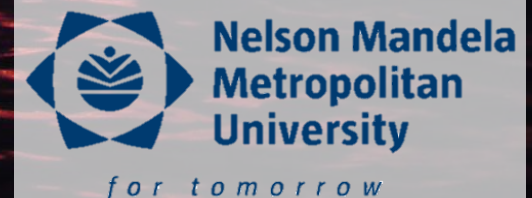


Institute for Coastal and Marine Research (CMR)

Research Symposium
20 April 2017

Impact of Coastal and Marine Research

Director: Prof Janine Adams





HISTORY

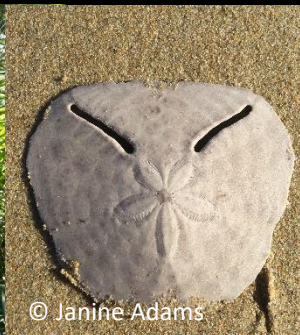
- 💧 40 years of coastal research - UPE in the early 70's
- 💧 Institute for Coastal Research established 1983
 - Funded by DEA, later SAB, environmental consulting
- 💧 Establishment of CMR - university-wide, reporting to the DVC: R&E



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Vision

Be a leading *marine sciences institute*,
conducting cutting-edge research,
building capacity and advancing our understanding of the
coastal & marine environment,
to serve the needs of South Africa, the continent and
beyond in a sustainable manner.



CMR

Institute for Coastal and Marine Research

Director & Deputy Director

Secretary

Admin Officer

Head RDU

Admin
Support

Research Diving Unit

Research Chairs

- M Roberts, *Food Security*
- M Lombard, *Marine Spatial Planning*
- R Perissinotto, *Shallow Water Ecosystems*
- P Vrancken, *Law of the Sea*
- Associated staff, post-grads

Participation around three research themes

- Living Resources and Food Security
- Biodiversity and Conservation
- Global Change

Research Units and Groups

- MAPRU
- Cetaceans
- Others

Faculty-based Membership

- Academics
- Research staff
- Postgrads
- Others

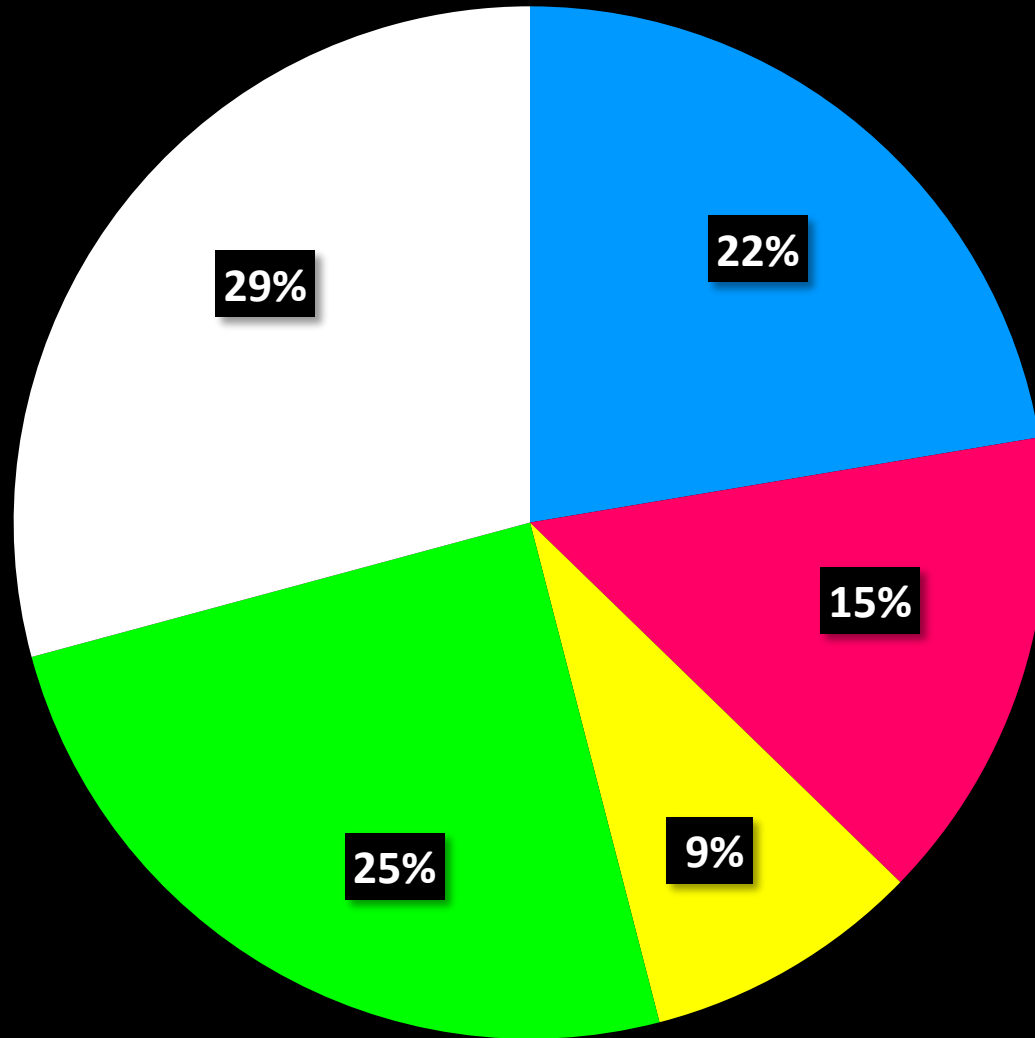
Research Associates:

- SAEON
- BCRE
- SANBI
- SANParks
- CSIR
- SAIAB

Visiting Scientists

- National
- International

2016 Membership: 161



■ Staff

■ Research Associates

■ Post-Doctoral Fellows

■ Masters Students

■ Doctoral Students



ACTIVITIES

Research

- 💧 Interdisciplinary research
- 💧 Research Diving Unit

Training

Research-based training - post-grads

- Short courses: diving, estuary management, MPA

Consulting

CMR houses broad expertise which can provide community service as commercial consultancies



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RESEARCH GROUPS



© Janine Adams

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Estuaries
Sandy Beaches
Agulhas
Apex Predators (MAPRU)
Islands
Resource Utilization
Fish Ecology
Turtles

Shallow Water Ecosystems
Coastal Palaeoecology
Ocean Current Energy
Law of the Sea
Indian Ocean
Marine Spatial Planning
Cetaceans
Research Diving



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THEMATIC AREAS



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Global Change

Monitoring and understanding *change*, both anthropogenic and natural, and how this impacts coastal and marine systems and human communities dependent on them.

Living Resources and Food Security

Studying and developing coastal and marine living resources which are, or can be, utilised as food sources, with the emphasis on sustainability.



© Paul-Pierre Steyn



© Tegan Carpenter-Kling

Biodiversity and Conservation

Broadly relating to understanding, protecting and managing coastal and marine *ecosystems*, both for conservation and sustainable human use.



EXTERNAL LINKAGES

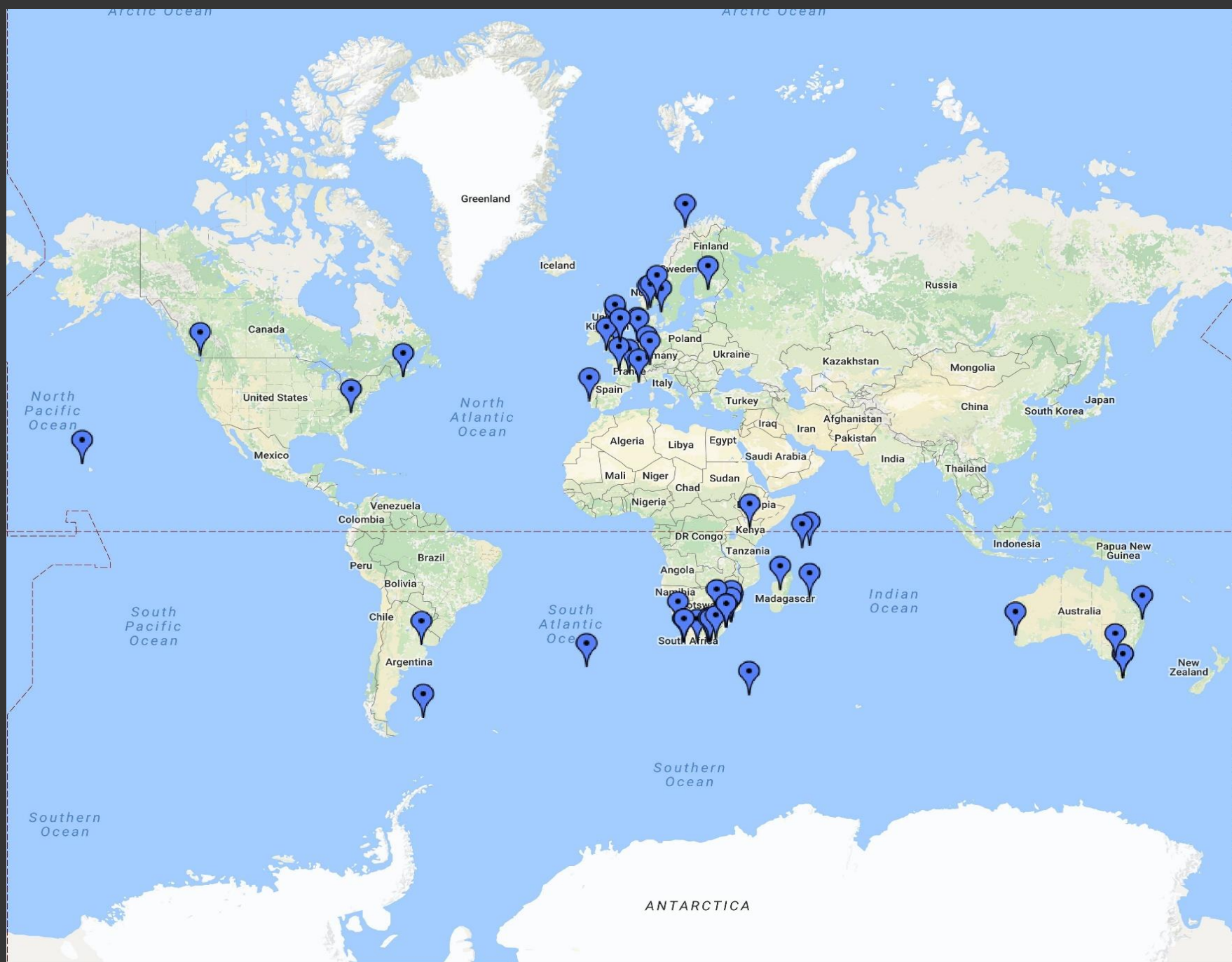
Numerous external partners both *national and international*

