoria's outdoor sculpture garden.

Highlights from the University of Pretoria Museum Collection: A distinguished selection of South African art, ceramics and sculpture.

An introduction to the University of Pretoria's South African Modernism Collection: The first 20 years of collecting (1931-1951).

Pocket Gallery - Artology: select works from the University of Pretoria Museums (1921-2022).

Modules engaging with UP Museums

Faculty/School	Department	Module No.	Topic	No. of students
EBIT	Department of Architecture	RFP721/ RFP722/RFP723	Heritage Studio: Museum Interventions Honours	13
EBIT	Dept. of Information Science	INL340	Construction & Management of Digital Repositories	105
Humanities	Department of Fine Arts: Inclusive Practices	SOA201	Community engagement in the arts	48
Humanities	Department of Fine Arts: Visual Studies	VKK200	Visual Culture Club	153
Humanities	Department of Fine Arts: Visual Studies	VIT100/VIT200/VIT300	Professional Art Practice/Curatorial Practice	55
Humanities	Department of Anthropology & Archaeology	AGL210	Archaeology of southern Africa	30
Humanities	Department of Anthropology & Archaeology	AGL890	MA Archaeology	1
Humanities	Dept. of Historical & Heritage Studies	EFK752	Heritage & Cultural Tourism Practice	5
Humanities	Dept. of Historical & Heritage Studies	EFK320	Heritage & Cultural Tourism	100
Humanities	Dept. of Historical & Heritage Studies	GES701	Introduction to precolonial southern African History	8
School of Arts	Tangible Heritage Conservation Programme	THC800/THC805/THC840	MA, PhD & Museum Internship	6
School of Arts	Museum Studies, Conservation & Preservation Skills	MKD710/ MKD712	Museum Skills: Ethics & Documentation	9
			Total no. of students engaged	533

Example – Heritage Studios: Architecture Honours Student research design projects 2023 Museum Interventions

Research Field Projects: RFP721/722/723 = 13 proposed research designs

Top-quality research, evocative, innovative curatorial designs by students for students

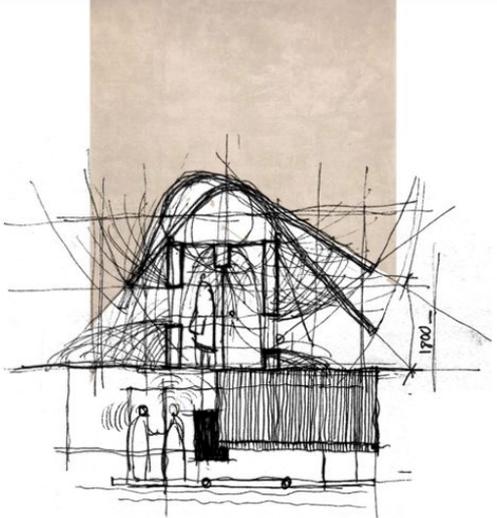
Academic collaboration with UP Museums, Department of Architecture and GLAM partners

Campus art interventions to link UP Museums, Tukkies Lane and all partners down an arts axis



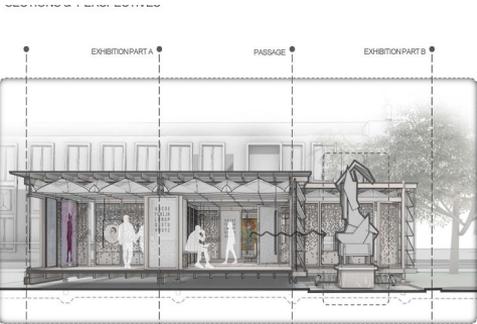
CONCEPT CORE :

THE MUSEUM PAVILLION HOUSES PEOPLE IN THEIR CONVERSATIONS AND THEIR ROUTINE, AND IN RETURN – THE MUSEUM ART IS SUBJECT TO A LIVE HERITAGE OF THE SOUTH AFRICAN EXPERIENCE GUIDED BY A SIMPLE EXCHANGE OF A WELCOMING HOST TO A WELCOMED GUEST



THE MUSEUM AS A HOME :
Nurturing a Guest-Host Relationship in the Living Room of Knowledge

