

NELSON MANDELA

UNIVERSITY

INSTITUTE FOR COASTAL
AND MARINE RESEARCH
(CMR)

QUARTER 4
NEWSLETTER

2023

CMR

COASTAL & MARINE
RESEARCH

NOTE FROM THE DIRECTOR

To our core team, members, researchers and supporters: thank you for all the research contributions and support provided. The success that CMR as an institute and the broader Nelson Mandela University has experienced would not be possible without your contribution and support. Thank you to the Management Committee and Advisory Board for your time and contributions.

We were pleased to have Professor Helmut Hillebrand from Oldenberg present our 4th quarter seminar and also present at our 2023 Research Symposium. As we wrap up the year, we would also like to acknowledge all our partners (i.e. SAEON, SAIAB, SAIMI, Nelson Mandela Bay Municipality, Department of Forestry Fisheries and Environment), our international visitors and partners as well as the communities that drive and enhance our activities.

On behalf of CMR, we wish you and your families a blessed festive break. We look forward to another year packed with impactful research and activities as we promote a better understanding of our coasts and ocean and sustainable development.

Dr Nomtha Hadi
CMR Acting Director



CMR QUARTER 4 SEMINAR

The Quarter 4 seminar was presented by Prof Helmut Hillebrand on the topic ***Are there tipping points for biodiversity change?*** Prof Hillebrand explored indications of threshold transgression and disproportional change in diversity in ecological data. He also addressed the scale sensitivity of biodiversity responses to environmental change and interpreted these in the context of tipping risks. This took place at the Ocean Sciences Campus on 8 November (82 attendees). The recording of the talk and presentation are posted on the CMR website: <https://cmr.mandela.ac.za/News-and-Events/Quarterly-Seminars>



RESEARCH SYMPOSIUM

The CMR research symposium, *Optimising Marine and Coastal Research for Global Sustainability*, took place on 24 November in the main conference hall on Ocean Sciences Campus. Dr Palesa Mothapo gave the welcome address, and Dr Denise Schael did the thanks and closure of the symposium. There were 9 speakers, including Dr Nomtha Hadi, Prof Nikki James, Prof Tommy Bornman, Prof Helmut Hillebrand, Dr Jessica Thornton, Mr Bayanda Laqwela, Dr Dylan Bailey, Dr Eckart Schumann and Dr Danica Marlin. There were 61 participants in attendance. The recording of the talks and the presentations are posted on the CMR website: <https://cmr.mandela.ac.za/News-and-Events/Symposiums/Symposium-2023>



INTERNATIONAL VISITS

Chinese Delegates

The CMR hosted a meeting with the Chinese delegation on 13 October. The purpose of the visit was to develop mechanisms for implementation of the recently signed MoU between the two universities. The discussions included modalities for collaboration in the strategic areas outlined in the MoU and the visit allowed broader engagement with various stakeholders at Nelson Mandela University. Dr Nomtha Hadi, Prof Patrick Vrancken, Prof Nikki James, Prof Tommy Bornman attended this meeting. The cooperation between Nelson Mandela University and the Ocean University of China will contribute to strengthening existing capacity development, training and education to link with the relevant supply and demand of skills required by the oceans sector through academic and higher education opportunities.



INTERNATIONAL VISITS

Professor Helmut Hillebrand

Professor Helmut Hillebrand was hosted by the CMR for the month of November 2023. During his visit he gave a CMR quarterly talk, presented a three-week course on biodiversity analysis to PhD students, met with CMR researchers at a roundtable event, gave an impromptu talk at the CMR Research Symposium, and met informally with numerous researchers and students.



INTERNATIONAL VISITS

Visit from the Ambassador of Norway

FishForce hosted the Norwegian Ambassador and a delegation from the Norwegian Embassy on 21 November. There was a ceremonial signing ceremony with the Vice Chancellor, and thereafter a meeting on Ocean Sciences Campus. The Norwegian Ambassador and a delegation met with Prof Tommy Borman (CMR & SAEON), Prof Nikki James (SAIAB), Dr Jessica Fraser (Business School), Ms Soraya Artman (SAIMI), Dr Tanya Wagenaar (represented Prof Patrick Vrancken), and Elbert Liebenberg (eNTSA).



SAMOS CONSORTIUM MEETING

The South African Master of Ocean Sciences (SAMOS) consortium meeting took place at Ocean Sciences Campus from 14-16 November. The purpose of the proposed Master of Ocean Sciences qualification is to empower students to acquire the knowledge, skills and competencies, attitudes, and values required to contribute to research and practices in the various fields of Ocean Sciences. A second aim is to develop the capacity in teaching Ocean Sciences at several South African universities. Academic staff from nine South African universities will collaborate in delivering the coursework component of the learning programme. Innovations in technological and analytical applications additionally will be taught by both South African, European, and other partners, ensuring students in the programme are exposed to up-to-date concepts, methods and technologies.



