

NELSON MANDELA  
UNIVERSITY



# Term 3 Newsletter

The **Institute for Coastal and Marine Research (CMR)** hopes that all of our members and their families are well, healthy, safe and warm!

Despite everyone's best efforts to return to normality and to figure out how to make the year a success, 2020 seems to have a surprise hidden around every corner and as we enter each new month... COVID-19 still dominates (now more than ever), and a few days of load shedding posed additional challenges!

In the midst of all the chaos and uncertainty, the CMR Office is weathering this storm and is making the best of the current situation. We hope that our members enjoy seeing what we have been up to, and what we plan for the remainder of the year. We wish our members all the best as preparations for term 3 activities are underway.

A warm welcome to new members!



# Rebranding

The CMR Office used this Lockdown time to refresh its appearance.

Members will notice the **CMR's logo** at the top of this newsletter sporting a new look that reflects the Nelson Mandela University's official colours. An e-mail was sent to CMR members, where various formats of this refreshed logo, an updated CMR letterhead and updated PowerPoint templates (16:9 & 4:3), were shared. Our Communications Assistant is working on restructuring the **CMR website**, where these logos and templates are available for download too. The new-look website will be shared with members as soon as possible!

**We kindly request that all members use the updated versions of the CMR logo and templates only.**



# Celebrations

## Publication

We congratulate Professor Pierre Pistorius and MAPRU team members on their publication in **Nature**! This is a tremendous achievement, worthy of celebration! The academic citation is as follows:

Hindell, M.A., Reisinger, R.R., Ropert-Coudert, Y. et al. Tracking of marine predators to protect Southern Ocean ecosystems. *Nature* **580**, 87–92 (2020).

<https://doi.org/10.1038/s41586-020-2126-y>



## Legal Appointment

We congratulate CMR Advisory Board Member and Executive Dean of Law, Professor Avinash Govindjee, on his appointment as one of two legal academics designated by the South African Law Deans' Association (SALDA) to serve on the **South African Judicial Education Institute** (SAJEI).



## Award

Professor Lynnath Beckley may be familiar to many CMR members. She completed her undergraduate degree at the Nelson Mandela University when it was still the University of Port Elizabeth, and has collaborated with many of our researchers on larval fish and oceanographic work. Professor Beckley is based at Murdoch University and works closely with the Marine Management Research Group there.

Professor Beckley is congratulated on recently receiving the prestigious **Australian Marine Sciences Association (AMSA) Jubilee Award** for her career contribution to marine research in Australia.

Please see this link for an article on this fantastic achievement:

<https://www.murdoch.edu.au/news/articles/murdoch-marine-scientist-receives-prestigious-career-award>

## SADC Centre of Excellence

We congratulate the FishFORCE team on being identified by the Southern African Development Community (SADC) and its Member States as a regional **Centre of Excellence** for the training of Monitoring, Control and Surveillance and other law enforcement officers operating in the fisheries sector.

## CMR Glossy Report

After much anticipation, the CMR can now share its **2019 Glossy Report** with members. This is our longest and most impressive report to date. We sincerely thank all our members for their continued research and engagement efforts, and constant support.

The 2019 Glossy Report is available for download from this link:

<https://cmr.mandela.ac.za/cmr/media/Store/documents/About%20Us/CMR-2019-Glossy-Report.pdf>



- 2 List of Abbreviations
- 3 Messages from the Directors
- 4 CMR Overview
- 5 Historical Background
- 6 Pillars
- 7 Objectives & Strategies
- 8 Goals & Targets
- 9 Activities
- 10 Governance Structures
- 14 Summary of Outputs
- 17 Research Structures
- 18 Research Themes
- 19 Marine Apex Predator Research Unit (MAPRU)
- 22 Research Diving Unit (RDU)
- 24 Research Chairs
- 26 Achievements & Highlights
- 30 Awards
- 31 Highlights
- 33 Rated Researchers
- 36 Communicating Research
- 35 Academic Journal & Book Publications
- 44 Reports, Policies & Proceedings
- 45 Media
- 46 Engagement
- 47 Academic Engagement
- 57 Ocean Sciences Campus
- 59 Community Engagement
- 62 International Collaborations & Visits
- 71 Project Funding & Output
- 78 Financial Statement
- 79 Income Statement
- 80 Succession & Sustainability
- 81 Faculty Highlights
- 91 Acknowledgements
- 92 Summary of Institute Outputs & Activities: 2019
- 97 Contact Details

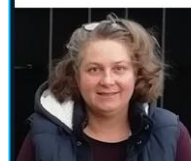


I am amazed by the passion and dedication expressed by our CMR members and partners. The CMR as an entity has grown significantly and our constant involvement in trans-disciplinary ocean and coastal science, mentorship and engagement means that the CMR is very busy. A highlight for 2019 was winning the **Nelson Mandela University Engagement Excellence Team Award**. This was a humbling experience for me, since this would not have happened without our members. Another highlight is the growing collaboration with the Helmholtz Institute for Functional Marine Biodiversity (HIFMB) at Germany's University of Oldenburg. The HIFMB brought an air of positivity so desperately needed in light of "no light" in our country and the burnout that so many of our members faced during 2019. The CMR is a team, but I must acknowledge the dedication and hard work that Liza puts into the CMR and promoting the wonders of the Ocean Sciences Campus. I would also like to acknowledge the contributions and support offered by the DVC: RII Professor Andrew Latch and support offices: Dr Kowal Mollizai and Dr Denise Schaal. Enjoy our 2019 annual report, and here is to a successful 2020!