HERITAGE STUDIO: MUSEUM INTERVENTIONS
SHANNON REES GOVENDER
17111162
30/06/2023

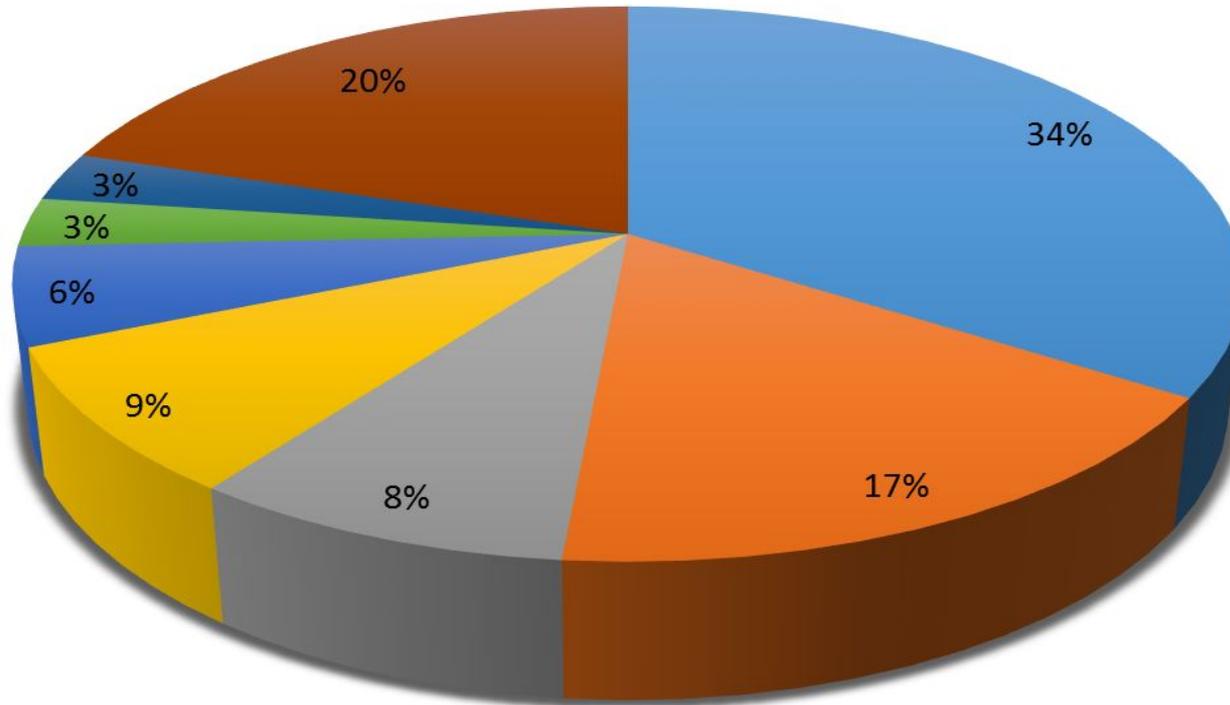


MAIN EXHIBITION FLOOR PLAN
SCALE 1 : 100

List of users across disciplines

Humanities	Law	Health Sciences	EBIT	EMS	Education	Professional Services	NAS	Other
Dept of Sociology	Dept. Public Law	Dept. Family Medicine	Dept. Mining & Engineering	Dept. Taxation	Dept. Humanities Education	UP Archives	FABI	Dept. Institutional Advancement
Unit for Academic Literacy	Centre for Human Rights	Dept. Oral & Maxillofacial Pathology	Dept. Mechanical & Aeronautical Engineering			Dept. Internal Audit and Compliance Services	Dept. Plant & Soil Sciences	Dept. Library Services
Dept. Historical & Heritage Studies	Law Student Administration		Dept. Architecture				Dept. Geology	Employee Wellness Programme
Dept. Speech-Language Pathology & Audiology							Dept. Zoology	Student Wellness Committee
Dept. Modern European Languages							Dept. Genetics, Biochemistry & Microbiology	Fly@UP
Humanities Student Administration							Dept. Consumer & Food Sciences	TuksSport
Dept. Fine Arts							Dept. of Statistics	Student Affairs & Student Accommodation
Dept. Anthropology & Archaeology								Education Innovation

Quantifying Faculty and Departmental Engagement with the UP Museums Jan 2023 - July 2023



