Communicating to non-scientific audiences

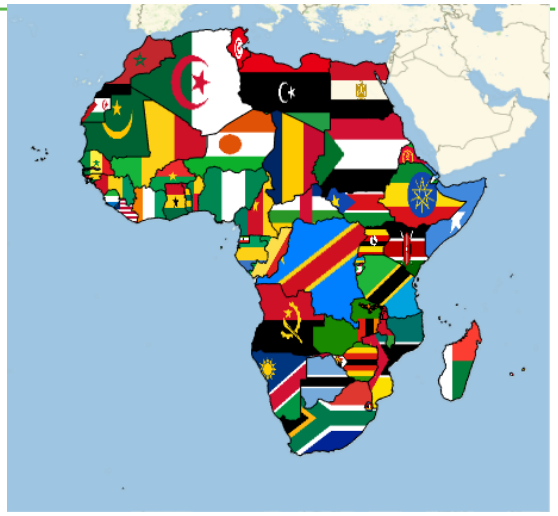
RSIF Cohort IV Orientation and training

Rsif Regional Scholarship and Innovation Fund
Research. Innovate. Transform Africa

1

Choose a country other than yours

- By show of hands, tell us your name, your choice of country and what you know about it.
- What is the Africa you want?



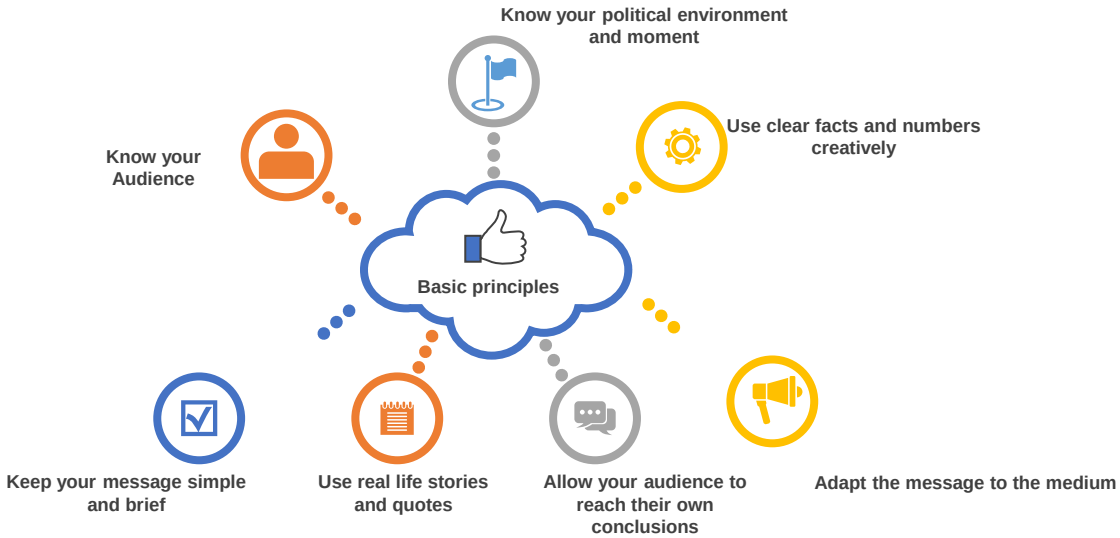
2

Why Communicate?

Communication is central to effective advocacy and influencing opinion and policy.

3

When Communicating…



4

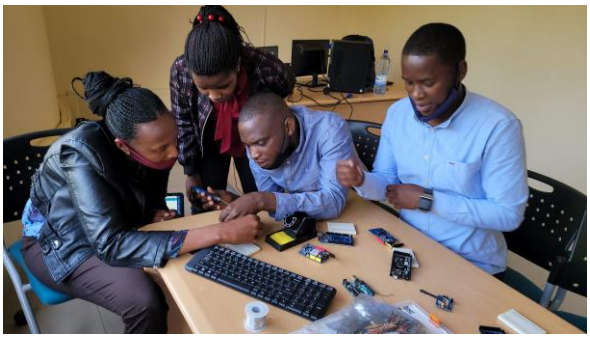
Scientific Communication

There are two ways;

- Communicating with peers; through peer-reviewed publications, conference presentations etc
- Communication to non-scientists. Lay people where the communication is beyond their research fields and or disciplines.

5

Why communicate with non-scientists?



- It is important to brand yourselves as young researchers and thought leaders, and raise you profile and visibility among key networks and to higher education stakeholders
- A wider outreach and sharing of content with a compelling narrative about your research as a unique, credible, legitimate and effective piece of scholarly work and contribution to the global knowledge hub.
- To Increase access to relevant and up-to-date content
- Establish or join Communities of Practice beyond Technical working groups
- Collaboration and Networking
- To enable the translation, synthesis and packaging of research for mass adoption in alignment with your country's national developmental needs and Africa's continental aspirations.

