

Getting your proposal funded:  
an ERC Success Story  
PAGES-ECN Webinar

# Getting your proposal funded an ERC Success Story

Alessio Rovere

**WARMCOASTS**



European Research Council  
Established by the European Commission

**marum**

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# An ERC StG is about ...

## You

The brilliant young  
researcher

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## Your idea

The ground-breaking stuff you'll do



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Conception

Having the first idea

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Streamlining the idea

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Streamlining the idea



**Writing**  
Fixing the idea  
on paper

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You aren't  
giving up,  
are you?

# Disclaimer!

## The following is what worked for me!

Take what you need

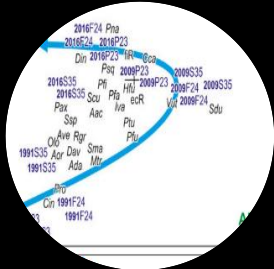
Leave what you don't think will work for you

# My path

I am attracted by things that I like  
but that I don't know how to do

## Bachelors and Masters

2000-2006



Learned to:

## Get data

## Analyse them

## Publish (2006)

# My path

I am attracted by things that I like  
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PhD  
2008-2011



Learned to:

**Work on a subject**  
**Follow my interests**  
**Publish more**

Bachelors and Masters  
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Learned to:

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## Postdoctoral researcher

2012-2014



Learned to:

**Think big**

**Write better proposals**

**Write higher quality papers**

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## Spinoff CEO

2010-2015



Learned to:

**Take budget responsibility**

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2012-2014



Learned to:

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## Jr. Group leader

2014-2018



Learned to:

**Supervise**

**Keep improving writing**

**Think collaboratively**

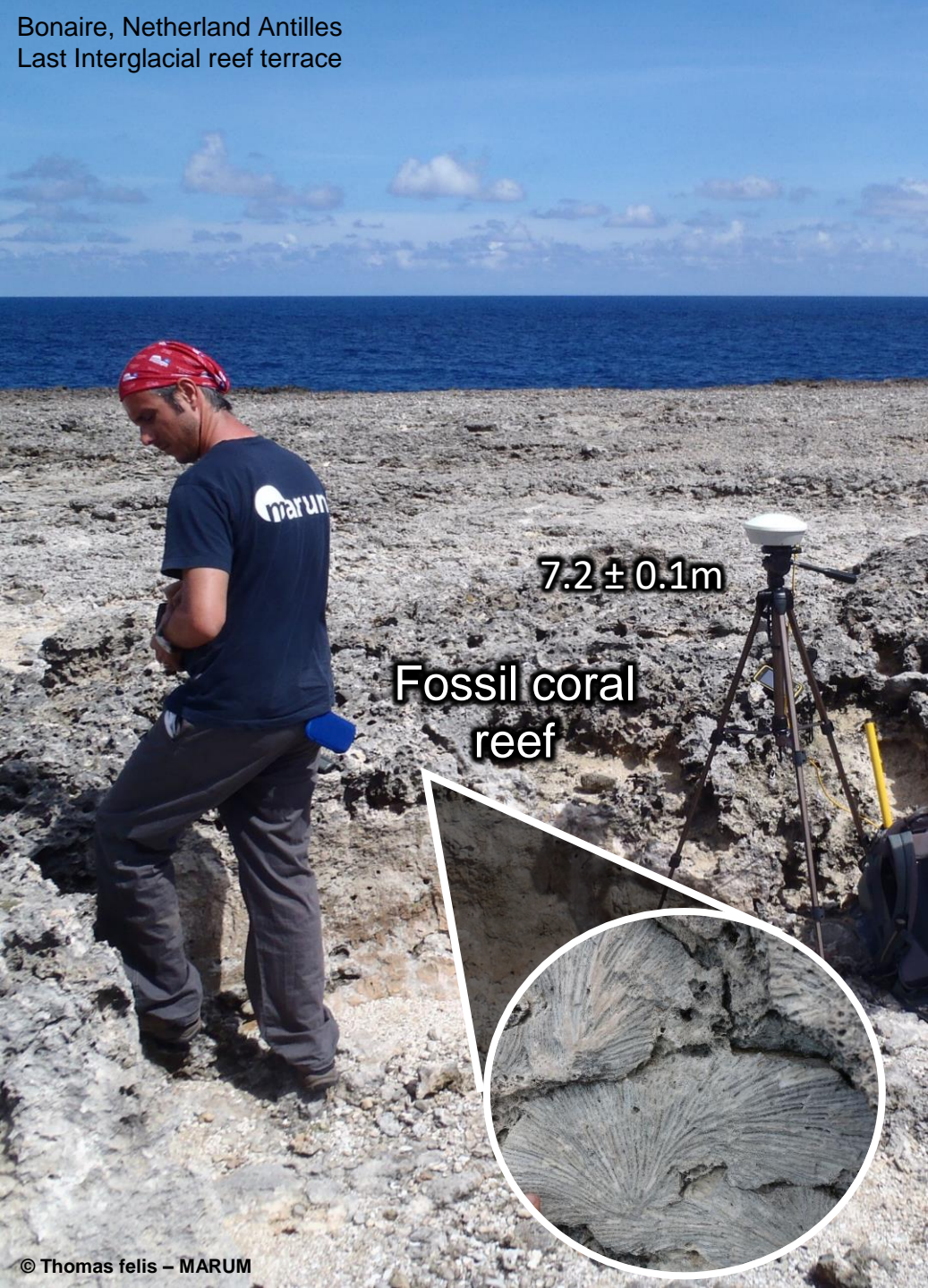
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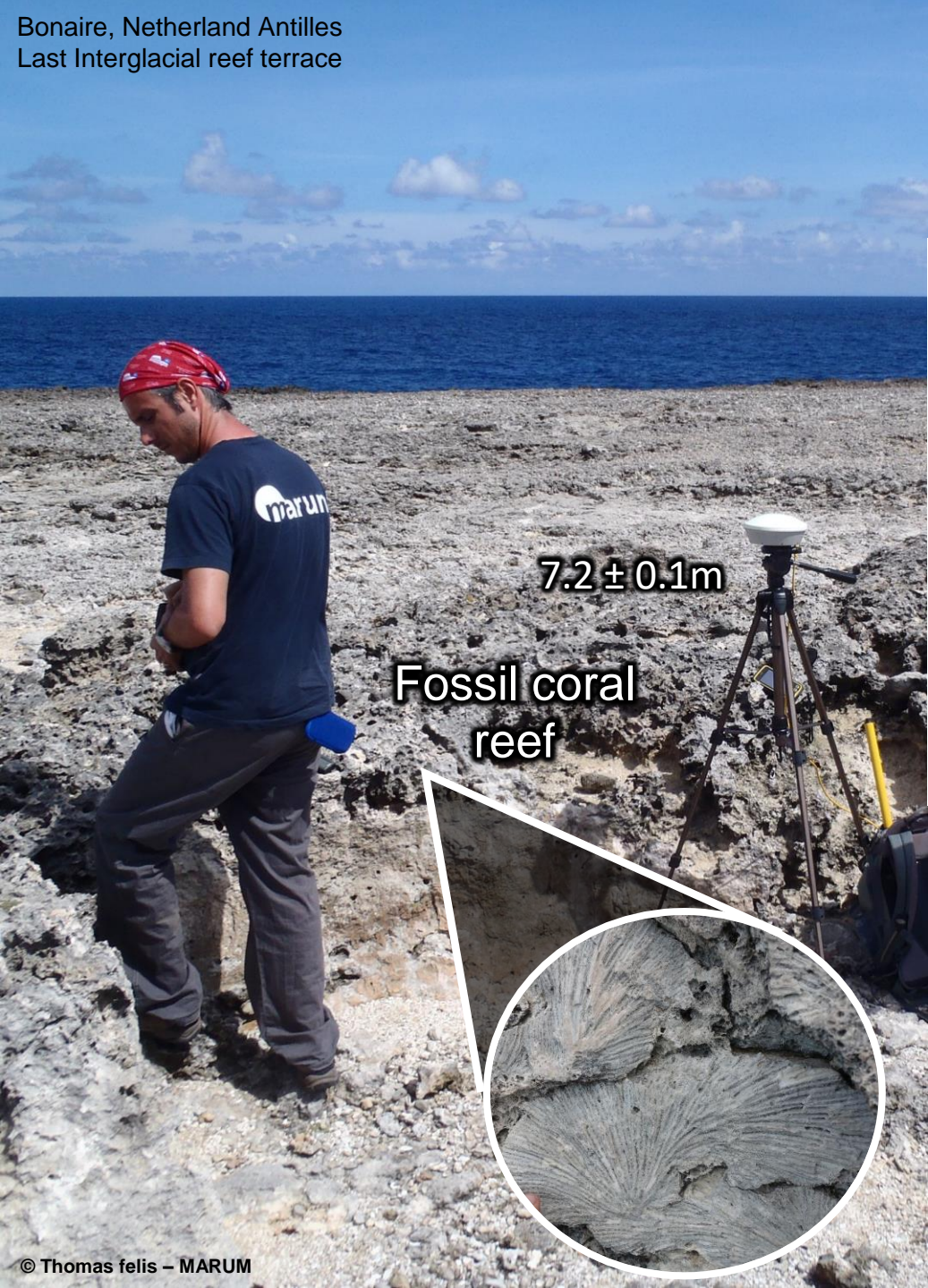
**Take budget responsibility**