Professional Services

EBIT Faculty

Faculty of Education

Faculty of Humanities

Faculty of Health Sciences

Faculty of Natural & Agricultural Sciences

Faculty of Law

Faculty of Economic Management Sciences



**Total No. of Registered
Researchers to the UP
Museum Collections
2018-2023**

39

Select UP Museum Research Projects

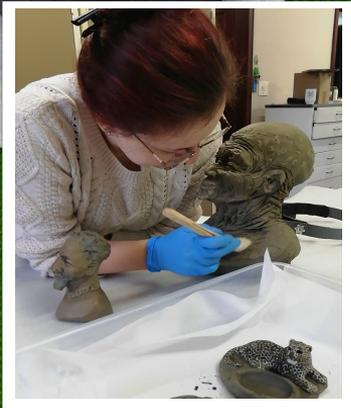
International & partner collaborations: Mapungubwe Collection

- [2024-2027] Project partnership between the UP Museums and the **University of Oxford, Lincoln College Ashmolean Museum, UK**. This research project seeks to build a network of the flow of gold across ancient Asia, Africa and Europe, from AD 200 onwards largely through the chemical analysis of gold coins held by the Ashmolean Museum and now widen access to southern African archaeological gold and the Mapungubwe Gold Collection. These non-destructive, in situ analytical techniques will include portable X-Ray Fluorescence, portable LA-ICP-MS and Negative Muon analysis. Researchers: Dr George Green & Dr Sian Tiley-Nel.
- [2022-2024] Project partnership between the UP Museums and the **University of Missouri (Columbia, US)** Dr Jay Stephens, a post-doctoral fellow in the MU Research Reactor Lab, **University of Arizona** (David Killick) Professor of Anthropology & Adjunct Professor of Materials Science and Engineering. Analysis of the UP Museum Mapungubwe/ other metal assemblages using lead isotopic (copper and bronze), tin isotopic (bronze), and elemental (copper and bronze) analyses to identify the geological source and traditional metallography and x-ray fluorescence methods to understand production technology. Researchers: Dr Jay Stephens.
- [2024-2025] Proposed Master's (MSc) study between the UP Museums and the **Dept. Plant & Soil Sciences (DePSS)** to assess and examine Mapungubwe plant/seed material using various forms of microscopy. Seeds will be compared to extant samples to confirm possible identification and to compare to currently cultivated land races i.e. species such as sorghum. It is further proposed to also compare the seeds of plants from other archaeological sites and ages (dependant on the availability of materials and willingness from other repositories). History of domestication of plants like sorghum is still unclear. If samples are viable, possible utilisation of DNA technologies to extract and sequence the partial genomes of these seeds. This study is proposed to be done under the umbrella of the new DIPLOMIX genome sequencing platform to be established in DePSS. Lead: Dr Nigel Barker.

Postgraduate Student Research Projects

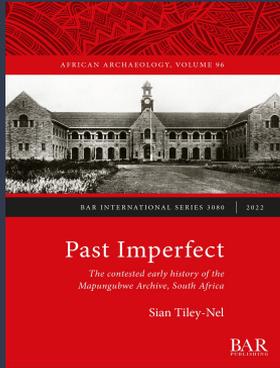
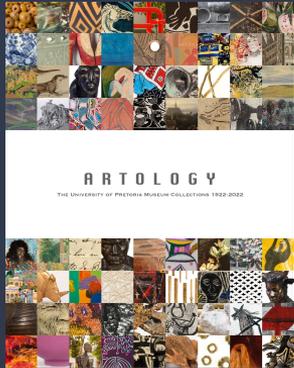
Below is a list of some postgraduate students and their study topics making use of the UP Museum Collections:

- *Compiling a database of the chemical composition of Anton van Wouw sculptures and links to the casting foundry* by Maggie Loubser, PhD Degree (THC800) MSocSci Tangible Heritage Conservation, School of Arts, Faculty of Humanities.
- *An analysis of cultural aspects of the commoner burials from K2* by Christine Smith, Masters Degree (AGL890), Department of Anthropology & Archaeology, Faculty of Humanities.
- *A technical analysis of saponification and flaking paint on works by Alexis Preller (1911-1975)* by Tayla Hollamby MSocSci (THC840) Tangible Heritage Conservation, School of Arts, Faculty of Humanities.
- *Ubumba Olungashi: A case study of unfired ceramics by the South African artist Hezekiel Ntuli(1912-1973)* by Chelsea Roberts MSocSci, mini-dissertation (THC840) Tangible Heritage Conservation, School of Arts, Faculty of Humanities.