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An example of a scientific paper to scientists versus to non-scientists

Scientific Version

Human activities have led to the establishment of a wide variety of fluorinated precursors. Interaction of these precursors with the environment creates novel fluorinated compounds (FCs). Yeung et al. (2016) reported that novel fluorinated chemical structures make up to 60–90% of total FCs in biological and environmental samples [1, 2]. Yamashita et al. (2004) further revealed that organisms found at the bottom of the food chain have at least higher concentrations of organofluorines which can neither be detected by high-performance liquid chromatography-electrospray ionization-mass spectrometry (HPLC-ESI-MS) nor ionizable by atmospheric pressure chemical ionization (APCI) [3].

Non- Scientific Version

Exposure to fluoride is known to cause molted teeth and weak bones in animals particularly humans. Its exposure and toxicity are maximized when it reacts with the environmental aspects of water, air and soil to form novel fluorinated compounds (FCs). With the advancement in analytical methods, a limited number of FCs have been identified in biological and environmental samples but these methods cannot capture all novel FCs due to lack of authentic standards. Currently. Inductively coupled plasma-mass spectroscopy (ICP-MS) is the most promising analytical technique but conventionally it cannot analyze FCs.

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A press release from a scientific paper

Paper Title: Nutritional Quality of Four Novel Porridge Products Blended with Edible Cricket (*Scapsipedus icipe*) Meal for Food

Scientific Version

Abstract: Currently, no data exist on the utilization of the newly described cricket species (*Scapsipedus icipe*) meal as additive in food products, though they have high protein (57%) with 88% total digestibility as well as a variety of essential amino acids. This article presents the first report on the effects of processing techniques and inclusion of cricket meal (CM) on the nutrient and antinutrient properties of four porridge products compared to a popularly consumed commercial porridge flour (CPF). Porridge enriched with CM had significantly higher protein (2–folds), crude fat (3.4–4–folds), and energy (1.1–1.2–folds) levels than the CPF. Fermented cereal porridge fortified with CM had all three types of omega-3 fatty acids compared to the others. The vitamin content across the different porridge products varied considerably. Germinated cereal porridge with CM had significantly higher iron content (19.5mg/100g)…….

Non- Scientific Version of a press release

Newly discovered African crickets fortify African porridge

icipe researchers use insect nutrients to transform continent's popular staple into a nutritious super-food; create a model for food-to-food biofortification. It is known as the staple food of Africa, and for good reason. Made from cereal grains, African porridge, whether in the form of a thick mush, soft or runny, is consumed in most households and by all age groups across the continent. It is a weaning food for infants; nourishment for nursing mothers, the elderly and the convalescents; a go-to breakfast, refreshment, and for some, a main meal. And now, in a game-changer for nutritional security in Africa, researchers from the International Centre of Insect Physiology and Ecology (icipe), have used insect nutrients to transform African porridge from a basic, often low-nutrient meal, into a super-food that meets and exceeds micronutrient requirements for people. In findings published in Foods journal (Paper link:), the scientists observe that although the predominant African porridge cereals, like sorghum and finger millet, are rich in carbohydrates, they are extremely low in energy and nutrient densities. This is partly because they contain anti–nutrient compounds that block the absorption of certain essential nutrients in the body……..

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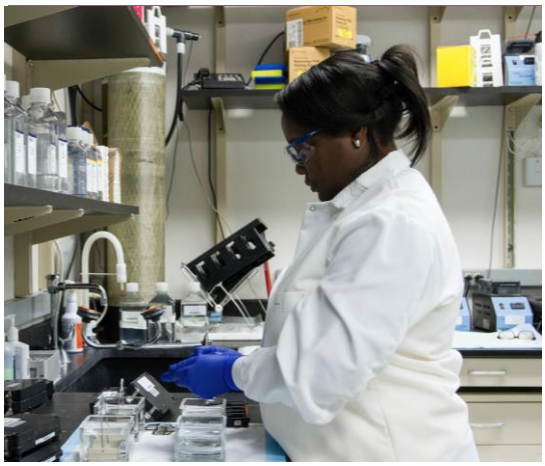
RSIF Press Releases



- https://www.rsif-paset.org/news/
- http://www.icipe.org/

Assignment:

- Follow RSIF on social media
- Write a tweet/post and tag @PasetRsif, we shall follow/respond
- Write a 700 word blog/article on either;
  - Your experience of the orientation week.
  - Your Journey to getting this PhD Scholarship and what you aspire to change in your community.

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https://www.instagram.com/pasetrsif/

Email
rsif@icipe.org

Website- Rsif-Paset
https://www.rsif-paset.org/

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Thank You

Regional Coordination Unit (RCU)
International Centre of Insect Physiology and Ecology (icipe)
P.O. Box 30772 – 00100, Nairobi, Kenya
Tel +254 (20) 8632000
Email: rsif@icipe.org
Website: www.rsif-paset.org

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