7.2 ± 0.1m

Fossil coral  
reef

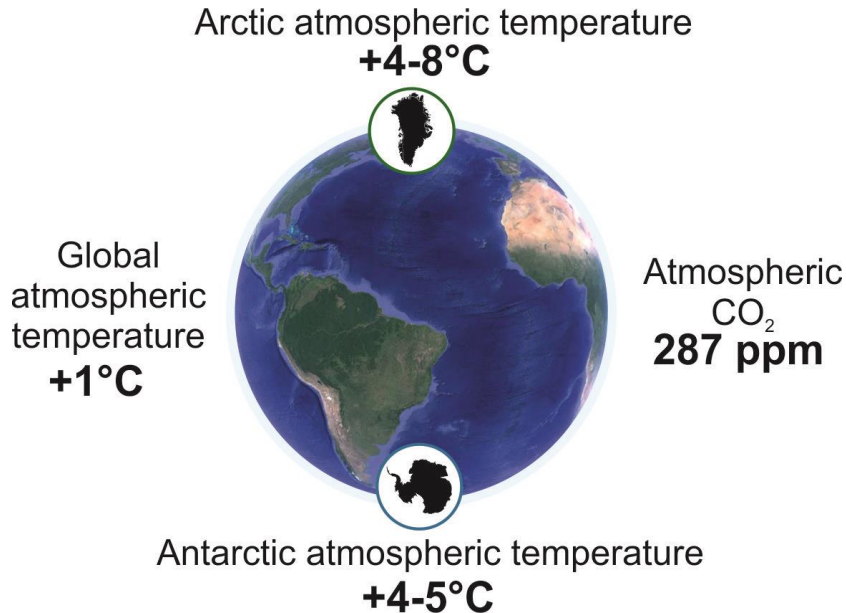




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# Last Interglacial ~125.000 years ago