UP Museum staff research

Accredited articles and creative outputs [2019–2023]



1. *Artology: The University of Pretoria Museum Collections 1922–2022*. University of Pretoria: Pretoria.
2. Doménech-Carbó, A., Scholz, F, Brauns, M, Tiley-Nel, S, Oliver, A, Aguilera, G, Noemí Montoya, Marí.Teresa. Doménech-Carbó. 2023. *Electrochemical dating of archaeological gold based on repetitive voltammetry monitoring of silver/copper in depth concentration gradients*. *Microchemical Journal* 190(7):108661. DOI: 10.1016/j.microc.2023.108661.
3. Elsenbroek, J.A. 2023. A technical examination and discussion of the conservation decision-making process using Anton van Wouw's Cattle Grazing near Pretoria Zoo (ca. 1896) as case study. MA Thesis: University of Pretoria: Pretoria.
4. Motena, M.S. 2022. Museums as Dark Tourism Destinations: The Kgoši Mampuru Correctional Service Prison Museum, *South African Museums Bulletin*, 44 (1): 38–46.
5. Tiley-Nel, S. 2022. Past Imperfect: the contested early history of the Mapungubwe Archive, South Africa. BAR International Series (3080) *African Archaeology*, Volume 96, Oxford.
6. Antonites, A., Ashley, C., Coutu, A., O'Connor, S. & Tiley-Nel, S. 2022. Object biography of a decorated ivory artefact from Vryheid (MNR04), a Late Iron Age site in the Limpopo Valley of South Africa. *South African Archaeological Bulletin* 77 (126): 4–16.
7. De la Harpe, M. 2022. *Museums, Archives and Tourism: a synergized relationship*. MA Thesis: University of Pretoria: Pretoria.
8. Tiley-Nel, S. New book on Mapungubwe Archive contests history of South African world heritage site, *The Conversation*, 7 August 2022.
9. De Kamper, G. and McGinn, I., 2021. Of Unknown Men: Rembrandt or Not? A South African Provenance Story. *De Arte*, 56(1): 5–22.
10. De Kamper, G. How we proved a Rembrandt painting owned by the University of Pretoria was fake, *The Conversation*, 19 May 2021
11. Motena, M.S., 2021. *Dark tourism as a management tool for dark and dissonant heritage: political change and public perception in South Africa and Russia*. MA Thesis: University of Pretoria: Pretoria.
12. De la Harpe, M. and Sevenhuysen, K., 2020. New Technologies in the Field of Tourist Guiding: Threat or Tool?. *Journal of Tourismology*, 6(1): 13–33.
13. Doménech-Carbó, A., Scholz, F, Brauns, M, Tiley-Nel, S, Oliver, A, Aguilera, G, Noemí Montoya, Marí.Teresa. Doménech-Carbó. 2020. Electrochemical dating of archaeological gold based on refined peak current determinations and Tafel analysis, *Electrochimica Acta*, Elsevier Ltd.
14. Tiley-Nel, S. & Wintjes, J. 2019. The Lottering connection: revisiting the 'discovery' of Mapungubwe. *South African Archaeological Bulletin*, Special Issue, 74 (210): 101–110.
15. McGinn, I. & De Kamper, G., 2019. Contested memories and reinvention of spaces: case studies illustrating strategies in the preservation of public monuments in South Africa. *South African Museums Association Bulletin*, 41(1): 37–45.
16. Tiley-Nel, S. 2019. *The Encyclopaedia of Archaeological Sciences*. Sandra L. López Varela (ed.), John Wiley & Sons. DOI: 10.1002/9781119188230.saseas0067.
17. Tiley-Nel, S L. 2019. National Treasures : The Mapungubwe Gold Collection (2nd Ed) University of Pretoria: Pretoria.
18. De Kamper, G. There is a spike in fake African Art. What's being done to fight it? *The Conversation*, 21 October 2019.