National

Close linkages with SAEON, Bayworld/BCRE, SAIAB, DEA: Oceans & Coasts, SANParks, SAIMI, CSIR, Ezemvelo-KZN Wildlife, isiMangaliso wetland park

International

Links exist with institutions in Norway, France, Sweden, UK (Southampton, Plymouth – research and a 2nd Year Ocean studies group).





2016 CMR NUMBERS



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6 Faculties

14 Departments

70 Papers Published

12 Research Reports

20 Engagement Activities

104 Operational Research Dive Days

4 Research Diver Training Courses



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Arts

Political and Conflict Studies: Blue Economy

Business & Economic Sciences

Development Studies: Marine Socio-ecological systems, Resource Economics

Engineering, the Built Environment and Information Technology

Engineering: Coastal infrastructure

Health Sciences

Emergency Medical Care: Diver Occupational Health & Safety

Law

Law: Maritime Governance

Science

Botany, Zoology, Geosciences, Statistics, Chemistry, Oceanography, Sustainability
Research Unit

Policy / Public Awareness

- 💧 Civil society and marine spatial planning
- 💧 Draft MSP Bill, and the 21 proposed new marine protected areas
- 💧 Estuary Management Plans
- 💧 Input to IUCN red list of species
- 💧 Identification of Ecologically or Biologically Significant Areas (in the Benguela Current region)

Government

Part-time students: DEA, DWS, SANBI, DAFF





ENGAGEMENT BENEFICIARIES

- 💧 **Local government** : Nelson Mandela Metro, Kouga, eThekweni
- 💧 **Provincial government** : DEDEA, Western Cape
- 💧 **National government** : DEA, DW&S, DAFF
- 💧 **International** : Ramsar, Nairobi and Abidjan Conventions
- 💧 **Conservation authorities**: SANParks, CapeNature, Eastern Cape Parks, Ezemvelo KZN Wildlife
- 💧 **Public, Learners**

Department of Environmental Affairs : Oceans & Coasts

- Coastal management
- *Integrated Coastal Management Act*

Department of Environmental Affairs : SANBI

- Conservation & biodiversity protection plans
- *National Biodiversity Act*

Department of Water & Sanitation

- Ecological water requirements of estuaries
- *National Water Act*





Transdisciplinary focus on post-graduate students where
science meets society

Cross-cutting ocean sciences research capabilities:

- 💧 Sustainable Livelihoods for Coastal Communities
- 💧 Ocean Governance and Global Change
- 💧 Marine Technologies and Infrastructure Development
- 💧 Ocean Resources and Marine Biodiversity Conservation

BIG RESEARCH QUESTIONS



SAMSS

South African Marine Science Symposium

4-7 July 2017, Boardwalk

Hosted by NMMU & CMR under the auspices of SANCOR

- ◆ Day 1: Special Sessions & Workshops
- ◆ Day 2-4: Conference Presentations and Posters

International Speakers:

- ◆ Prof Robert Constanza (Australia)
- ◆ Prof Omar Defeo (Uruguay)
- ◆ Prof Callum Roberts (UK)

National Speakers:

- ◆ Prof Coleen Vogel (Global Change Unit – Wits)
- ◆ Mr Craig Smith (DAFF – Fisheries Management)
- ◆ Prof Amanda Lombard (SARChI Chair – NMMU)





Institute for Coastal and Marine Research Symposium

Date: 20 April 2017

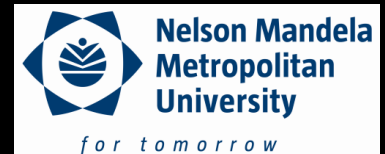
Venue: NMMU South Campus Senate

Time: 08:30 – 16:00

Objective: Showcase the impact of CMR research across various disciplines and faculties

Themes to Discuss:

- * Global Change
- * Living Resources & Food Security
- * Biodiversity & Conservation





Thank You