

Contextualising Responsible Research and Innovation



Lessons from participation in the
EU Horizon 2020 project



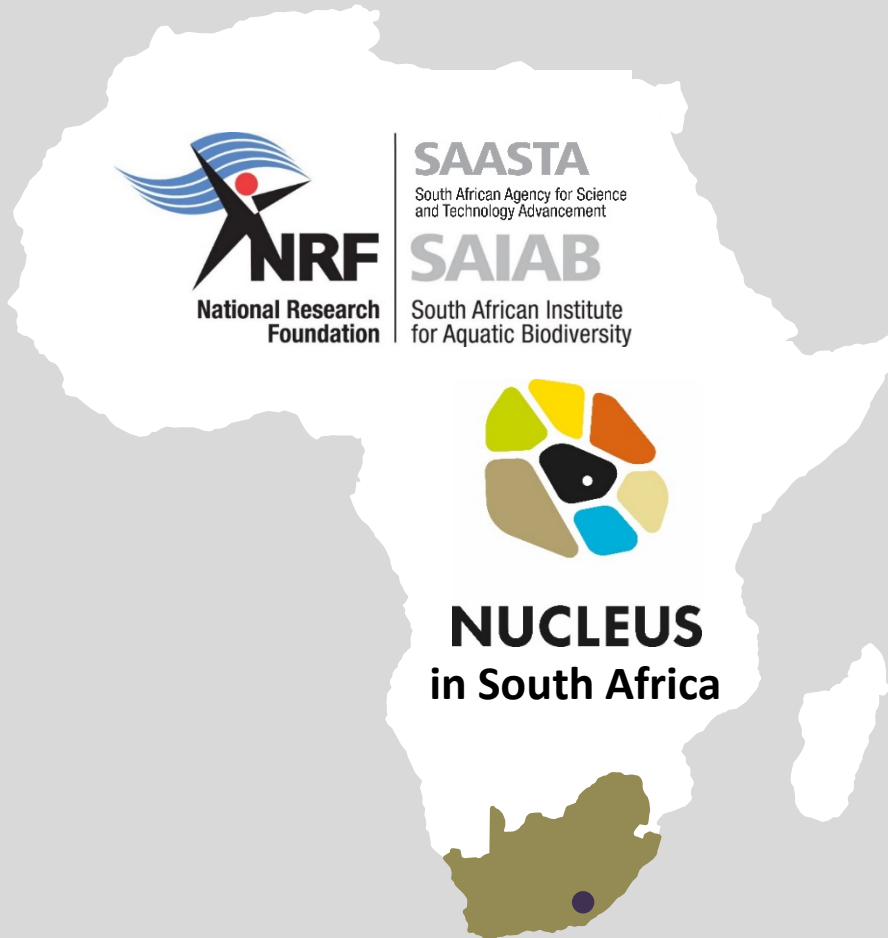
NUCLEUS

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Contextualising RRI in a South African research institute