Handwritten notes on a piece of paper, possibly a letter or a memo. The text is written in cursive and includes the following legible parts:

18/10/20
Maud
16. 3. 20

Dear Mrs. Essey
I have just received a telegram
stating that he was
Wednesday next. It is
convenient as we have
me waiting at present on
the idea of taking Van
does not appear to be
and for our lives on the
he not only knows all
but is au fait with
the work here and is
able to me.

accommodation for visitors
a two the meeting
is a trouble, I hope you
scribble, but I am
trib. especially a "J."
brief note to let

UP Museum Staff Research

In process or in press [2023-2024]

1. De Kamper, G. Proving Provenance: the case of J.A. van Tilburg and his collection at the University of Pretoria. PhD candidate. Department of Historical & Heritage Studies.
2. De Kamper, G. *1000 artworks of Maud Sumner*. Dream Africa.
3. Motena, M.S. 2024. Management Tools for Dark and Dissonant Heritage: Political Change and Public Perception in South Africa and Russia. Potential submission to 'Heritage and Society'.
4. Motena, M.S. Prisoner's Food As Dark Heritage: South African Prisons Culture and Social norms in the 20th century. PhD candidate. Department of Historical & Heritage Studies.
5. De la Harpe, M. 2024. Where's the convergence?: The relationship of archives with museums and tourism. Potential submission to *Archivaria*.
6. Tiley-Nel, S.L. 2023 (pending). 'These are our ancestors, these are our people': a curatorial case study of the repatriation of archaeological human remains from Mapungubwe in South Africa. *University Museums and Collections Journal*. Special Edition.
7. Tiley-Nel, S.L. 2023 (pending). *Repatriation and decolonization*. Chapter 17. Lord Cultural Resources, Rowman & Littlefield: Canada.
8. Tiley-Nel, S.L. 2024. "Perpetuating change: transformative and blended experiences in a South African university museum context". Licia Calvi, Arnold Verneeren & Amalia Sabiescu (Eds.) In, *The Future of Museum Experiences*, Springer: Netherlands.
9. Tiley-Nel, S.L. 2024. From 1 Mil. to Mapungubwe: Gays, drug addicts and conscripts and the secret military history of the Greefswald Archives c. 1970- c.1975. Potential submission to the *Southern African Historical Journal*.

Museum Conservation Research

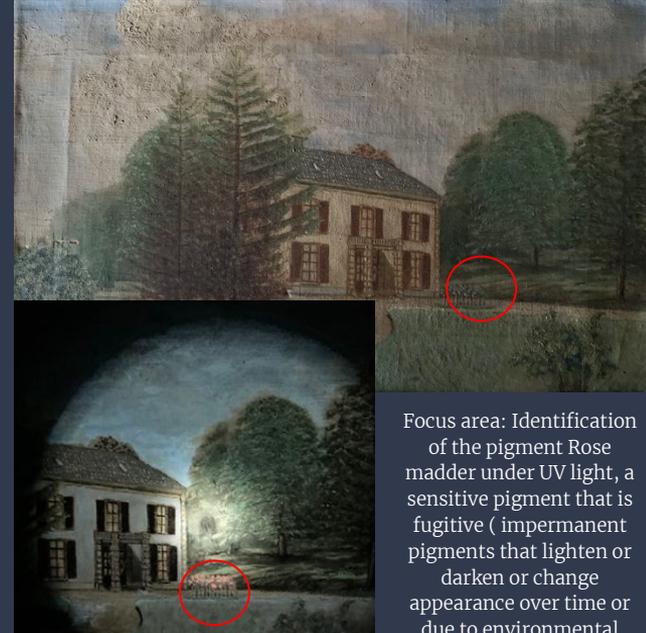
Conservation research is both preservation and remedial conservation of all material types identified within the museum collections. Museum conservation research within the UP Museums focuses on materiality, artist's techniques and the ageing processes of artworks or cultural objects for the development of effective strategies to prevent deterioration over time.

The art conservator assesses an artwork's condition, plans appropriate treatments, continually developing and refining conservation techniques and methodologies that are best suited to the types of collections.

Analytical conservation techniques frequently used in the museum include, microscopic examination, use of UV light, or UP's internally available analytical resources, such as XRF, XRD and microscopy. Museum conservation research is a collaborative effort between art conservators and scientific experts.