COP OAF END-OF-YEAR WORKSHOP

The workshop was conducted over two days, 29-30 November 2023. The workshop brought together work programme leads, researchers, and collaborators to engage with the ongoing work across the various work packages. The purpose was to explore synergies, discuss future goals, and optimise collaboration as the project approaches its final phase - end of 2024. The NRF project launched in 2020 and has progressed through multiple stages. Throughout the project, key milestones have been achieved and the timeline was revisited during the workshop, outlining the remaining tasks. Participants exchanged insights, fostering a deeper understanding of the multidisciplinary and interconnected nature of the project and laying the groundwork for the project's trajectory beyond 2024.



OTHER EVENTS

Ocean Law Group Seminar: A fair share of the ocean? Professor Vrancken was invited to give a talk at the Ocean Law Group Seminar, *A fair share of the ocean?*, in Sweden on 19 September. This seminar focused on different aspects of equity in relation to governance of the ocean. Professor Vrancken's talk was entitled *Equity and State Ocean Jurisdiction*.

Water Ways Conference

Professor Rose Boswell hosted this conference from 22-23 September. CMR Members, Dr Hayley Cawthra, Prof Rose Boswell, Dr Mia Strand, Dr Nina Rivers, Prof Bernadette Snow, Prof Juliet Hermes, Dr Elena Perez-Alvaro, Dr Zanele Hartmann, Dr Obinna Emmanuel Nkomadu and Dr Sharon Gabie all presented at the conference.



NRF-SAEON Webinar

Dr Lucienne Human gave a talk on *The Water Quality of the Knysna Estuary – A Water and Sediment Biogeochemistry Perspective* on 5 October. The talk was part of the SAEON Seminar Series.

MEMBER ACHIEVEMENTS

World Maritime University Graduation

CMR member, Samkelisiwe Danisa, enrolled as a MSc student at the World Maritime University in Sweden. The standard MSc programme is taught in Malmö for 14 months and divided into three terms, term 1: foundation studies, term 2: specialisations, and term 3: dissertation.

Samkelisiwe Danisa specialised in Ocean Sustainability, Governance and Management (dissertation title: *Involvement and effectiveness of coastal communities' input in the implementation of Marine Spatial Planning (MSP) in South Africa*). She graduated from this programme on 28 October 2023, in Malmö.

"I am very grateful to have been granted this opportunity to pursue my Masters degree at this prestigious university. I'm excited to see what the future has in store for me, and I hope to play a part in ensuring sustainable oceans as they are a huge part to both human life and the environment". - Samkelisiwe Danisa



MEMBER ACHIEVEMENTS

Three Minute Thesis (3MT) Competition

CMR doctoral student, Mia Strand, claimed the second runner-up position in the national 3MT competition, hosted in South Africa by the University of the Free State. She also took the runner-up position at the institutional level at Mandela University, where eight students were selected to compete.

Vice Chancellor's Excellence Awards

We would like to congratulate the following CMR members for receiving vice chancellor's excellence awards:

- Professor Magda Minguzzi - Research Excellence Award
- Professor Janine Adams - Faculty Researcher of the Year Award
- Tanya Wagenaar - Faculty Excellent Teacher of the Year Award
- Professor Magda Minguzzi - Engagement Excellence Award
- Dr Denise Schael - Professional, Administrative and Support Service Staff (PASS) Award (Peromnes level 5-7)



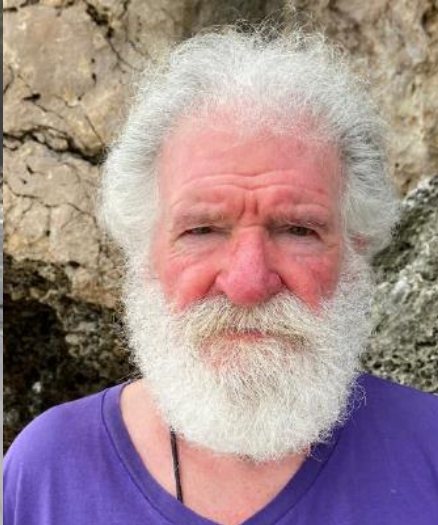
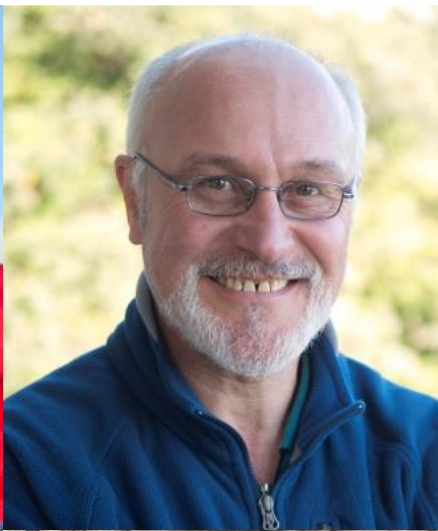
MEMBER OUTPUTS

1. Malongweni, NV, Rocke, E, Roberts, MJ & Giering, SLC. 2023. Spatial distribution of vertical carbon fluxes on the Agulhas Bank and its possible implication for the benthic nepheloid layer. *Deep Sea Research Part II: Topical Studies in Oceanography*, 212: 105334.
2. Le Gouvello, DZM, Heye, S, Harris, LR, Temple-Boyer, J, Gaspar, P, Hart-Davis, MG, Louro, C & Nel, R. 2024. Dispersal corridors of neonate sea turtles from dominant rookeries in the Western Indian Ocean. *Ecological Modelling*, 487: 110542.
3. Smit, KP, Bernard, ATF, Sink, KJ, Dyer, A, Lombard, AT & Heyns-Veale E. 2023. Identifying suitable indicators to measure ecological condition of rocky reef ecosystems in South Africa. *Ecological Indicators*, 154: 110696.