CONTENT



- ***About NRF-SAIAB***

Organisational fit

SAIAB Research Platforms

Aquatic Biodiversity Research

- ***About NUCLEUS***

Project fit – Embedded Nucleus

Conceptual Framework

Road Map

- ***Working SMART***

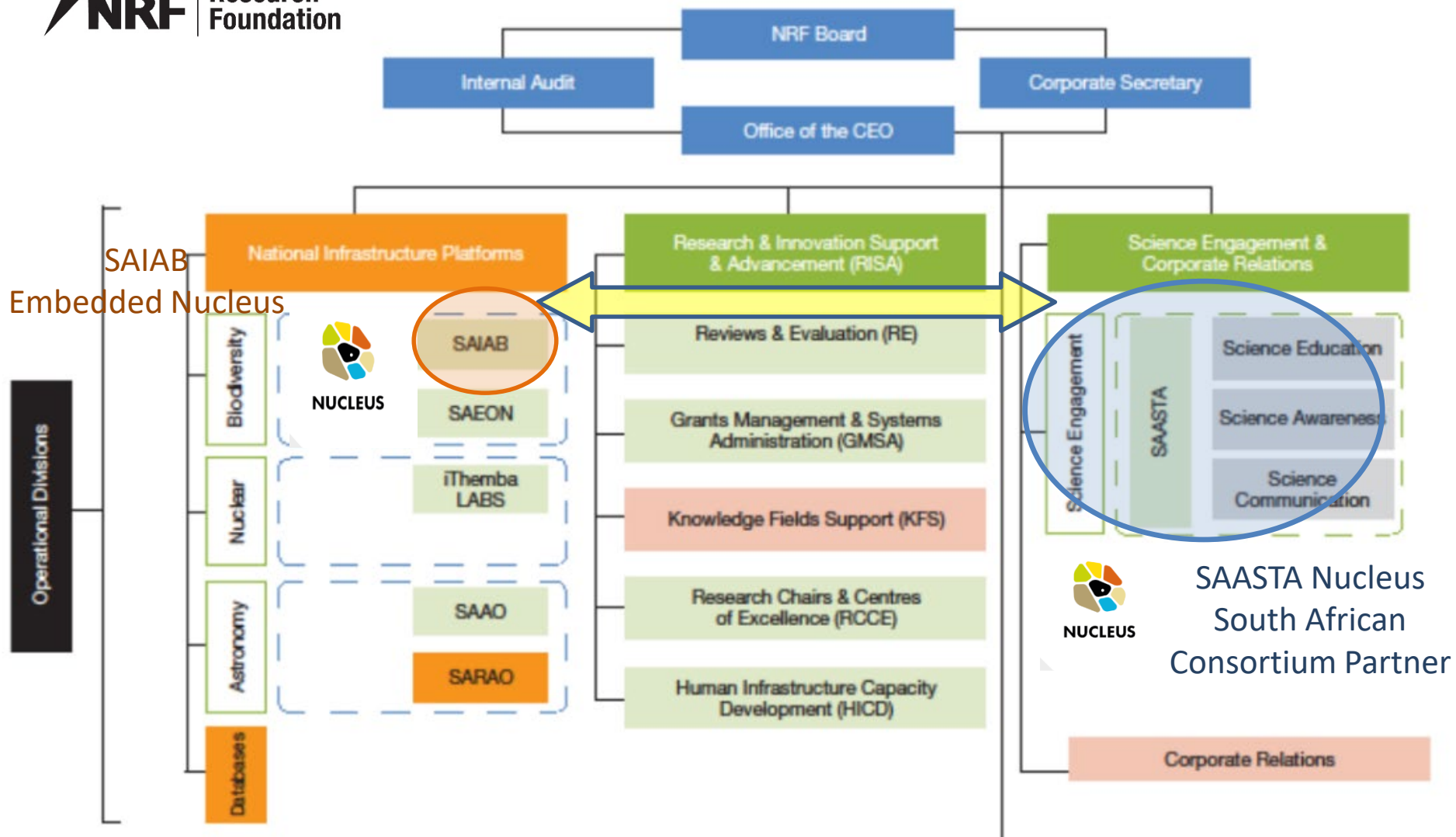
Action Framework

- ***Shared learning***

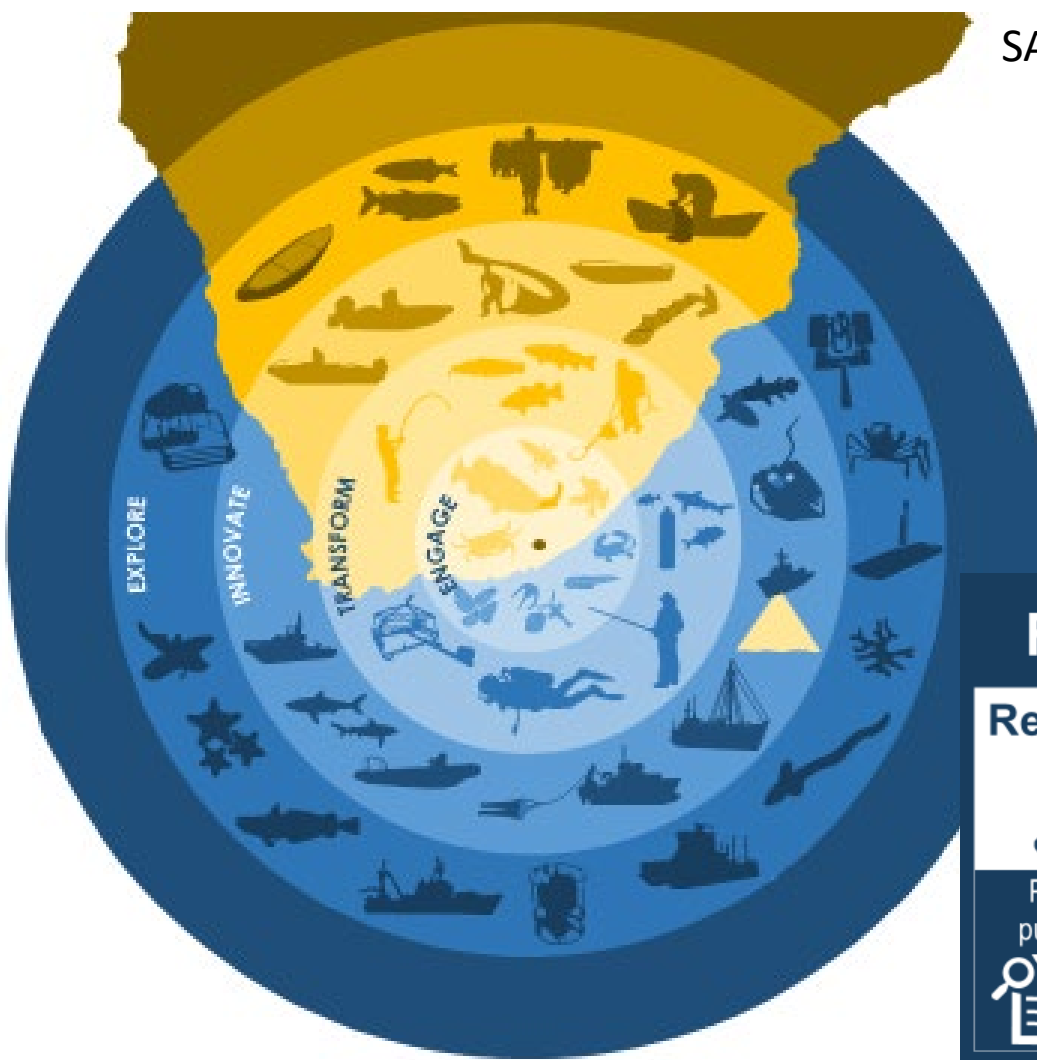
The DNA of RRI

#Living RRI

Organisational fit



SAIAB's research focus – LIFE in Water



SAIAB is a research institute of the National Research Foundation

Vision – **Aquatic** Research that works for Society

Mission – To improve the quality of life of all South Africans through advancing scientific research, technology and innovation in **aquatic biodiversity**

Responsible Research & Innovation

Research	Sustain	Transform	Conserve
Projects & publications	Platforms & collaborations	Supervision & students	Laboratories & collections

South African Institute for Aquatic Biodiversity Research Platforms

Marine Platforms

-  Acoustic Tracking Array Platform (ATAP)
-  Geophysics Mapping Platform (GeMaP)
-  Marine Remote Imagery Platform (Mar-RIP)
- 
 - Tsitsikamma
 - St Francis Bay
 - Port Elizabeth (home port)
 - Port Alfred
 - East London
 - Durban (home port)
 - Richards Bay
-  Small Craft