The Museums monitor environmental conditions that affect all types of collections. Factors such as temperature, humidity, light exposure, pollutants and pests can severely compromise the stability of collections and archives. Ongoing research on how such elements interact with different materials is important towards the development of methods to mitigate their harmful effects and any risks.

Data loggers placed in the museum galleries, storage and archives provide valuable information regarding the stability or instability of environmental conditions surrounding the items on display or in storage, directly affecting their structural behaviour.



Focus area: Identification of the pigment Rose madder under UV light, a sensitive pigment that is fugitive (impermanent pigments that lighten or darken or change appearance over time or due to environmental conditions).

Green Conservation research

A growing trend in museum conservation research involves the identification of compatible materials in remedial conservation that is aligned with **green chemistry**. This emerging field in green conservation explores deploying more sustainable museum practices and the use of less harmful chemicals. Thus ensuring both the health of conservators and reducing environmental impact, as well as to ensure that any form of intervention does not cause damage to the objects or staff working with them.

The UP Museum conservation efforts aim to promote an eventual pivot towards what is termed **#GreenArt**. Long-term, the museum conservation space hopes to use remedial treatments employing newer and safer materials and sustainable solutions that adhere to the **#GreenDeal** requirements. This method or system will try to transform and replace existing harmful polymers, solvents and surfactants with bio-friendly, natural or low-impact materials that are fully sustainable, thus moving away from the use of harmful and dangerous chemicals. The UP Museums will strategically move towards **green museum conservation** to replace unsuitable consolidants, coatings, harmful solvents and other materials (such as plastics, bubble wrap/polyethylene) with much more environmentally friendly and sustainable alternatives such as biodegradables.

Green conservation is also a new frontier in cultural heritage preservation and its application within the diverse museum collections has immense potential to link to the UN SDGs and the consequences of climate change. This is relevant and innovative research, ideal for the much-needed new museum collections storage, museum facilities/buildings, and even to **green the archives**. The provision of suitable environmental conditions both in galleries and storage can, in the long-term significantly reduce energy, infrastructure and facility budgets of the institutional collections and archives.



The UP Museums also provide external research services such as provenance research, object histories, artist biographies and information on works of art to South Africa's TOP LEADING ART CONSULTANTS AND AUCTION HOUSES such as Strauss & Co, Art Aspire, Stephan Welz Co & Bernardi auctioneers.