The vision of the CMR that was set in 2016 is revisited briefly to measure our progress. The CMR is indeed a **leading** coastal and marine research institute, as evidenced by the exponential increase in the number of national and international funded projects. Published research in high impact journals, such as *Nature*, indicate our **cutting-edge** outputs. The CMR works across the science-policy-practice forum in many fields to ensure that our research **resonates** the needs of South Africa. Our members are engaged with all levels of government – in 2019, significant inputs were made to the National Biodiversity Assessment. Collaboration took place with Norway, IORA, Germany, the UK, and Sweden. These activities provide opportunities for academics and students alike. **Capacity** is built with young researchers leading new initiatives. All members are congratulated on their significant outputs. The CMR showed exceptional growth in terms of external funding in 2019, and this would not have been possible without the dedication and resourcefulness of our Director. Thank you, Berry, for this tremendous effort! You, together with the support of CMR members, have successfully placed our Institute and University on the global stage.

Berry Snow  
Director

Janine Adams  
Deputy Director



## Professorial Appointments

The CMR Office is delighted to share the news of new professorial appointments under the CMR! We look forward to increased collaborations and successes with these individuals.

### Professor Lorien Pichegru

Lorien's marine ecology work, focusing on seabird foraging ecology and life history traits in relation to prey availability and competition with industrial fisheries, forms a pivotal field of research under the CMR's Marine Apex Predator Research Unit (MAPRU). Lorien became affiliated to the CMR in 2015 when she was registered as a Research Fellow. She coordinates marine waste research under the CMR, she serves on our Management Committee as a representative of this critical field of research, and she facilitates and leads many community engagement initiatives under the CMR. We congratulate her on her appointment as an **Adjunct Professor!**

### Professor Juliet Hermes

Juliet is an oceanographer who places emphasis on transdisciplinarity in general marine research, the projects that she leads, her strategic approach to project development, capacity development, and pursuing diverse regional and international collaborations. She is the current Manager and Principal Oceanographer at the SAEON Egagasini Node, based in Cape Town. Juliet's journey with the CMR started when she was appointed as an Advisory Board member in 2016, and she is now an important collaborator on many of the CMR's internationally-funded projects. We are delighted that Juliet is appointed as an **Honorary Professor** with the CMR!

### Professor Peter Jones

Peter is a Reader at the University College London's Institute for Environmental Policy. His expertise in the field of natural resource governance (focused on the governance of human use on marine ecosystems, marine protected areas and marine spatial planning) drew interest from the CMR. This led to Peter being one of the invited international key speakers for the Transformed and Transformative Ocean Governance Conference (TTOGC), hosted by the CMR in January this year. This conference gave CMR researchers the opportunity to engage with Peter on critical ocean governance matters, and he expressed a strong interest in adding South African marine protected area and marine spatial planning case studies to his research portfolio. We welcome him to the CMR Team as an **Honorary Professor!**



# Past Events

## UN Presentation

Dr Bernadette Snow delivered a presentation on *COVID-19 impacts on the South African small-scale fisheries sector* on 22 May. This formed part of the 2020 United Nations-Nippon Foundation Alumni Network's first online session on COVID-19 and its implications for ocean affairs.

## World Oceans Day Competition

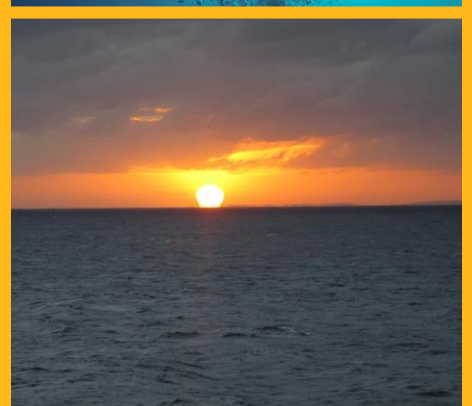
World Oceans Day was celebrated on 8 June 2020. The CMR hosted a competition with three categories: Artwork, Poetry, and Images. A total of 32 entries were received. Winning entries are showcased at the end of this newsletter.

## Celebrating the Whales Festival

Since 2018, Raggy Charters has organised a festival, hosted at the Pine Lodge Resort on 16 June, to welcome Humpback Whales to Algoa Bay as they travel along their breeding migration route. This event includes a number of research and conservation organisations who communicate marine research and environmental awareness to members of the public. Due to COVID-19 event restrictions, this 2020 event was adapted for an online audience. The Raggy Charters Facebook page uploaded posters and video contributions from participating organisations throughout the day on 16 June. The CMR contributed two posters: one providing an overview of the CMR (elaborating on the institute's vision, mission and values; research, training and consulting; and contact details) and another edited student conference poster (communicating passive acoustic monitoring of coastal dolphins in Plettenberg Bay).

## BOATS Tournament

To celebrate Mandela Day on 18 July, CMR member and Department of Computing Sciences researcher Professor Jean Greyling, hosted an online BOATS Tournament. BOATS is a mobile app and board game developed by Professor Greyling and his student team. This game teaches coding and critical thinking skills to children, whilst educating them about plastics pollution in the ocean. A total of 95 schools and non-profit organisations participated in this event.