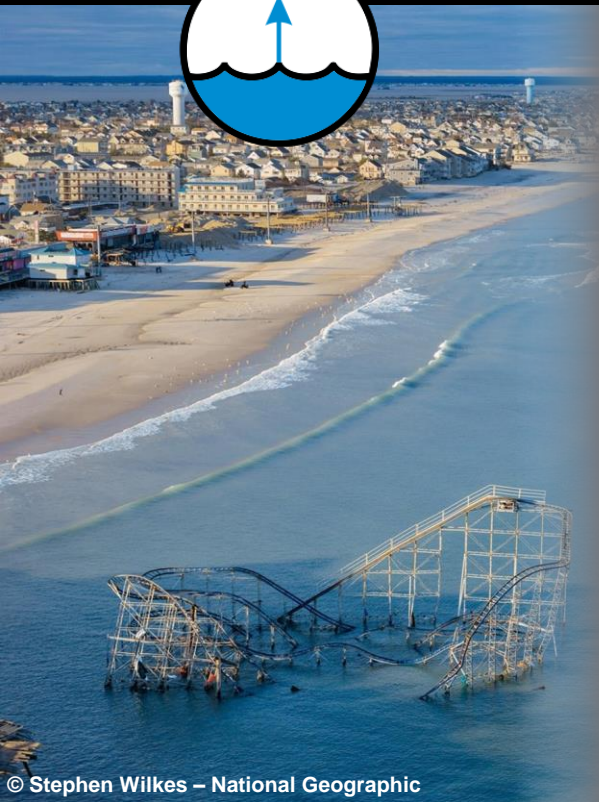


The last time the Earth was  
**slightly warmer than today**

An analog for future warmer  
**worlds**

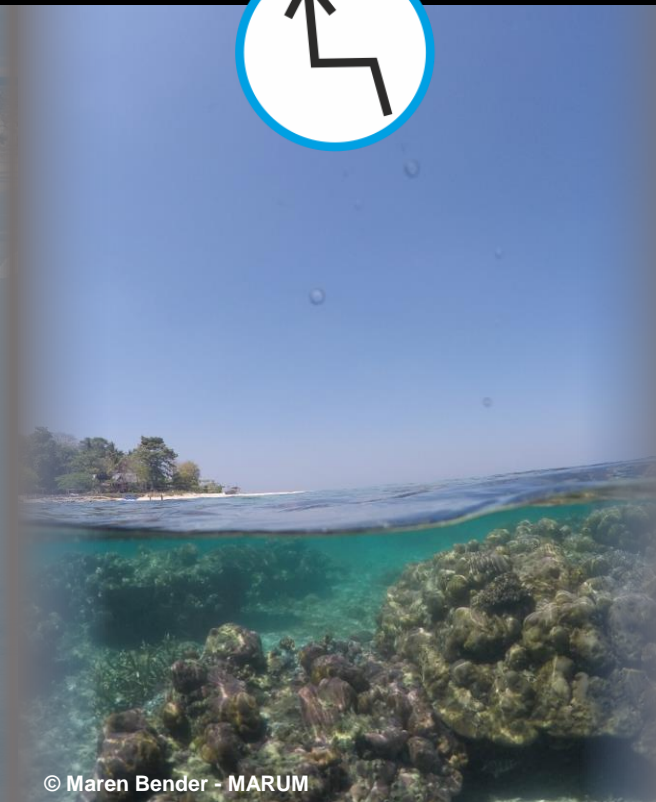
# The big questions in sea level science:

How much  
will sea level  
rise?



© Stephen Wilkes – National Geographic

How fast will  
it rise?



© Maren Bender - MARUM

Will there be  
stronger  
storms?



© George Desipiris - Pexels

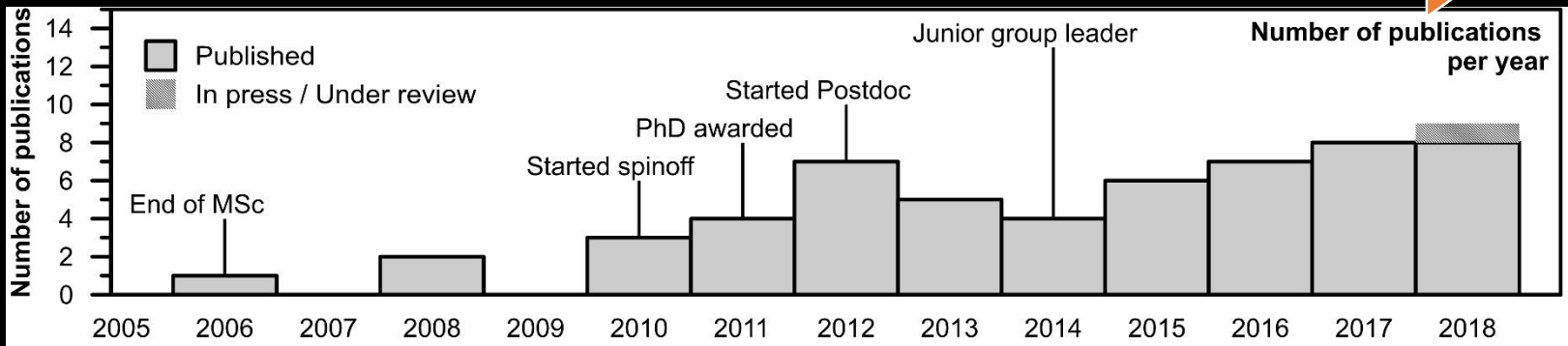
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I am attracted by things that I like  
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More quantity than quality  
Regional scale  
Limited applications