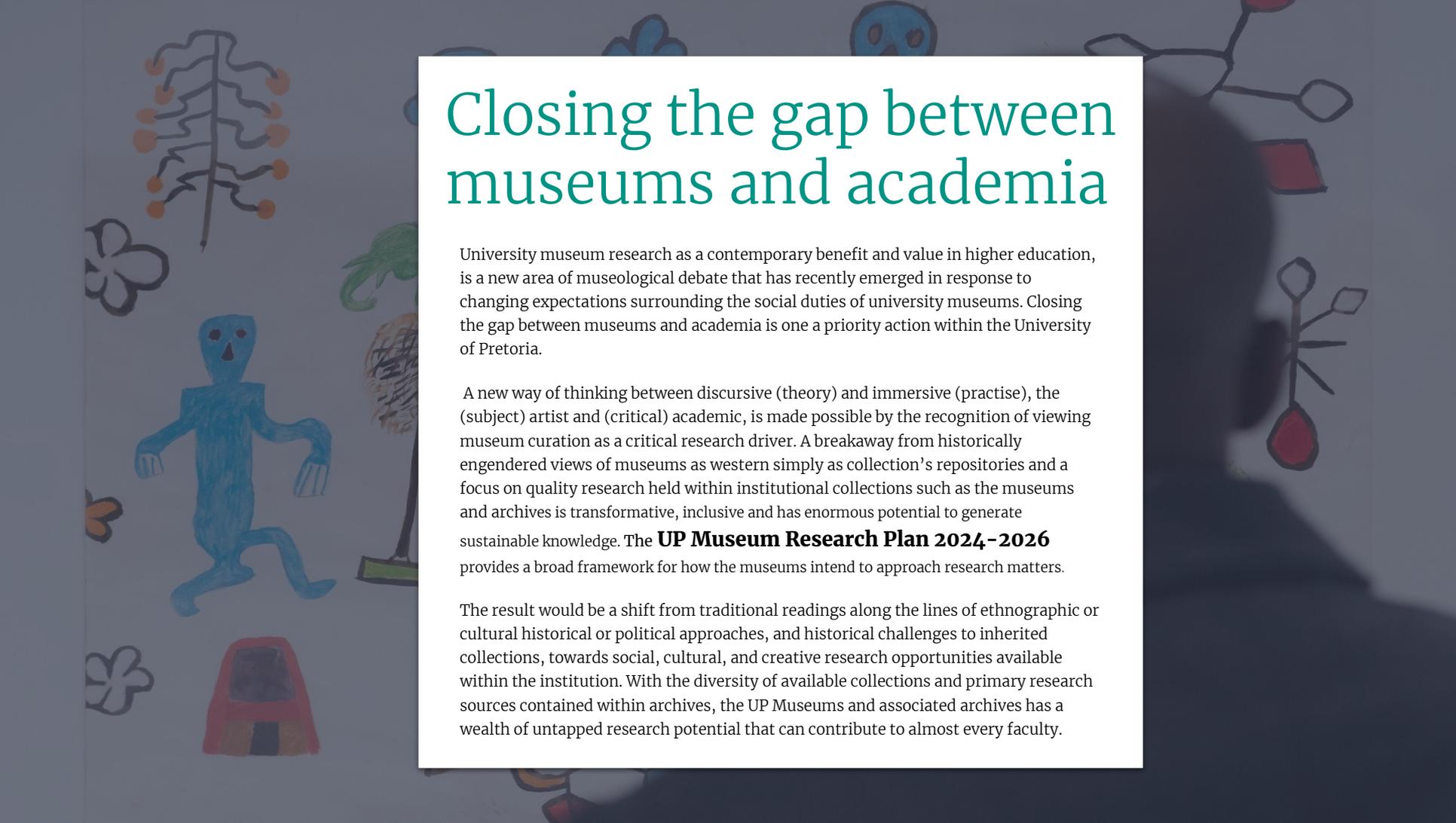
Provenance—or the history of ownership of art from the time of its creation to the present—is a critical aspect of museum work in the 21st century and to the mission of the UP Museums as trusted sources of valid and legal information.

OTTO
KLEIN
1921

No. of items on Artology: **101**
No. of items on internal loan: **3021**
No. of National Treasure tours: **72**
No. of artworks conserved: **118**
No. of frames restored: **28**
No. of artworks audited: **967**
No. of condition assessments: **118**
No. of tours: **86**
No. of digitised archival files: **161 092**
No. of visitors (Jan- July) 2023: **18 391**
No. of paintings relocated: **550**
No. of Instagram followers: **1276**
No. of Facebook followers: **3700**
No. of e-newsletter subscribers: **835**
No. of LinkedIn followers: **1079**
No. of UP Museum staff: **9**