# Upcoming Events

## Women's Month Celebration

After the success of the Women's Month event that the CMR co-hosted with the Department for Research Support and Management in 2019, these offices are co-hosting another event to mark this occasion for 2020. This event will take place via **Zoom** from **09:00-12:00** on Friday, **21 August**. The invitation and programme will be communicated via the CMR mailing lists, CMR social media platforms and other communication channels, in due course! Keep an eye on these communication channels for information.

The CMR follows the theme for International Women's Day (8 March), which is **#EachForEqual**. We hope that our members, particularly our female scientists, will join us for the morning to discuss and tackle difficult topics around equality.

## WildOceans Seminar

The CMR was set to host WildOceans for a *Youth for Sharks Spark and Environmental Law and Ocean Protection with Kirsten Youens* event on 12 August at the North Campus Conference Centre. COVID-19 has resulted in the cancellation of this on-campus event. WildOceans is still assessing how to proceed with this event, and the CMR Office will keep members updated on any developments.

## CMR Research Symposium

The CMR's annual Research Symposium was scheduled to be hosted at the Nelson Mandela University North Campus Conference Centre on Wednesday, 11 November 2020. The safety of guests needs to be prioritised, and Conference Centre Management made the difficult decision to cancel all on-campus events for the remainder of 2020. The CMR Office is conscious of researcher fatigue and burn-out, especially as the academic year advances and progressively changes in accordance to University and Governmental regulations put in place as the COVID-19 pandemic develops. The academic year will continue deep into December, and the CMR Office is also aware of numerous online commitments in place for members, and that members may wish to catch up on travel or field work towards the end of the year should these be possible. The strategic importance of networking opportunities provided by an on-campus event are also realised.

In light of the above and not wanting to add to online fatigue and stress, the CMR Office has decided that it will not host a Research Symposium this year. Instead, we will plan an exciting two-day event for 2021, once the pandemic is more under control.

**We look forward to celebrating Research Chairs at our 2021 Research Symposium!**

# Projects

Although Lockdown has resulted in the cancellation of many plans and the re-imagining of others, CMR Projects have thrived under the increased attention. Below is a brief update on the CMR Office's current projects.

## CMR Audio Project

Dr David Pattaway has joined the CMR Team as a Development Studies Post-Doctoral Research Fellow. He leads the CMR Audio Project, which endeavours to introduce CMR members, the University community, national and international stakeholders, and the public to key players of the CMR, as well as various aspects of CMR Research. This is done through audio recordings of interviews. To date, interviews have been conducted with Dr Bernadette Snow (CMR Director), Professor Janine Adams (CMR Deputy Director) and Dr Denning Metuge (Post-Doctoral Research Fellow with the Research Chair: Law of the Sea and Development in Africa). Interviews can be accessed through this link:

[https://archive.org/details/@the\\_cm\\_r\\_audio\\_project?fbclid=IwAR1Oa7P4CmwTKQqQgxoU4XhbXRLK8gYlyG2Mo5ZY5bNvGu\\_r3RTSnkeg45U](https://archive.org/details/@the_cm_r_audio_project?fbclid=IwAR1Oa7P4CmwTKQqQgxoU4XhbXRLK8gYlyG2Mo5ZY5bNvGu_r3RTSnkeg45U)

## CMR CoP Projects

In the Term 2 Newsletter, news was shared on the successful *Western Indian Ocean: Assessing the applicability of the oceans-account framework (OAF) Community of Practice (CoP) Project*. Work on this project is progressing well, and the CMR Office has appointed a dedicated assistant to administrate various components of this project. The Algoa Bay CoP Project's proposal for a second phase (2020-2021) was successful, and we are excited to continue working in this project. The CMR Office will continue to provide administrative support to this project.

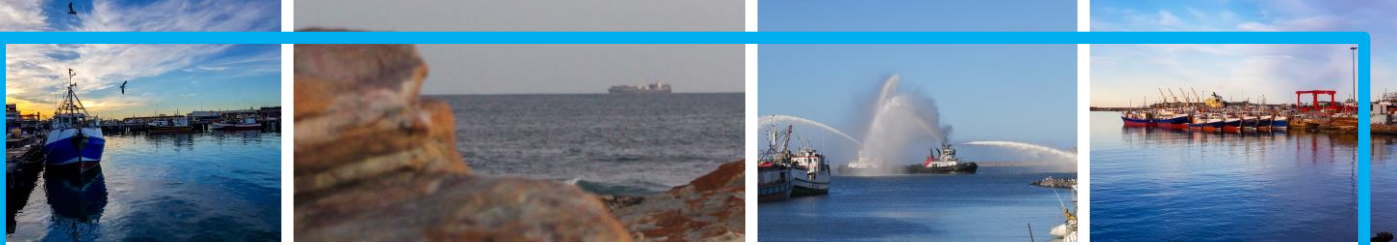
## WIOMPS Project

The CMR will adopt a SFFA-UNEP (United Nations Environment Programme – Small Scale Fishing Agreement) project which entails developing a marine spatial planning strategy for the Western Indian Ocean (WIOMSP Project). This is led by Professor Mandy Lombard and Dr Bernadette Snow.

## iAtlantic Project

This European Union-funded Horizon2020 project is a multidisciplinary research programme that seeks to assess the health of deep-sea and open-ocean ecosystems across the full span of the Atlantic Ocean. Professor Kerry Sink leads a component of this project's research under the CMR.