Focussing on quality  
Global scale  
Bigger implications

Collaborative research  
Senior authorship  
Papers with students



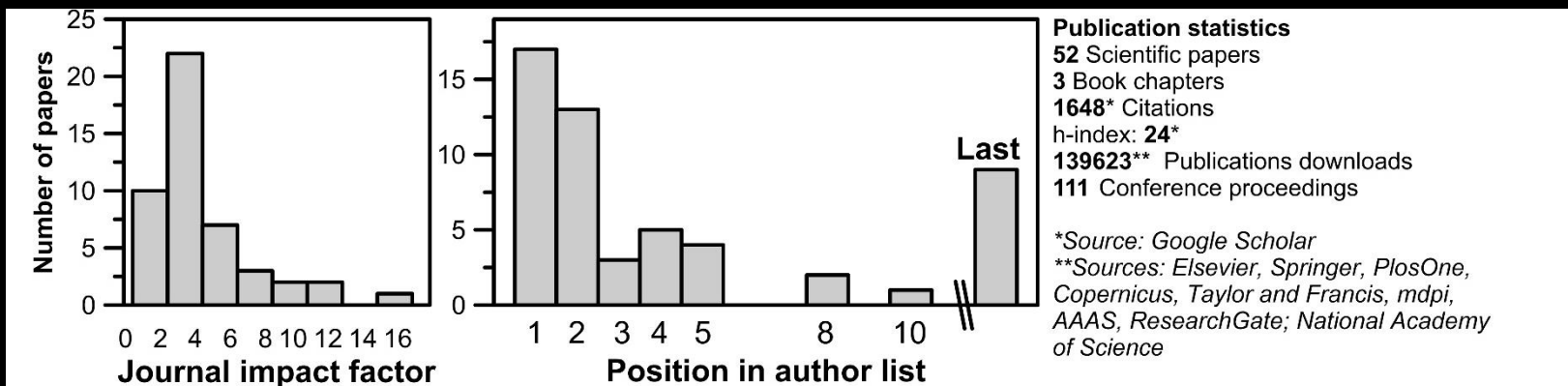
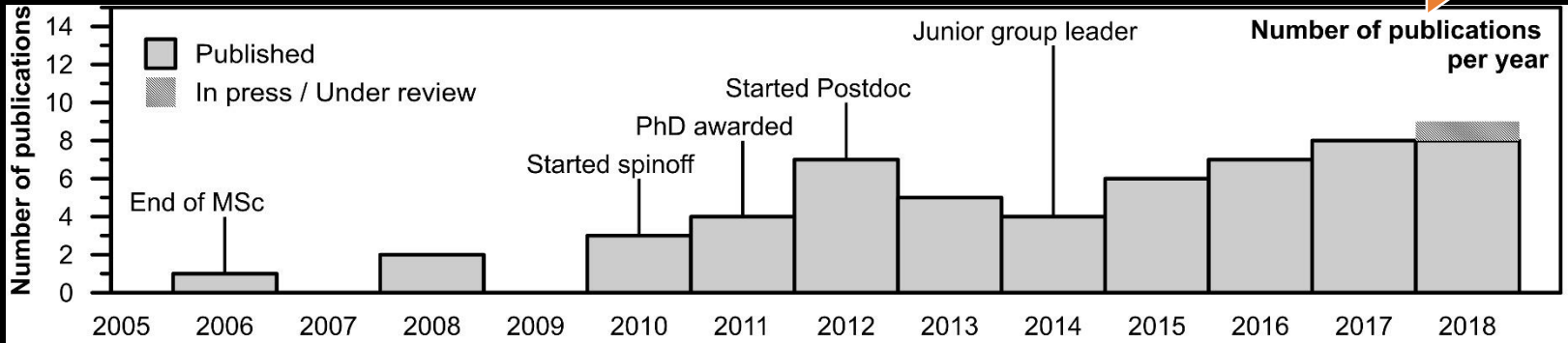
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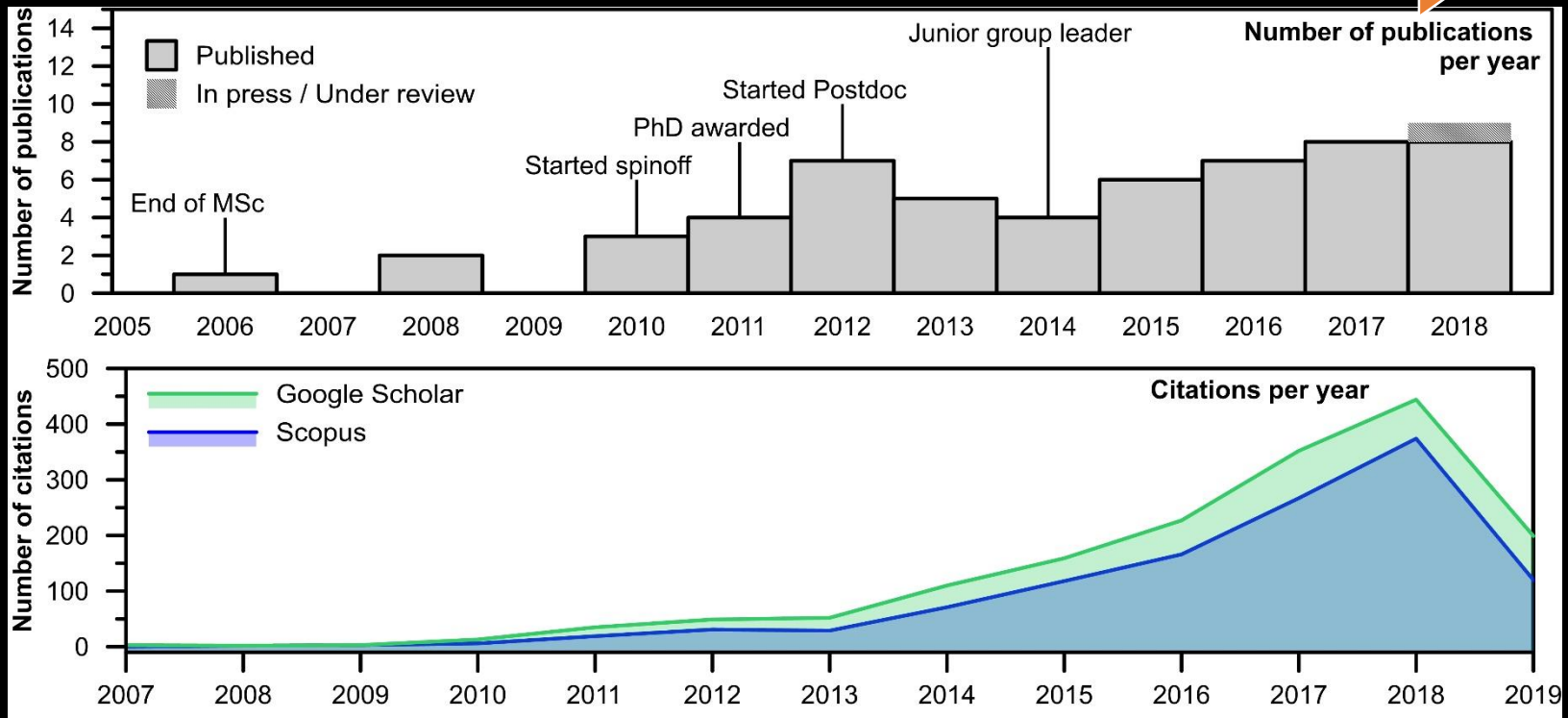
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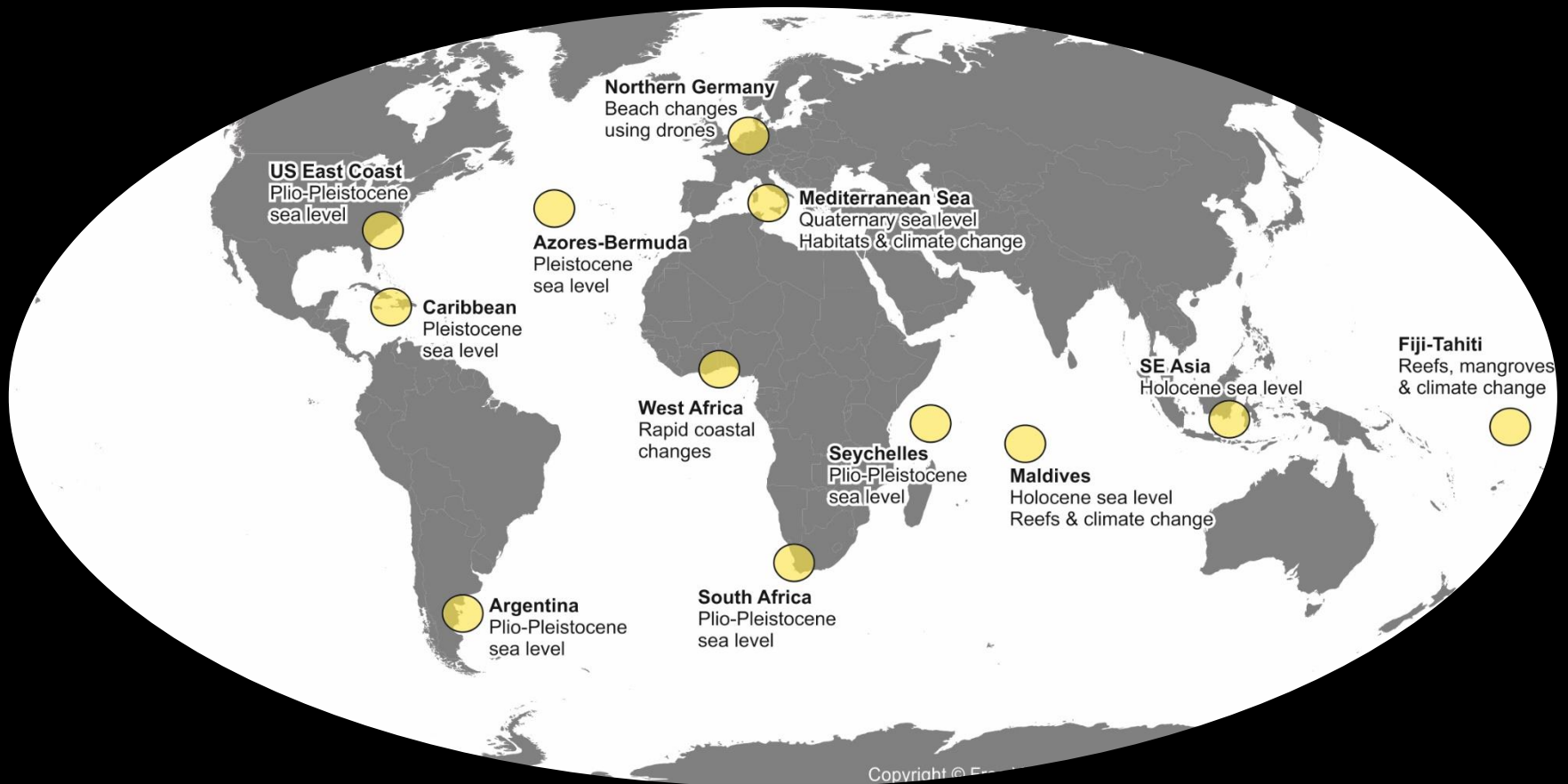
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The publication statistics must be good, BUT...