RESEARCH ASSOCIATES & HEAVA'S

In 2023 there have been 7 new research associates under the CMR, Dr Alistair McInnes, Dr Nina Rivers, Dr Chijioke Olisah, Dr Estee Miltz, Dr Jennifer Olbers, Dr Myriam Perschke and Dr Jackie Raw. Professor Tommy Bornman (ecology of coastal and offshore marine plants and protists), Professor Renzo Perissinotto (shallow water ecosystems) and Professor Susan Taljaard (marine water quality and estuarine management) were renominated as Honorary Professors under the CMR for additional 5 years. The Adjunct Professor nomination for Dr Matthew Dicken (marine conservation and fisheries management) and the Honorary Professor nomination for Professor Richard Barnes (ecology of coastal environments) and Professor Stephen Lamberth (fisheries research and management) were also accepted for 5 years.



TYPES OF RESEARCH

See the next page - The differences, similarities, advantages, and disadvantages between interdisciplinary, transdisciplinary, and multidisciplinary research.

It's essential to recognize that these distinctions are not rigid, and research projects often lie on a spectrum between these approaches. The choice of which approach to adopt depends on the nature of the research problem, available resources, and the level of integration needed to address the issue effectively.



Aspect	Interdisciplinary Research	Transdisciplinary Research	Multidisciplinary Research
Definition	Integrates knowledge and methods from different disciplines to address a specific problem or question.	Goes beyond interdisciplinary research by creating a holistic approach that integrates knowledge across disciplines, often involving collaboration with stakeholders from various sectors.	Involves multiple disciplines working independently on a common topic or problem, with limited integration of their methods and approaches.
Focus	Addresses complex problems that require insights from multiple disciplines.	Focuses on real-world problems that may not fit neatly within the boundaries of traditional disciplines.	Studies a specific problem or topic from different disciplinary perspectives without necessarily aiming for integration.
Collaboration	Collaboration between different disciplines is common, but the degree of integration may vary.	Involves collaboration between academia, industry, policymakers, and other stakeholders to create actionable solutions.	Less emphasis on collaboration; researchers from different disciplines work independently.
Integration of Methods	Integrates methods and approaches from different disciplines to create a comprehensive understanding of the problem.	Encourages the synthesis of methods and theories to provide a more comprehensive understanding of the problem.	Each discipline uses its own methods, leading to limited integration of approaches.
Advantages	<ul style="list-style-type: none">Offers a comprehensive understanding of complex issues.Promotes creativity and innovation by combining diverse perspectives.Tackles real-world problems effectively.	<ul style="list-style-type: none">Addresses complex, real-world problems holistically.Fosters collaboration between stakeholders, leading to more practical solutions.	<ul style="list-style-type: none">Allows in-depth exploration of a problem from multiple angles.Maintains the depth of disciplinary expertise.Less time-consuming than true interdisciplinary or transdisciplinary work.
Disadvantages	Requires effective communication and collaboration between disciplines, which can be challenging. May face resistance from traditional disciplinary boundaries.	Requires significant time and effort to foster effective collaboration between diverse stakeholders. Difficulties in integrating diverse knowledge systems.	May result in fragmented and isolated findings. Solutions may not be as comprehensive as in interdisciplinary or transdisciplinary research.

SAVE THE DATES – 2024

J

J

F

A

1 - MPA Day
Event
30 - Women's
Month Event

M

12 - Q1 Seminar

S

30 - Heritage
Month Event
5 - Q3 Seminar
26 – WMD Event

A

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M

N

5 - Q4 Seminar
15 - Research
Symposium

J

5 - Q2 Seminar
8 - WOD
Competition

D

CMR PUBLICATIONS

Scan the below QR codes to view the CMR expertise booklet and the CMR glossy report.

CMR Expertise Booklet



CMR Glossy Report



OCEAN SCIENCES & FISHFORCE PUBLICATIONS

Scan the below QR codes to view the Ocean Sciences brochure and the FishForce newsletter.

Ocean Sciences Brochure



FirshForce Newsletter



CMR SOCIAL MEDIA

Social Media Statistics

Website (<https://cmr.mandela.ac.za/>)

Page views/visitors (2023) – 72 766

Facebook

- Followers – 525
- Likes – 478
- Reach (2023) – 2450
- Visits (2023) – 801

Instagram

- Followers – 324
- Reach (2023) – 336

Twitter

- Followers – 234
- Tweet Impressions (2023) – 4691

LinkedIn (<https://www.linkedin.com>

[/company/institute-for-coastal-and-marine-research/](https://www.linkedin.com/company/institute-for-coastal-and-marine-research/))

- Followers – 2
- Views - 26

NELSON MANDELA
UNIVERSITY

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