Horizon 2020

the largest research funding program in the world

2nd PIURN Conference

Addressing the Challenges of Sustainability in the Pacific Islands

Dr Rado Faletič

Director, Projects & Communications Montroix Pty Ltd (Australia)



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1. What is Horizon 2020?

- European program to fund ST&I
- Largest ST&I program in the world
- To stimulate economic growth and jobs
- Focussed on solving European problems (economic, social, environmental, etc.)
- Funds everything*

Who participates

- Universities
- Public agencies
- Large companies
- SMEs
- Governments
- Non-profit organisations
- Consultants



Summary facts

- Budget: €80 billion (~WS\$ 225 billion)
- **Duration**: 2014-2020
- Participants: global
- Success rate: 10-20%
- Fields of research: all
- Funding: 100% + 25%



• **General information:** http://ec.europa.eu/programmes/horizon2020

2. Past examples with the Pacific

- Pacific-Europe Network for Science, Technology and Innovation (PACE-Net Plus)
 - http://cordis.europa.eu/projects/rcn/109857 en.html
- Dengue research Framework for Resisting Epidemics in Europe (DENFREE)
 - http://cordis.europa.eu/project/rcn/102500 en.html
- Plasmodium Vivax infection in pregnancy (PREGVAX)
 - http://cordis.europa.eu/projects/rcn/86760_en.html
- European Consortium for Pacific Studies (ECOPAS)
 - http://cordis.europa.eu/project/rcn/106638 en.html

3. Quick rules

- Proposals should normally be focussed on European interests
- Projects must involve a minimum of 3 different organisations from 3 separate European countries (including OCTs)
- Exceptions to these rules are noted in the calls, especially calls focussed on *individual* researchers (e.g. fellowships)

Funding

- For pre-commercial activities, funding is generous
 - reimbursement of 100% of costs, plus an additional 25% for overheads.
- PICT & OCT organisations (universities, agencies, businesses, etc.) can get funding
- note: advanced economies like Australia,
 New Zealand, USA, China, Japan, etc., are not automatically eligible for funding

Proposals

- Proposal must address the call requirements. Most of the calls are very specific – they are not to fund your pet topic, they are to fund what Europe wants... like a tender
- Let your European colleagues do all the hard work (administration, etc.)

Evaluations

- Evaluation of proposals based on:
 - a. Excellence
 - b. Impact
 - c. Quality & efficiency of implementation
- Different weightings depending on call, e.g.:
 - innovation actions may focus on Impact
 - ERC grants only consider Excellence

4. How can Pacific researchers participate?

- PICTs known as a "third countries", i.e. a non-European country, whilst OCTs are considered to be "Member States" of the EU
- PICT organisations can participate in most calls, and get funded
- But, you cannot do it by yourself you must be part of a European consortium

- Contact your colleagues in Europe, and ask them if they will be submitting any applications... and ask if there is a role for you also
- Consider Horizon 2020 as a means to collaborate with regional colleagues (remember, New Caledonia and French Polynesia are *France*)
- You must demonstrate your level of excellence (track record) and clearly articulate what value you will bring to the project (e.g. unique data, world-leading research, local knowledge, regional networks, etc.)

- Encourage your researchers and experts to register to be Horizon 2020 evaluators http://ec.europa.eu/research/participants/portal/desktop/en/experts
 - Learn about Horizon 2020 from the inside
 - Learn the unwritten rules
 - Network with other people in your field
 - Get paid for your time, plus a flight to Brussels
 - Organise side meetings to build your networks

5. Excellent Science

There are several areas dedicated to supporting *the best* science:

- European Research Council (ERC)
- Future and Emerging Technologies (FET)
- Marie Skłodowska-Curie Actions (MSCA)
- European Research Infrastructures, including e-Infrastructures

European Research Council

- erc.europa.eu
- Investigator grants for the best researchers
- Highly prestigious, highly competitive
- Any research topic, any field
- Any researcher of any nationality can apply
- Must undertake the project at a European institution
- Portable grant