### One Ocean Hub (OOH)

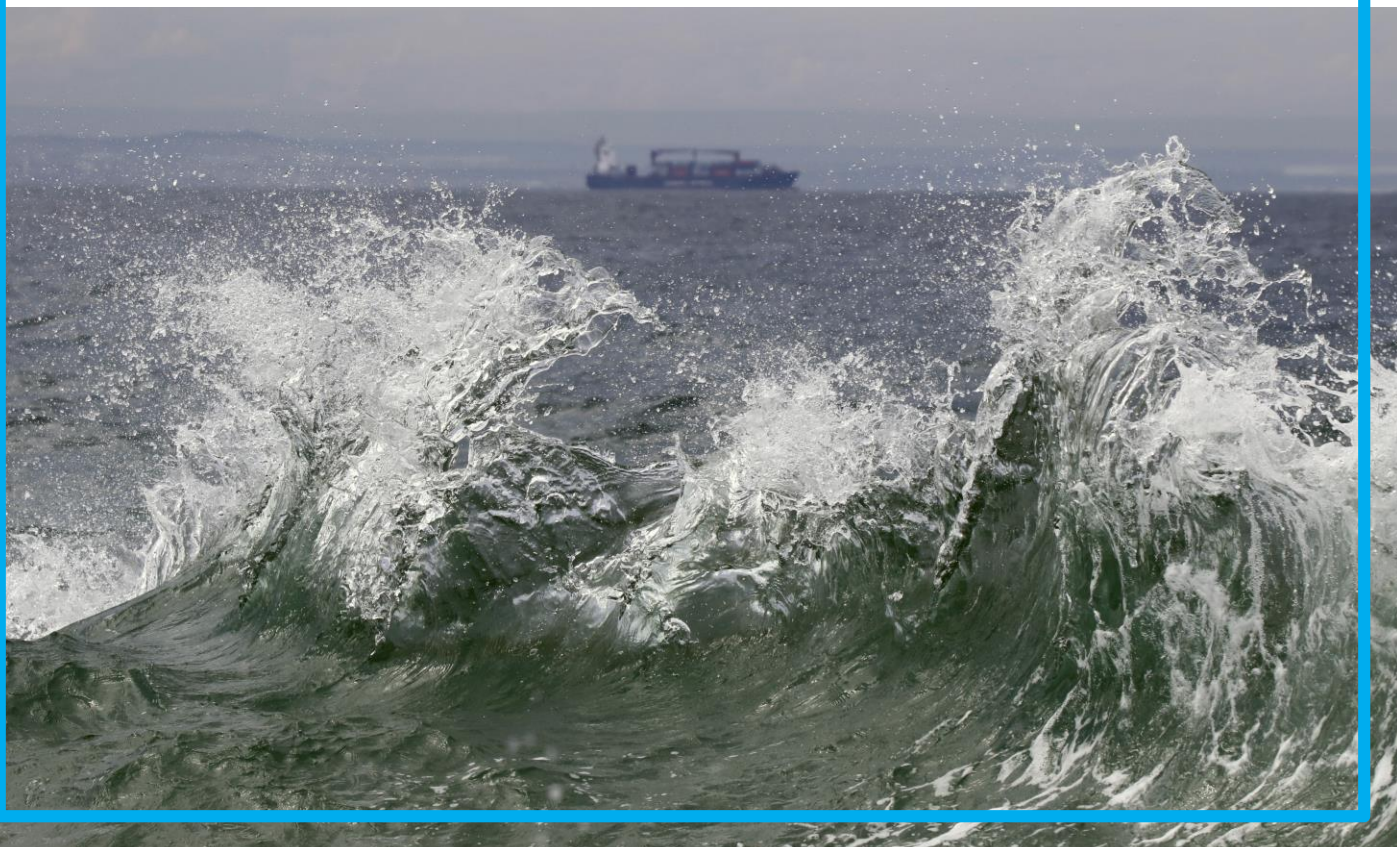
The OOH Project aims to transform our response to the urgent challenges facing our ocean. Its research seeks to bridge current disconnections in law, science, and policy, and integrate governance frameworks to balance multiple ocean uses with conservation. Dr Bernadette Snow was elected as *South African In Country Director* for this project. This cross-disciplinary research and engagement programme is continuing with COVID-19 adaptation to online platforms and using cellular technologies for stakeholder engagement.

### CICLICO

This project is linked to the prestigious Helmholtz Association Centre (GERICS) in Germany and the Universidade Nova de Lisboa in Portugal. It develops climate services for coastal cities, and builds cities that are resilient to climate change. It has been severely impacted by COVID-19. However, mitigation measures are in place and with advice from the Advisory Board, the project team's online methodology has been employed and the scope and scale for the project was reduced.

### MARSICO

In collaboration with the Helmholtz Centre for Functional Marine Biodiversity and the University of Oldenburg, the MARSICO Project aims to develop global knowledge for understanding the consequences of human actions for coastal and ocean sustainability. This project was officially launched on 15 June, and workshops were attended. SA partners are still waiting to receive funding, but collaborations continue and the project will progress. COVID-19 is impacting on the travel and engagement components of this project.