ACEP Phuhlisha

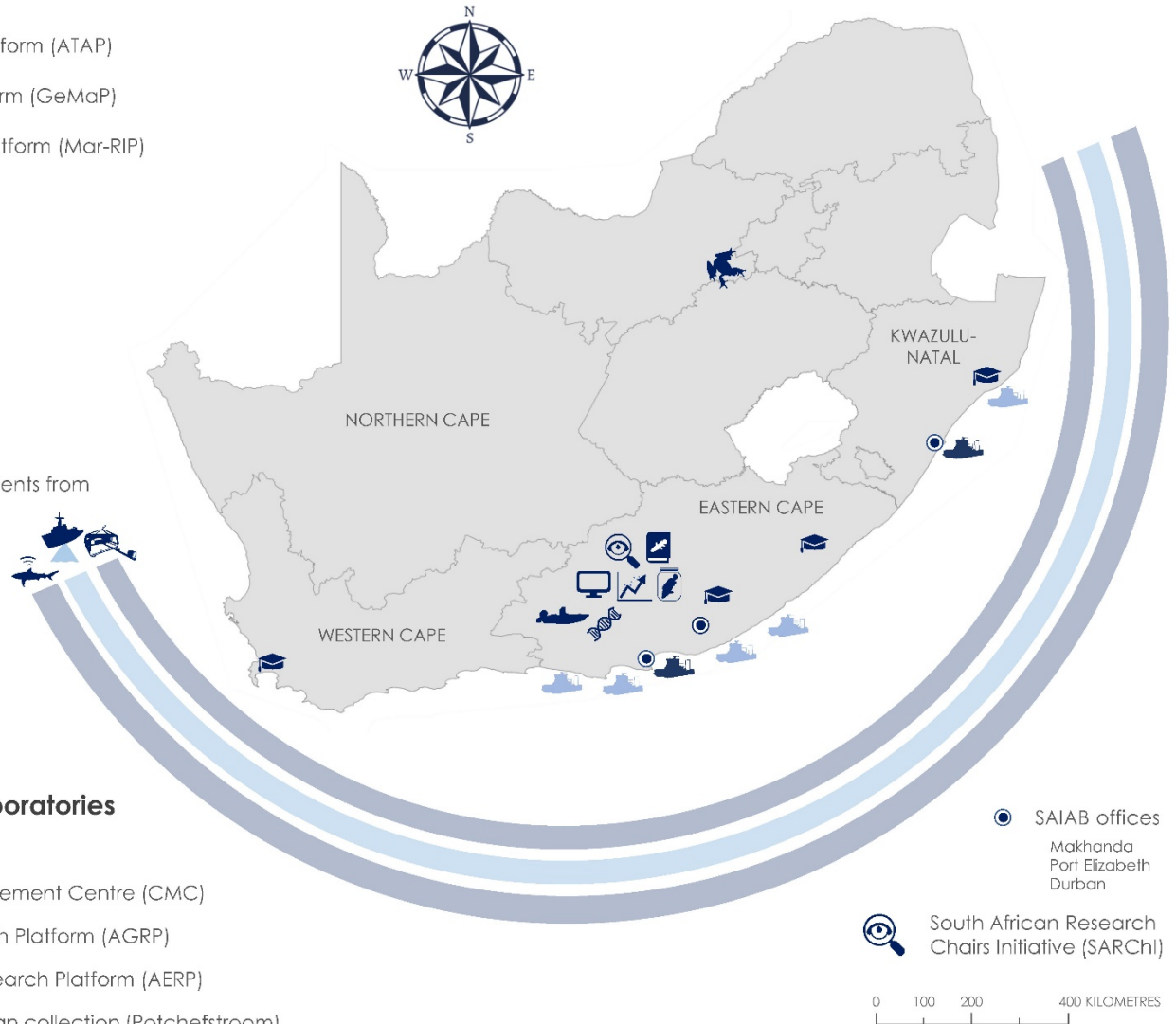
-  Supports postgraduate students from
 - University of Zululand
 - University of Fort Hare
 - Walter Sisulu University
 - University of Western Cape

Information Platforms

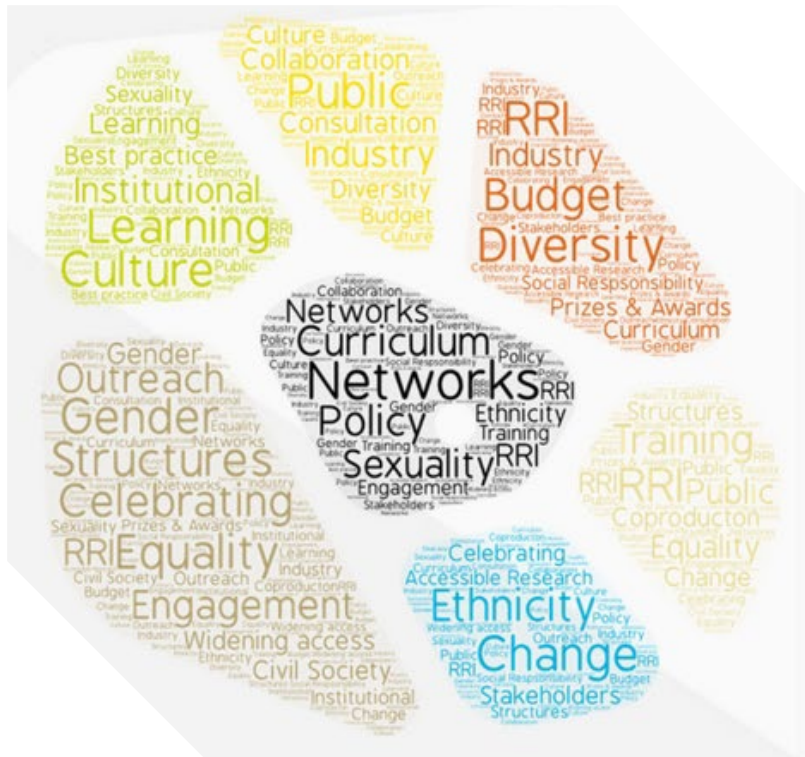
-  Bioinformatics Platform
-  Margaret Smith Library