## More important are these four points

- 1) Demonstrated ability to propose and conduct ground-breaking research
- 2) Ability of creative independent thinking
- 3) Early achievements beyond the state of the art
- 4) Level of commitment to the project

# Some comments on my profile from the ERC reviewers

**An excellent publication record**

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**Clear evidence of independence and leadership**

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The PI is clearly well connected and well regarded  
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## **...enthusiastic, capable and accomplished...**

**The great majority of papers are without his PhD supervisor  
and many include his students.**

There is strong evidence of independent thinking.

# Your CV counts, but...

## Your idea will “seal the deal”

Innovative, risky, not incremental

It may take years to develop – this includes rejections!

# Conception

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- *Johann Wolfgang von Goethe*

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NERC, 2011



*MARE NOSTRUM*: NERC Post-doctoral fellowship proposal

## *MARE NOSTRUM*: a comprehensive, coherent, spatially explicit and updatable holocene sea level markers database for the Mediterranean

### Quick facts

*What do I want to do and how much time will it take?*

Build a database of reviewed relative sea level markers for the Mediterranean to sustain sea level studies, especially those related to eustasy and glacio-hydro-isostatic modeling and coastal vulnerability assessment in this basin. The project will last three years and the database will be online also after the project end.

*How does the proposed project relate to NERC interests?*

Among the environmental issues investigated by NERC, there are 'Rising sea levels'. This project is related mainly to the improvement of past information to tune glacio-hydro-isostatic models in an important part of the European Union.

*What difference will the project make to the state of the art?*

The methodology is not new, but a similar project in the Mediterranean has never been carried out. Another novelty resides in the freely available and updatable database which will be the main output of the project.

*What has already been done in the area of my project?*

A great quantity of literature dealing with local areas, in some case reviewed by some author. Similar projects have been successfully carried out in US and UK coastal areas. Some similar project in different geographic areas has been already funded by NERC.

*Why should I, rather than someone else, do this project?*

I have the interdisciplinary preparation necessary to review biological, sedimentological, geomorphological and archaeological relative sea level markers. I have also good skills in the building of spatial databases.

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SCIENCE OF THE  
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## Problems:

- Too local (Mediterranean)
- Immature wording and organization, spatially explicit and updatable holocene
- Data oriented, not innovative database for the Mediterranean

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## NERC, 2011

Few years later, we did it anyway!

Earth-Science Reviews 155 (2016) 172–197



Contents lists available at [ScienceDirect](#)

### Earth-Science Reviews

journal homepage: [www.elsevier.com/locate/earscirev](http://www.elsevier.com/locate/earscirev)



## Multiproxy assessment of Holocene relative sea-level changes in the western Mediterranean: Sea-level variability and improvements in the definition of the isostatic signal



Matteo Vacchi<sup>a</sup>, Nick Marriner<sup>b</sup>, Christophe Morhange<sup>a</sup>, Giorgio Spada<sup>c</sup>,  
Alessandro Fontana<sup>d</sup>, Alessio Rovere<sup>e</sup>

<sup>a</sup> Aix-Marseille Université, CEREGE CNRS-IRD UMR 34, Europole de l'Arbois BP 80, 13545 Aix-en-Provence, Cedex 4, France

<sup>b</sup> CNRS, Chrono-Environnement UMR 6249, Université de Franche-Comté, UFR ST, 16 route de Gray, 25030 Besançon, France