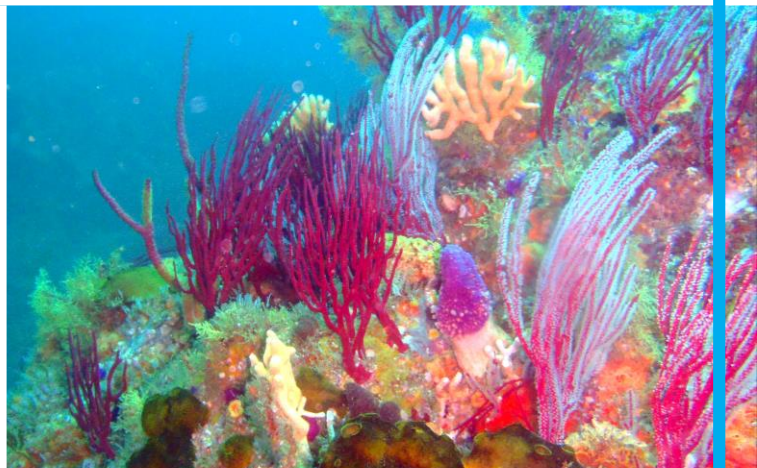


### BCLME-EBSA

The Benguela Current Larine Marine Ecosystem – Ecologically and Biologically Significant Areas (BCLME-EBSA) Project has been administered by the CMR since its inception in 2016. The no-cost extension of the contract with the funder – the German Development Corporation (GIZ) – came to an end in April 2020. The GIZ requested a with-cost extension of the project, which was approved. This project, under the leadership of Dr Stephen Holness, now runs until 31 January 2022. As part of the extended contract, an additional Namibia-based expert environmental consultant was contracted.

### DMRE Collaboration

The Department of Mineral Resources and Energy (DMRE) visited coastal universities in 2018 and 2019 to identify the best research partners to work on offshore and coastal mining research. Through the CMR, the Nelson Mandela University and the University of Cape Town (UCT) were selected as the successful research partners. The CMR and UCT will collaborate with the DMRE by producing research on impacts, legislation and social aspects linked to coastal and offshore mining, towards developing guidelines that support environmentally sustainable mining practices grounded in peer reviewed research. This research is directly applicable to the development of the country.



# Ocean Sciences Campus

Guided by Governmental directives and in accordance with the development of the COVID-19 pandemic, the University is putting various measures and protocols in place on its campuses to **facilitate the safe return of staff and students**. Although access is very limited and only for the purposes of performing critical tasks and seeing to essential services, we are pleased that some of our Ocean Sciences Campus (OSC) staff and students can resume some activities, albeit limited.

The CMR Office has done all in its power to make this transition onto the OSC as seamless as possible. The CMR Office supports four Research Chairs and research partners external to the University, and sends regular updates on developments to the affected staff members and students.



## CMR Social Media

A reminder that the CMR now has a number of social media profiles!  
Find and follow us here:

**Facebook**

**Institute for Coastal and Marine Research – CMR**

**Twitter**

**@cmr\_mandelauni**

**Instagram**

**@CMR\_MandelaUni**

Please share our posts, and contact our Communications Assistant at [Busisiwe.Ndlovu@mandela.ac.za](mailto:Busisiwe.Ndlovu@mandela.ac.za) if you have anything newsworthy to share.



# Meet the Team

The CMR Office welcomes Ms Taryn Smit and Ms Ammaarah Abrahams as new team members! The CMR Office now consist of the following staff and positions:

- **Director:** Dr Bernadette Snow
- **Deputy Director:** Professor Janine Adams
- **Research Assistant:** Liza Rishworth
- **Finance Officer:** Zureena Bloew
- **Project Data & Stakeholder Coordinator:** Hannah Truter
- **Communications Assistant:** Busi Ndlovu
- **Research Chairs Assistant:** Taryn Smit
- **OAF CoP Assistant:** Ammaarah Abrahams

We are delighted that Mrs Bloew will remain with the CMR Office team until November to provide part-time financial assistance. The CMR Office will appoint another part-time Finance Officer in October to receive training, particularly for project audits. A full-time appointment will follow for this individual for 2021.

Remote working conditions enforced by COVID-19 has forced the CMR Office to put the One Ocean Hub Project South African Programme Manager appointment, on hold.

## Housekeeping

CMR members are kindly reminded to include the CMR in all affiliations and addresses. This is particularly important with regards to academic publications. Please use the full **Institute for Coastal and Marine Research** title.



# Thank You

The CMR Office extends its condolences and well wishes to its members and their families who have been impacted by COVID-19. Many of our members have suffered losses in their families or are in homes needing to isolate due to members affected by this virus. The impact has come very close to home, and we wish everyone great strength as the physical and emotional impacts of COVID-19 are battled. We wish you all the best as we enter the third term.

If you have any news to share, please contact us for inclusion in the next newsletter, or sharing on social media pages!