ERC

- Can include international partners
- Funding for up to 5 years
- Starting Grant (StG), 2-7 years after PhD,
 €1.5 million + €0.5 million
- Consolidator Grant (CoG), 7-12 years after PhD, €2 million + €0.75 million
- Advanced Grant (AdG), €2.5 million + €1 million

Marie Skłodowska-Curie Actions

- These Actions are focused on providing training and mobility opportunities for researchers (from PhD to senior)
- Excellent for building lab-lab relationships and long-term collaborations
- Ideal for mobility with regional (French OCT) research partners

MSCA Individual Fellowships (IF)

- Fully funded fellowships to go to/from Europe
- Must have PhD or 4 years research experience
- Funding covers salary, travel, family allowance, overheads, costs, etc.
- 12-24 months

- Your proposal is about you and your science (excellence), but you need to also pay attention to "impact" and "implementation"
- For each fellowship, you will have a host institution
 - Receives the funds from Horizon 2020
 - Responsible for administration and your salary
 - Must be a European organisation, regardless of whether you are going to or from Europe
- Since this host institution has a vested interest in your success, you cannot submit a proposal independently from them
- Next call opens in April 2017
 <u>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/msca-if-2017.html</u>

MSCA Research and Innovation Staff Exchange (RISE)

- For multi-year lab-to-lab exchange programs
- Must have at least 2 European countries involved
- Provides resources for international secondments of all research staff (PhD, postdocs, experienced researchers, technical staff, administration staff)
- Next call will open in December
 http://ec.europa.eu/research/mariecurieactions/about-msca/actions/rise/index_en.htm

6. Industrial Leadership

- Leadership in Enabling and Industrial Technologies (LEIT)
 - Information and Communication Technologies (ICT)
 - Nanotechnologies, Advanced Materials,
 Advanced Manufacturing and Processing, and
 Biotechnology
 - Space
- Innovation in SMEs

7. Societal Challenges

- 1. Health, Demographic Change and Wellbeing
- 2. Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy
- 3. Secure, Clean and Efficient Energy
- 4. Smart, Green and Integrated Transport
- Climate Action, Environment, Resource Efficiency and Raw Materials
- Europe in a changing world Inclusive, innovative and reflective societies
- 7. Secure societies Protecting freedom and security of Europe and its citizens
- How to find call topics / funding opportunities? Go to the Participant Portal: http://ec.europa.eu/research/participants/portal

8. Some upcoming call topics, e.g.

- Contentious inputs in organic farming, closes 14 February 2017
 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-08-2017.html
- Emerging diseases in plants and terrestrial livestock, closes 14
 February 2017
 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-10-2017.html
- Validation of diagnostic tools for animal and plant health, closes 14
 February 2017
 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-13-2017.html
- Smart fisheries technologies for an efficient, compliant and environmentally friendly fishing sector, closes 14 February 2017 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-22-2017.html
- Functional biodiversity, effective interplay of crop pollinators and pest predators, closes 14 February 2017 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-28-2017.html

- Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination, closes 14 February 2017 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-30-2017.html
- The Asia-Pacific as a strategic region for Europe, with focus on governance in and of the Pacific, closes 2 February 2017 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-06-2017.html
- Resilience to extreme (natural and man-made) events, closes 26
 January 2017
 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-7.1-2017.html
- Coordination of citizens' observatories initiatives, closes 7 March 2017
 <u>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/s</u>
- International network of raw materials training centres, closes 7 March 2017 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-16-2016-2017.html
- Novel in-situ observation systems, closes 7 March 2017
 <u>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/s</u>c5-18-2017.html

More upcoming topics listed in these calls

- Sustainable food security: resilient and resource-efficient value chains http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2016-2017.html
- Blue growth: demonstrating an ocean of opportunities
 http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-bg-2016-2017.html
- Rural renaissance: fostering innovation and business opportunities <u>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-rur-2016-2017.html</u>

Some final tips

- Contact your colleagues in Europe
- Join a COST Action *www.cost.eu*
- Join the Australasian Research Management Society (ARMS)
 researchmanagement.org.au

www.montroix.com

Dr Martin Grabert, CEO martin.grabert@montroix.com

Dr Rado Faletič, Projects & Communications rado.faletic@montroix.com