Collections & Specialist Laboratories

-  National Fish Collection
-  JLB Smith Collection Management Centre (CMC)
-  Aquatic Genomics Research Platform (AGRP)
-  Aquatic Ecophysiology Research Platform (AERP)
-  National diatom & amphibian collection (Potchefstroom)



NUCLEUS 2016-2019



New
Understanding of
Communication,
Learning and
Engagement in
Universities and
Scientific Institutions



NUCLEUS

- Four-year EU-funded Horizon 2020 project
- Focus: how **RRI** can be implemented by the 'nucleus' of a university or research institute through **governance** that directs the policy and culture of the organisation
- SAIAB was one of 10 international test sites referred to as 'Embedded Nuclei' selected to work towards understanding and unravelling the 'DNA' of RRI.



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Conceptual Framework

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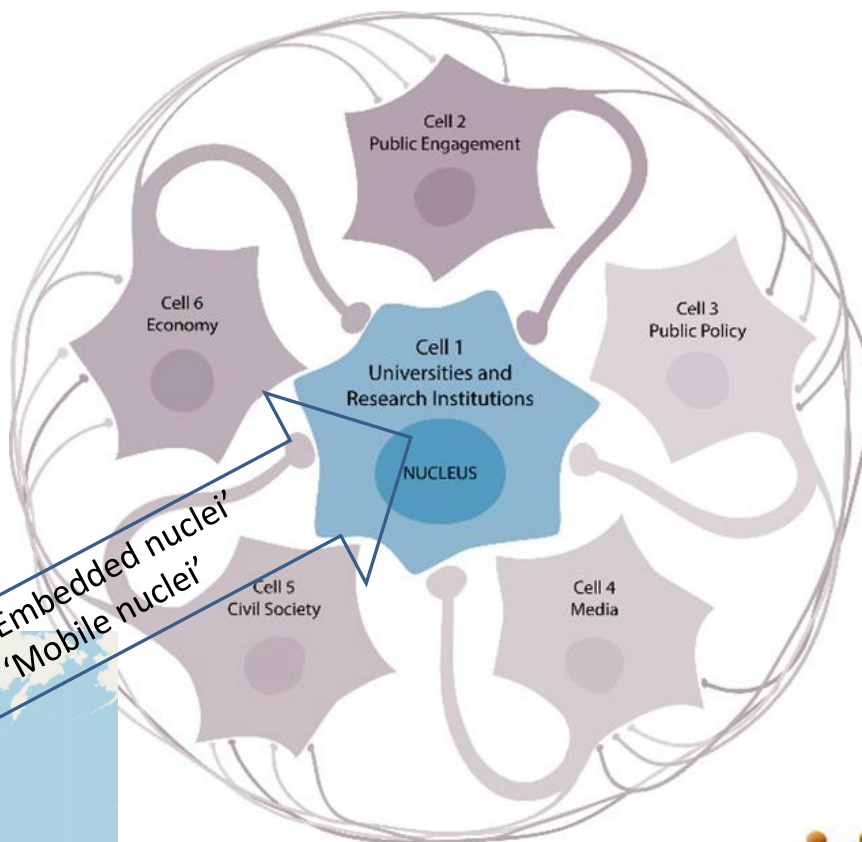
Metaphorical association of the 'nucleus' and its 'cells'

Accessible visual metaphor

24 Consortium Partners



<http://www.nucleus-project.eu/>



All societal actors work together throughout the whole research process.