<sup>c</sup> Università degli Studi di Urbino, Dipartimento di Scienze Pure ed Applicate (DiSPeA), Via Santa Chiara 27, Urbino, Italy

<sup>d</sup> Università degli Studi di Padova, Dipartimento di Geoscienze, Via Gradenigo 6, Padova, Italy

<sup>e</sup> University of Bremen, Marum, ZMT, Bremen, Germany

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## Marie Curie IEF, 2011

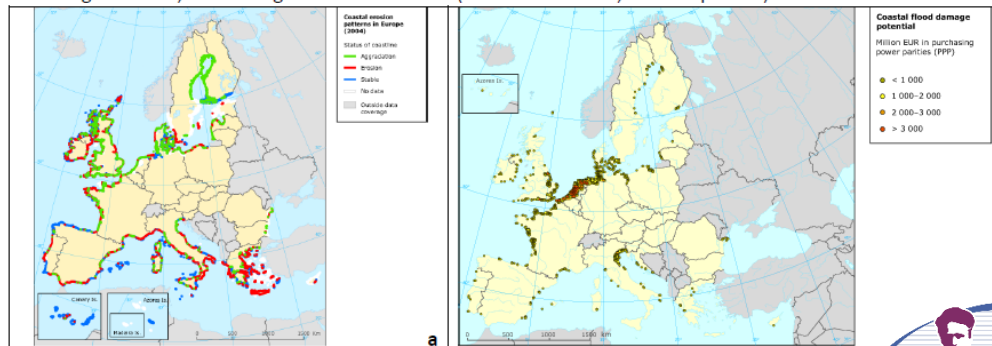
EUROCAST is the acronym for “Classification and Indexing of EUROpean COASTlines”

### B1 RESEARCH AND TECHNOLOGICAL QUALITY (MAXIMUM 8 PAGES)

RESEARCH AND TECHNOLOGICAL QUALITY, INCLUDING ANY INTERDISCIPLINARY AND MULTIDISCIPLINARY ASPECTS OF THE PROPOSAL

#### GENERAL PURPOSE OF THE PROPOSAL

**Coastal areas are one of the most rapidly evolving systems on Earth.** Their evolution is both natural and human-driven, and, according to the last IPCC report, they will be one of the systems mostly affected by climate changes in terms of human population. With about 43% of citizens living in coastal areas (Source: EuroStat), the European Union has a strong attention towards coastal management practices and adaptation policies (e.g. Adapting to climate change: Towards a European framework for action – COM 2009 147 final). In fact, about 15% of EU coasts are at risk of erosion (EUROSION, [www.euroSION.org](http://www.euroSION.org)), and large tracts of the coast are at risk of coastal flooding following tsunamis, storm surges or sea level rise (data from ESPON, [www.espon.eu](http://www.espon.eu)).



Different hazards related to European coastlines (Source: [www.eea.europa.eu](http://www.eea.europa.eu)). a) Coastal erosion patterns in Europe (2000). b) Coastal flood damage potential.



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MARIE CURIE ACTIONS

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## Marie Curie IEF, 2011

### Problems:

- Technical work, not science
- Workplan not very well organized
- Still data oriented, no big questions tackled

Outcome: 77.9/100

EUROCOAST is the acronym for "Classification and Indexing of European COASTlines"

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GENERAL RESEARCH AND TECHNOLOGICAL QUALITY (MAXIMUM 8 PAGES)

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Coastal flood damage potential

Million EUR in purchasing power parities (PPP)

• < 1 000  
• 1 000-2 000  
• 2 000-3 000  
• > 3 000

MARIE CURIE ACTIONS

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## Marie Curie IOF, 2012

### **PHiSI: Pliocene Highstands: Sea level and Ice sheets in a warmer world**

#### **B1 RESEARCH AND TECHNOLOGICAL QUALITY**

##### ***B1.1 Research and technological quality, including any interdisciplinary and multidisciplinary aspects of the proposal***

Understanding climate change is one of the most challenging scientific issues in the 21<sup>st</sup> century. Climate change is foreseen to have impacts on a vast set of assets, from human health<sup>1</sup>, to economy<sup>2</sup> and natural systems<sup>3</sup>. As for the facets of a Rubik's cube, scientists work to reconcile different aspects of climate change, trying on one side to depict its global effects and on the other to understand its spatial variability and local effects. Central issues in climate sciences are the mechanisms triggering global temperature changes and the consequent response of ice sheets, ocean circulation and sea level.

Sea level (SL) changes are among the most discussed effects of global climate changes. The elevation of ocean surface relatively to the ocean floor is defined as a 'relative sea level' (RSL), and any shift on height of either of these two surfaces produces a RSL change. RSL varies due to a variety of processes, acting at different time scales<sup>4</sup>. In the long term these factors are eustatic, deformation of the solid earth and tectonic. Eustatic SL changes are caused by variations in ocean volume due to input of melt water into the oceans or by thermal expansion of seawater. As regards deformation of the solid earth, near major ice centres (near field regions) glacioisostatic effects are the dominant signal, while far away from them (far field regions) the major signal is due to by ocean loading (called hydroisostasy). Solid earth deformation causes also perturbations in the Earth rotation parameters, which produce changes in global RSL<sup>5</sup>. Tectonic processes cause local displacements of the earth crust and can occur either at short (e.g. earthquakes) or long time scales (e.g. tectonic uplift or thermal subsidence).

Models that incorporate the mechanisms briefly outlined above can be employed to predict RSL change. These can, in turn, be compared to observations made in the field, once that these have been correctly interpreted. In the last decade, geophysicists and field geologists have started to cooperate in multidisciplinary teams<sup>6</sup> to gather a better understanding of SL change and its spatial variability.



MARIE CURIE ACTIONS

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## Marie Curie IOF, 2012

### Problems:

- Scientific work could be better defined
- Big questions are there but already being tackled

Outcome: between 70 and 80/100

PHiSI: Pliocene Highstands: Sea level and Ice sheets in a warmer world

B1. RESEARCH AND TECHNOLOGICAL QUALITY

B1.1 Research and technological quality, including any interdisciplinary and multidisciplinary aspects of the project

Understanding the challenges of the 21<sup>st</sup> century. Climate change is forecast to have impacts on a vast set of assets, from human health<sup>1</sup>, to economy<sup>2</sup> and natural systems<sup>3</sup>. As for the future, it is essential to work to reconcile different aspects of climate change, trying on one side to depict its global effects and on the other to understand its spatial variability and local effects. Central issues in climate sciences are the mechanisms triggering global temperature changes and the consequent response of ice sheets, ocean circulation and sea level.