Kind regards,

*Berny Snow*

CMR Director

## Contact Information

**Berny Snow: CMR Director**

E-mail: [Bernadette.Snow@mandela.ac.za](mailto:Bernadette.Snow@mandela.ac.za)

**Liza Rishworth: CMR Research Assistant**

E-mail: [Liza.Rishworth@mandela.ac.za](mailto:Liza.Rishworth@mandela.ac.za)

**Busi Ndlovu: CMR Communications Assistant**

E-mail: [Busisiwe.Ndlovu@mandela.ac.za](mailto:Busisiwe.Ndlovu@mandela.ac.za)

## Institute for Coastal and Marine Research (CMR)

Ocean Sciences Campus, Nelson Mandela University  
Gomery Avenue, Summerstrand, Port Elizabeth





# Institute for Coastal & Marine Research (CMR)

## World Oceans Day 2020 Competition Winners

The **Institute for Coastal and Marine Research (CMR)** is a leading research institute that facilitates transdisciplinary ocean and coastal sciences research. The CMR is based at the Nelson Mandela University's Ocean Sciences Campus.

8 June is celebrated as **World Oceans Day** annually and globally. On this day, people around the world honour the ocean. To mark this occasion, the CMR hosted a competition!

### *Category 1: Art*

Paintings and drawings inspired by the ocean

### *Category 2: Poetry*

Poems paying tribute to the ocean

### *Category 3: Images*

Spectacular moments of the ocean captured in photographs

Winners are announced on the next pages!

# Winners Category 1: Artwork

1st

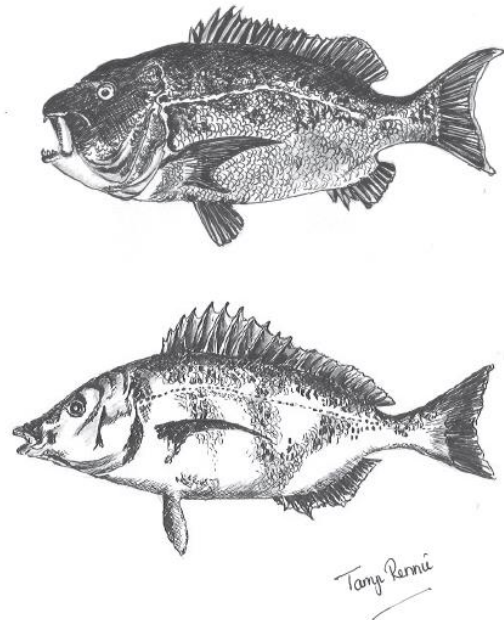


Dr Nikki James

Shelley Beach, Kenton-on-Sea

Oil on Canvas painting, 150 x 300mm

2nd



## CATEGORY 1: FISH IN LOCKDOWN - PENCIL AND BLACK PEN

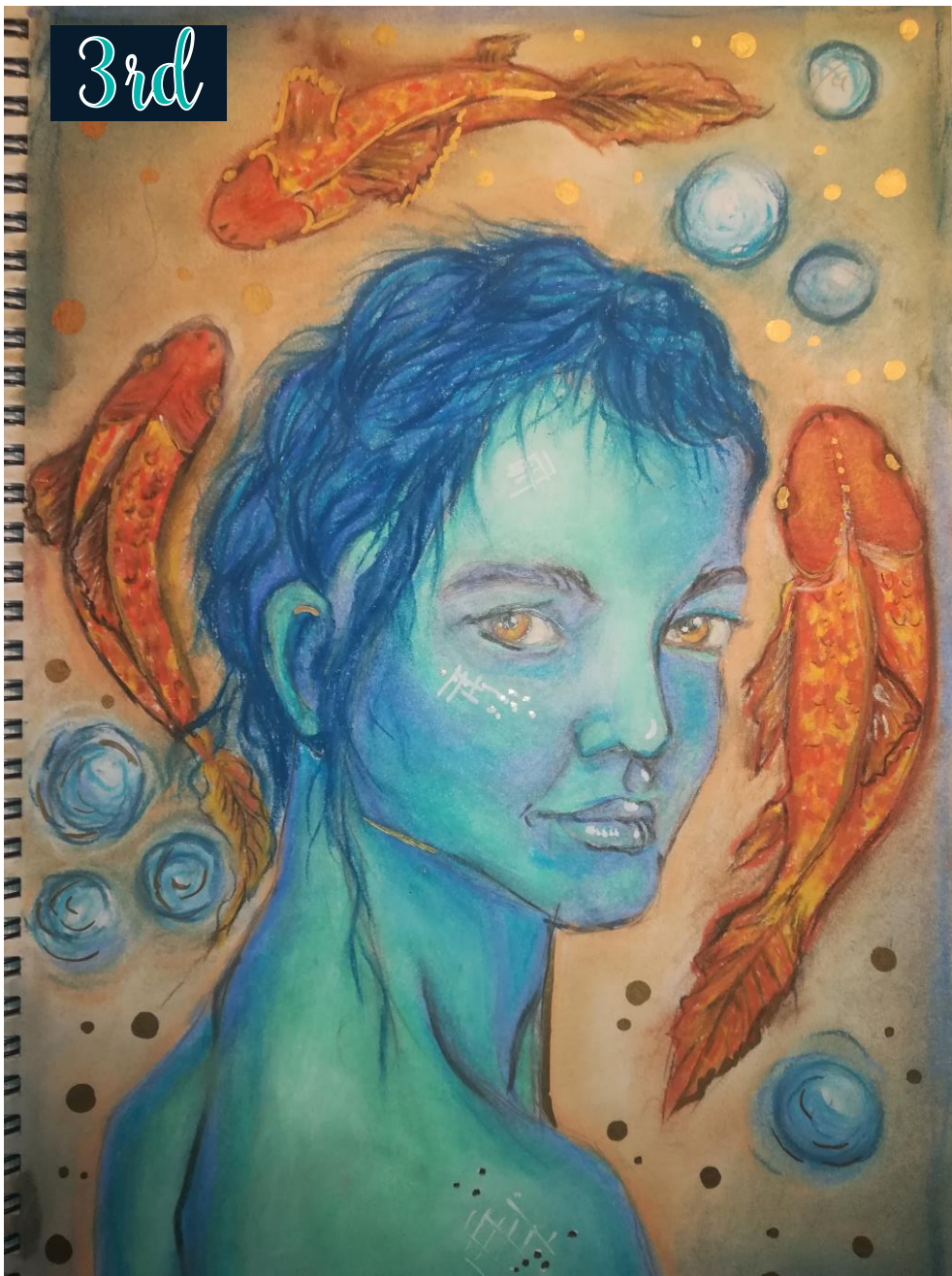
Both the Black Steenbras and White Steenbras are endemic to our South African shores with the White Steenbras being highly endangered. My concept was to bring these beautiful sea creatures to life in our homes, as interior spaces that beautify and provide visual pleasure, as much as they do in our magnificent oceans. Let's hope they've been prospering during lockdown.