Cells are stronger and more productive if they work with other cells.

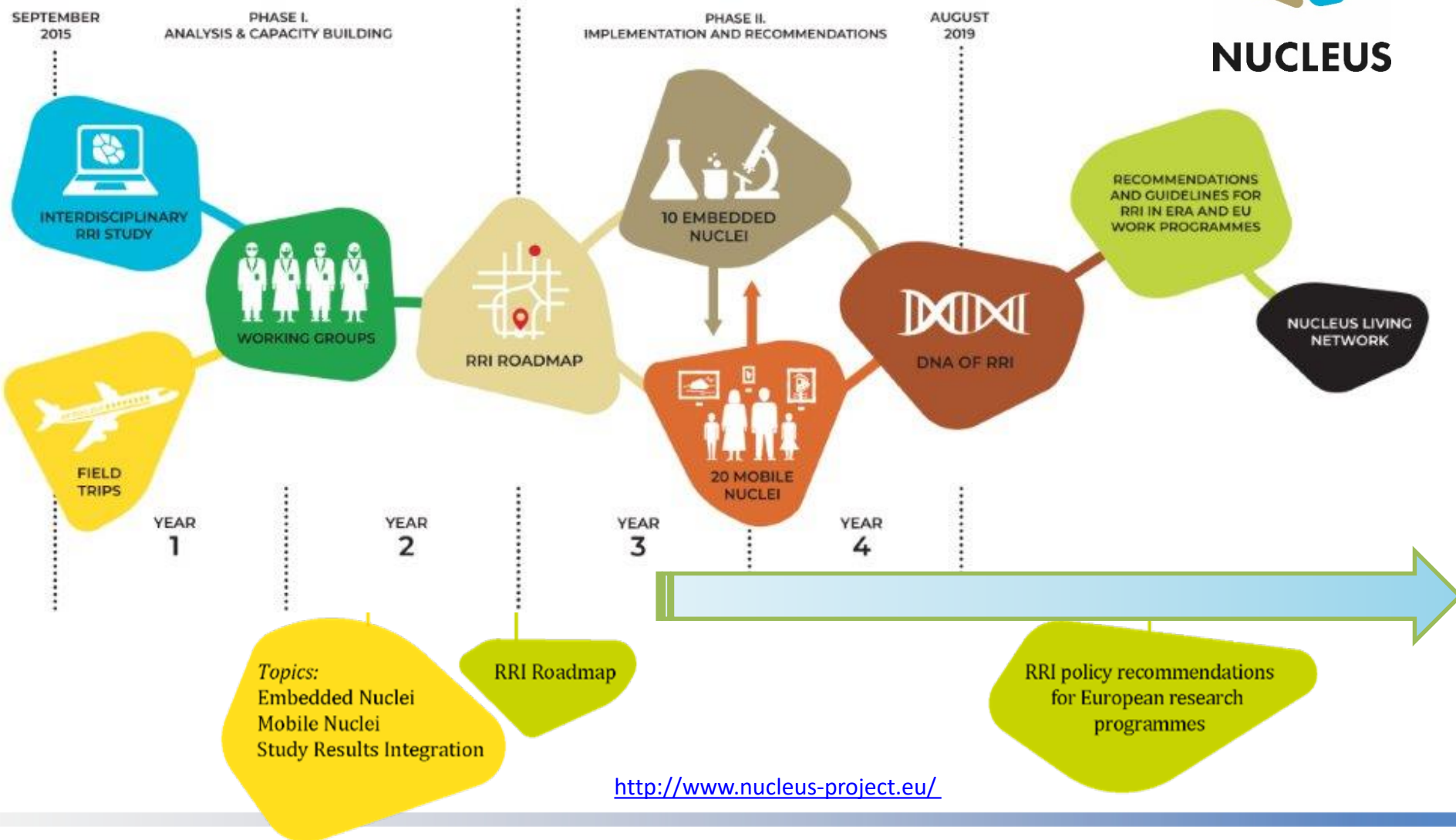
With these other cells they can perform more complex and larger tasks.