Sea level (SL) changes are among the most discussed effects of global climate changes. The elevation of ocean level (RSL), and any shift on height of either of these two surfaces produces a RSL change. RSL varies due to a variety of processes, acting at different time scales<sup>4</sup>. In the long term these factors are eustatic deformation of the solid earth and tectonic. Eustatic SL changes are caused by variations in ocean volume due to input of melt water into the oceans or by thermal expansion of seawater. As regards deformation of the solid earth, near major ice centres (near field regions) glacioisostatic effects are the dominant signal, while far away from them (far field regions) the major signal is due to by ocean loading (called hydrostatic). Solid earth deformation causes also perturbations in the Earth rotation parameters, which produce changes in global RSL. Tectonic processes cause local displacements of the earth crust and can occur either at short (e.g. earthquakes) or long time scales (e.g. tectonic uplift or thermal subsidence).

Models that incorporate the mechanisms briefly outlined above can be employed to predict RSL change. In turn, be compared to observations made in the field, once that these have been correctly displacement. In the last decade, geophysicists and field geologists have started to cooperate in multi teams<sup>6</sup> to gather a better understanding of SL change and its spatial variability.

PHI: Pliocene Highstands: Sea level and Ice sheets in a warmer world

MARIE CURIE ACTIONS

# Conception

Daring ideas are like chessmen moved forward. They may be beaten, but they may start a winning game.


- Johann Wolfgang von Goethe

## Marie Curie IOF, 2012

Some of it was used in a later review paper!

Earth-Science Reviews 145 (2015) 117–131

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ELSEVIER

Contents lists available at [ScienceDirect](#)


### Earth-Science Reviews

journal homepage: [www.elsevier.com/locate/earscirev](http://www.elsevier.com/locate/earscirev)



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## Mid-Pliocene shorelines of the US Atlantic Coastal Plain — An improved elevation database with comparison to Earth model predictions

 CrossMark

A. Rovere <sup>a,b,\*</sup>, P.J. Hearty <sup>c</sup>, J. Austermann <sup>d</sup>, J.X. Mitrovica <sup>d</sup>, J. Gale <sup>b</sup>, R. Moucha <sup>e</sup>, A.M. Forte <sup>f</sup>, M.E. Raymo <sup>b</sup>

<sup>a</sup> MARUM, University of Bremen and ZMT, Leibniz Center for Tropical Marine Ecology, Germany  
<sup>b</sup> Lamont-Doherty Earth Observatory, Columbia University, NY, United States  
<sup>c</sup> Department of Environmental Studies, UNC Wilmington, NC, United States  
<sup>d</sup> Department of Earth and Planetary Sciences, Harvard University, MA, United States  
<sup>e</sup> Department of Earth Sciences, Syracuse University, NY, United States  
<sup>f</sup> Département des Sciences de la Terre et de l'Atmosphère, UQAM, Canada

# Conception

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## National Science Foundation, 2014

### PROJECT DESCRIPTION

#### **Polar Ice Sheet Dynamics During MIS 5e: A Combined Field Data and Modeling Approach**

Principal Investigators: Maureen E. Raymo (Lamont-Doherty Earth Observatory)  
& Paul J. Hearty (University of North Carolina, Wilmington)  
in collaboration with Dr. Alessio Rovere<sup>1</sup> (MARUM, Germany)

#### **1. Introduction: MIS 5e sea level and hypotheses to be tested**

Past interglacials are of interest for the scientific community (and society at large) as they provide us with natural experiments involving a climate system as warm or slightly warmer than today. Of particular interest is the degree to which relatively small perturbations to climate forcing variables such as atmospheric temperature, insolation, or CO<sub>2</sub> can lead to polar ice volume and sea level changes. Currently, the research community is intensely focused on understanding sea level and ice volume history during marine isotope stage (MIS) 5e, which was the last interglacial period as warm as today and which occurred between ~128 and 116 kyr BP. During MIS 5e, ice core evidence suggests greenhouse gas concentrations were comparable to pre-industrial levels [Petit et al., 1999], however, summer insolation at high latitudes was higher by ~10%. This small increase in solar heating was apparently sufficient to warm polar temperatures in both hemispheres by about 3-5 °C relative to today [Otto-Bliesner et al., 2006] and global mean temperature by an estimated 1.5°C [Turney & Jones, 2010]. By comparison, global mean temperature has already increased by an estimated 0.85°C since 1880 [IPCC, 2013] and an additional warming of 1°C, likely to occur by the end of this century, is expected to raise polar temperatures by an additional 3-6 °C [Kattsov et al., 2005]. Indeed, the Antarctic Peninsula has warmed by an average of 0.5°C/decade over the last 60 years [Mulvaney et al., 2006].

How did the polar ice sheets respond to the comparable MIS 5e warming? Sea level at this time



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# Conception

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National Science Foundation, 2014

## Problems:

- The idea is mature, but it needs to be refined
- Global scope is OK, but needs to be better framed
- Not a single-person (postdoc) project, need of a team working through several years

## PROJECT DESCRIPTION

### Polar Ice Sheet Dynamics During MIS 5e: A Combined Field Data and Modeling Approach

Principal Investigator: E. Raymo (Lamont-Doherty Earth Observatory)  
Co-Principal Investigator: & Paul J. Hearty (University of North Carolina, Wilmington)  
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## National Science Foundation, 2014

Some of it was used in a later review paper!