Medium: pencil and black pen, Adobe Photoshop

Illustrator and Designer: Tarryn Rennie, Department of Media and Communication, Nelson Mandela University

Tarryn Rennie

3rd



**Mari Swartz**

**Warm Ocean Glow**

Soft chalk pastel on A4 paper

*This artwork helped me to combat lockdown blues. It reminded me of the alluring nature of the ocean and I created contrast by adding some brightly coloured orange fish. I wanted to capture the feeling you get when you stare at the waves rolling in – to capture the inviting essence of the turquoise waters on a perfect day at the beach.*



# Winners Category 2: Poetry

Nadine Ramiah

1st

## Beautiful Shades of Blue

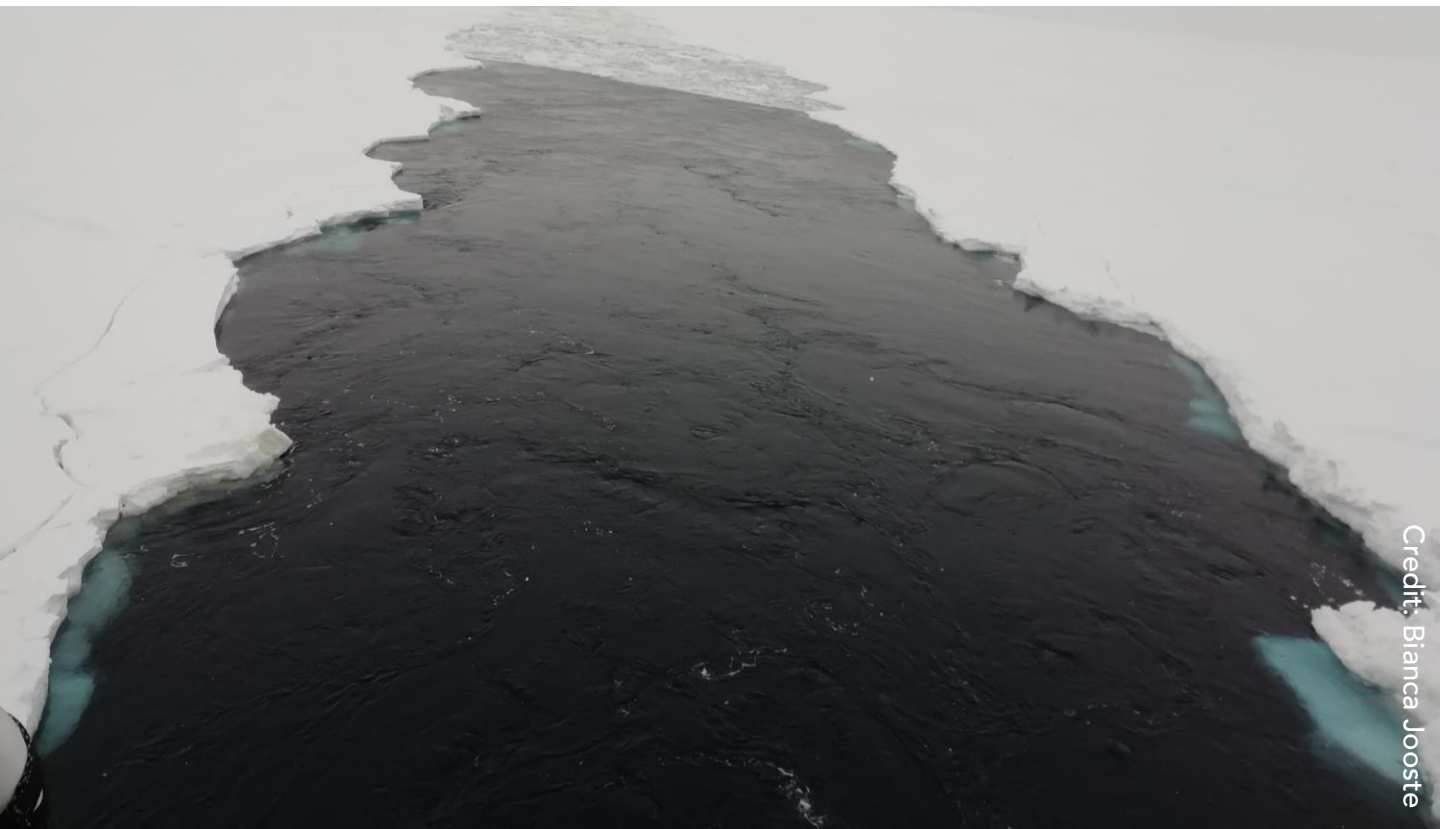
A peaceful breeze travels from city to city,  
Who cannot marvel at Your astounding beauty?  
Your big rocks represent the strength of Your character,  
Your aquatic life shows us the perfection of nature.