NUCLEUS Road Map



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ACTION FRAMEWORK

Working SMART

THE NUCLEUS ACTION FRAMEWORK PROVIDES EMBEDDED NUCLEI WITH A STRUCTURED APPROACH FOR INTRODUCING STEP-CHANGES TOWARDS EMBEDDING RRI IN THE LOCAL STRUCTURE AND CULTURE IN THE 10 'TEST BED' RESEARCH INSTITUTIONS.

OUR APPROACH COMPRISES 3 LEVELS: ESTABLISHING —→ ADVANCING —→ EMBEDDING RRI

THE 8 NUCLEUS ACTIONS FOR EMBEDDED NUCLEI IMPLEMENTATION ARE AS FOLLOWS:

1

CONDUCT RRI
CONTEXT
MAPPING

2

DEVELOP RRI
POLICY,
COMMITTEE AND
STRATEGY

3

BUILD
INSTITUTIONAL
BRIDGES

4

CATALYSE
ONGOING
DEBATES

5

SUPPORT NEW
FORMS OF
TRANSDISCIPLINAR
Y RESEARCH

6

STIMULATE CO-
RESPONSIBILITY OF
ALL
ACTORS

7

QUESTION. &
REDEFINE NOTION
OF 'RECIPIENTS' &
'AGENTS'

8

REFLECT, ANALYSE
PROCESSES AND
PROCEDURES

<http://www.nucleus-project.eu/>



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Towards a DNA of RRI - What we learned SAIAB

***RRI ≠ Science Engagement**

***No need to reinvent the wheel**

- **Reflect** – Recognise RRI in current practice; Work to our strengths; Recognise gaps
- **Adapt** RRI to address specific challenges and build on existing foundations
- **Strategise** – actively build RRI into governance & strategic planning
- **Align** RRI with organisational values, national imperatives & relevant SDGs
- **Tell our story** - illustrate RRI in practice (tell our story, tell our story)



Towards a DNA of RRI – NUCLEUS Project Legacy













Lessons shared – Outcomes & Outlook



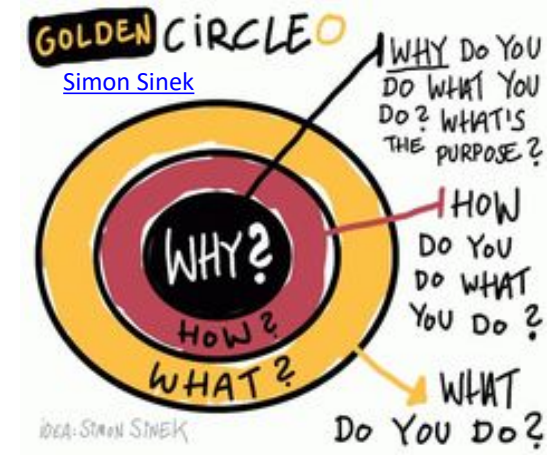
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NUCLEUS newsletters - <http://www.nucleus-project.eu/newsletter/>

-  Be prepared to change
-  Start small
-  Embrace diversity – give everyone a voice
-  Listen
-  Acknowledge sectoral, geophysical & cultural strengths
-  Adapt to challenges posed by history
-  Recognise gaps
-  Share skills and expertise across networks
-  Foster multi-institutional partnerships; multi-, inter-, and transdisciplinary projects
-  Co-create Pathways to Transformation – <http://pathways2019.eu/declaration/>
-  Be flexible: RRI = different things to different people
-  If at first you don't succeed, try and try again...

SAIAB - #LivingRRI



You Tube videos



[Lessons from the Implementation of RRI at SAIAB](#) – produced by Nucleus Communications team 2019



[SAIAB](#) – produced to commemorate SAIAB's 50 years as a research institute 1969-2019

www.nucleus-project.eu

www.saiab.ac.za

www.saasta.ac.za

www.nrf.ac.za

Ref: Haworth, P. S., & Dijkstra, A. M. (2019). Putting responsible research and innovation into practice at a local level in South Africa. In P. Weingart, M. Joubert, & B. Falade (Eds.), *Science Communication in South Africa. Reflections on Current Issues* (pp. 45-72). Cape Town: African Minds. <http://www.africanminds.co.za/wp-content/uploads/2019/11/Science-Communication-in-South-Africa-WEB.pdf>



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