Snapshot of statistics for the period Jan 2023- July 2023





Closing the gap between museums and academia

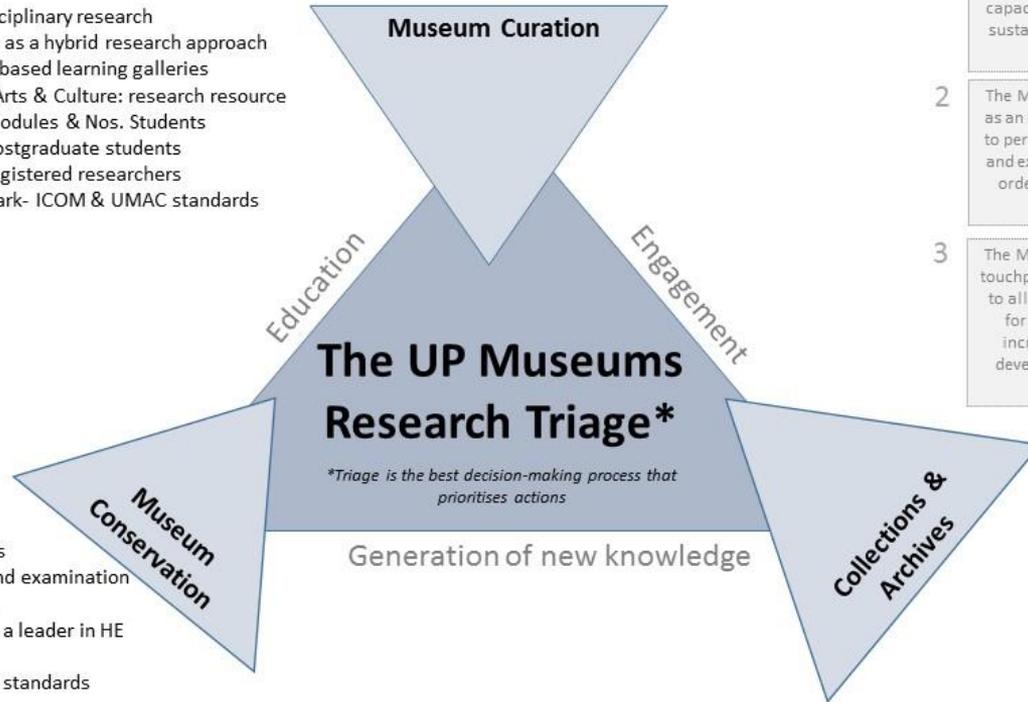
University museum research as a contemporary benefit and value in higher education, is a new area of museological debate that has recently emerged in response to changing expectations surrounding the social duties of university museums. Closing the gap between museums and academia is one a priority action within the University of Pretoria.

A new way of thinking between discursive (theory) and immersive (practise), the (subject) artist and (critical) academic, is made possible by the recognition of viewing museum curation as a critical research driver. A breakaway from historically engendered views of museums as western simply as collection's repositories and a focus on quality research held within institutional collections such as the museums and archives is transformative, inclusive and has enormous potential to generate sustainable knowledge. The **UP Museum Research Plan 2024-2026** provides a broad framework for how the museums intend to approach research matters.

The result would be a shift from traditional readings along the lines of ethnographic or cultural historical or political approaches, and historical challenges to inherited collections, towards social, cultural, and creative research opportunities available within the institution. With the diversity of available collections and primary research sources contained within archives, the UP Museums and associated archives has a wealth of untapped research potential that can contribute to almost every faculty.

UP Museums Research Plan 2024 - 2026

- Transdisciplinary research
- Artology as a hybrid research approach
- Objects-based learning galleries
- Google Arts & Culture: research resource
- No. of Modules & Nos. Students
- No. of postgraduate students
- No. of registered researchers
- Benchmark- ICOM & UMAC standards



- Condition assessments
- Remedial treatment and examination
- Conservation analysis
- Museum conservation a leader in HE
- [#GreenConservation](#)
- Benchmark - ICOM-CC standards

- 1 The MRI triage is a decisive theory in achieving explicit objectives while acknowledging constraints (funding, time, capacity) to produce new knowledge that is impactful and sustainable for university museums within a professional services domain guided by a codified ethos.
- 2 The MRI triage is proposing to use the concept of Artology as an innovative hybrid research approach. It's intention is to permeate museum curation that customises specialised and expert skills, balancing people and academic efforts in order to drive transdisciplinary and inclusive curatorial practices.
- 3 The MRI triage is an innovative research iterative (multiple touchpoints) method that follows a set principles and ethics to allow for efficient and effective allocation of resources for research. The UP Museum research plans aims to incrementally introduce new research perspectives to develop museum collections, archive and conservation practices.

- Objects-based research
- Collections-based research
- Provenance research
- Archival research
- Digital archiving and digital curation
- Blur boundaries of archives and art
- Collections of global research interest
- With support from GLAM partners
- Benchmark- UMAC and ICA standards



Conclusion

The University of Pretoria Museum research and engagement in the academic landscape plays a critical role in advancing scholarship and the mission of the University of Pretoria. The UP Museums provide students, staff, external and international researchers with access to rare and valuable collections, as well as a unique study and safe environment for collaboration and new inquiry.

However, challenges such as research funding, research posts and balancing competing missions with engagement, exhibitions, collections and conservation priorities will need to be addressed to ensure the continued impact of museum research within the wider academic landscape. Stronger academic support and active use of the diverse art and heritage collections right on the institutional doorstep is needed to ensure the sustainability of the UP Museums and the high-value curated institutional collections and archives under their care and curation.