A fun day of relaxation to a day surfing on Your waves,  
You heal and help us in so many different ways.  
Your sound is very distinct and can be heard from a distance,  
Though some of Your creatures are extinct – You still shine showing perseverance.

We sometimes take You for granted,  
Oil, litter and pollution is not what You wanted.  
The killing of your endangered species has wounded You.  
But You have somehow survived and the wounds have moulded You.

I salute You for Your courage,  
And I apologise for all You have been through.  
You are so marvellous Dear Ocean,  
With all your Beautiful Shades Of Blue.

Image Credit: Leila Rouhani



Credit: Bianca Jooste



## Lwandlekazi: A Poem to Honour the Ocean

Lwandlekazi,  
 Khayakazi lezilwanyana nezityalo,  
 Usisityebikazi,  
 Sendalo.

Ubukho bakho buvulel'intlaninge  
 yemisebenzi,  
 Bugxoth'ikat'eziko,  
 Bukhulise noqoqosho lwezizwe ngezizwe.

Uliqhawekazi,  
 Eliqum'iindidi zobuhle,  
 Ubuhle bakho abunakugqagqaniswa,  
 Futhi abunakushwankathelwa,  
 Kuba abugqibeki.

Ubukho bakho bukhulisa icandelo lophando,  
 Bandise ulwazi ngawe,  
 Bakhe nobuhlobo phakathi kwezizwe.

Ukuba ubusisiqhamo,  
 Bendizakutsho ukuba uqhamile,  
 Kanti ukuba ubuyintsimi,  
 Bendizakutsho ukuba uchumile.

Aah! Aah! Aah! Lwandlekazi  
 Maz'enethole kuwe,  
 Inene sibamba ngazo zozibini kuwe,  
 Lwandlekazi.

Umoya wakho uzob'ozza  
 umphefumlo,  
 Ungcib'intliziyo echachambileyo.  
**Lwandlekazi,**  
 Ulichiza elingaphez'ukuphilisa,  
 Wawuphilisa emandulo,  
 Ukanti nangoku usaphilisa.

## English version and explanation of the poem

Ocean,  
 Home of animals and plants,  
 You are rich with nature.

You are the warrior,  
 Embodying a rich biodiversity and beauty,  
 Your beauty cannot be compared to anything.

If you were a fruit,  
 I would say that you are so fruitful,  
 If you were a garden,  
 I would say that you are so fertile,

Your breeze brings healing to many souls and hearts,  
 Ocean,  
 You are the medicine that heals and restores.

Your presence creates jobs to many and thus combating poverty,  
 You boost the county's economy,  
 Your presence opens research opportunities for many,  
 And enhance our knowledge about you,  
 And you build relationships amongst different countries.

Aah! Ocean,  
 We celebrate and honour you.

# Her Love

By Bianca Jooste

The ocean spoke to her soul, calling her near with every breathe it had within it  
Loving every second spent together, his every wave breaking into her existence  
Night time romance would bring magic, as phytoplankton would shine as bright as  
her eyes

And the day- majestic creatures, wishing that they would swallow her whole

Intrigued and moved, she followed him like Langrangian

She fell inlove with his complexity, exploring his every layer

His personality was as diverse as the creatures of the Great Barrier

A soul warmer than the tropics and eyes as cold as ice

He had so much life to offer, but life treated him cruelly

Only offering him fibres and fragments, little by little destroying his light

Like the Coriolis, he deflected her away from his pain to provide peace to her heart,

But being without him left hole in her heart, as deep as ocean trenches ever since  
they fell apart

# Winners Category 3: Images

1st



**Muhammad Bayat**  
**Into the Wild Blue Yonder**

*These "biogenic reefs" are made of stabilised sediments. The makers of which are tube worms called polychaetes. It takes a unique mind to appreciate the diversity of polychaetes. There are around 10 000 species and have adapted to survive in a great range of marine habitats including hydrothermal vents, coral reefs and the open ocean. Interestingly polychaetes and their relatives have survived 5 mass extinctions. We are truly lucky to see these colour-rich reefs on our Durban rocky shores. Umhlanga, Durban.*

2nd



**Natalie Dos Santos**  
**Journey to the Unknown**

*A loggerhead turtle hatchling stops to take a breath on its way from its nest to the ocean at Bhanga Nek Beach, KwaZulu-Natal. On entering the ocean, turtles are said to begin their 'lost years', where their whereabouts are largely unknown until they are much older.*



3rd



**Natalie Dos Santos**  
**Ocean Protector**

*A Blacktip Shark (Carcharhinus limbatus) glides gracefully through sunlit waters at Aliwal Shoal, KwaZulu-Natal. They play a major role in keeping our oceans and reefs healthy. It is always wonderful seeing them in the water.*