Earth-Science Reviews 159 (2016) 404–427

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Contents lists available at [ScienceDirect](#)

### Earth-Science Reviews

journal homepage: [www.elsevier.com/locate/earscirev](http://www.elsevier.com/locate/earscirev)

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Invited review

## The analysis of Last Interglacial (MIS 5e) relative sea-level indicators: Reconstructing sea-level in a warmer world

 CrossMark

Alessio Rovere<sup>a,b,\*</sup>, Maureen E. Raymo<sup>c</sup>, Matteo Vacchi<sup>d</sup>, Thomas Lorscheid<sup>a,b</sup>, Paolo Stocchi<sup>e</sup>, Lluís Gómez-Pujol<sup>f</sup>, Daniel L. Harris<sup>a,b</sup>, Elisa Casella<sup>b</sup>, Michael J. O'Leary<sup>g</sup>, Paul J. Hearty<sup>h</sup>

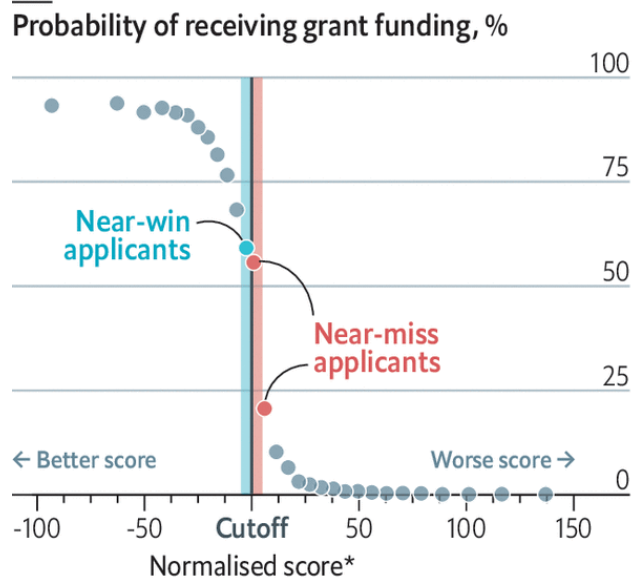
<sup>a</sup> MARUM, University of Bremen, Leobener Straße, 28359 Bremen, Germany  
<sup>b</sup> ZMT, Leibniz Center for Tropical Marine Ecology, Fahrenheitstraße 6, 28359 Bremen, Germany  
<sup>c</sup> Lamont-Doherty Earth Observatory, Columbia University, 61 Route 9W, Palisades, NY 10964, United States  
<sup>d</sup> Aix-Marseille Université CEREGE CNRS-IRD UMR, 34, Europole de l'Arbois BP 80, 13545 Aix-en-Provence Cedex 4, France  
<sup>e</sup> NIOZ Royal Netherlands Institute for Sea Research, Department of Estuarine and Delta Systems (EDS), and Utrecht University, P.O. Box 59, 1790 AB Den Burg, Texel, the Netherlands  
<sup>f</sup> SOCIB, Balearic Islands Coastal Observing and Forecasting System, ParcBit, Ed. Naorte, Ctra. Valldemossa km 7.4, 07121 Palma, (Balearic Islands), Spain  
<sup>g</sup> Department of Environment and Agriculture, Curtin University, Perth, Australia  
<sup>h</sup> Environmental Studies Department, University of North Carolina, Wilmington, United States

# Conception

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## Grant proposals for America's National Institutes of Health



Source: "Early-career setback and future career impact", by Y. Wang, B. F. Jones and D. Wang, arXiv

The Economist

## "Hit" papers, % of total published

Papers in the top 5% of citations received in the same field and year



## Average number of citations



\*Proposal score minus funding cutoff score

**Scientists who fail early in their careers may benefit from the experience**

# Conception

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- Johann Wolfgang von Goethe

## MARUM Excellence Initiative 2014

### FIVE-YEAR PROJECT PLAN – ALESSIO ROVERE

#### FOREWORD

The following research plan represents a projection of my ongoing research activities for the next five years. As Junior research group leader at the University of Bremen, my plan is to lead a small research group (e.g. 2 doctorate students and myself) that will carry on the activities described hereafter in collaboration with fellow colleagues both at MARUM and ZMT as well as with other colleagues in US, Europe and Australia. Each research activity I plan to develop is described hereafter in the form of a work package (WP), where the state of the art is briefly described alongside the preliminary work I did in the past years in the field, the objectives for the next 5 years and the main ongoing collaborations. Successively, are listed the costs and the personnel that would be needed to achieve the objectives of each WP (excluding personnel cost).

The overall goal of my five-year plan is to contribute to the advancement of science in understanding sea levels during past interglacials to some extent analogues of slightly warmer worlds and to investigate the occurrence and magnitude of past rapid sea level changes imprinted in the Pliocene to Holocene geologic record. This kind of research is of direct relevance to the study of the magnitude of both present and future sea level changes.

# Conception

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## DFG Spp Sea Level 2016

DFG form – Rev. 06/15

page 1 of 20

### Project Description – Project Proposals

Alessio Rovere (MARUM-ZMT, Bremen); Thomas Mann (ZMT, Bremen); Hildegard Westphal (ZMT Bremen), Tilo Schöne (GFZ, Potsdam)

Alessio Rovere (Principal applicant): Junior research group leader

Term of contract: 2014-2017 + 2 years after successful evaluation funded by the Excellence Initiative, MARUM, University of Bremen and ZMT – Leibniz Center for Tropical Marine Ecology, Bremen.

**TITLE:** Holocene sea-level change in Southeast Asia

### Project Description

#### 1 State of the art and preliminary work

Changes in relative sea level (RSL) are the net effect of eustatic, isostatic, tectonic and other local factors, such as subsidence due to sediment compaction. Holocene RSL reconstructions allow constraining both vertical land movements and geophysical models of Glacial Isostatic Adjustment (GIA), as these are in turn used to correct instrumental sea-level measurements from and to obtain information on vulnerability to future sea level changes. Therefore, regional RSL datasets, surveyed following standardized protocols, represent a long-term basis which to assess changes in mean sea level (msl) during the past century, and to help sea-level projections for the 21st century at local and regional scales.

**DFG**  
Deutsche  
Forschungsgemeinschaft

# Conception

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- Johann Wolfgang von Goethe

## DFG Spp Sea Level 2016

### What changed

- Mature ideas, naivety is gone
- Big problems are tackled
- More focused writing
- Care on graphics

DFG form – Rev. 06/15 page 1 of 20

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**Project Description – Project Proposals**

Alessio Rovere (MARUM-ZMT, Bremen); Thomas Mann (ZMT, Bremen); Hildegard Westphal (ZMT Bremen), Tilo Schöne (GFZ, Potsdam)

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**DFG**  
Deutsche  
Forschungsgemeinschaft

# Lessons learned

2011-2019

It is a marathon, not a sprint

If an idea is good, persistence pays off

Use what you write for review papers

Keep reshaping the idea as new literature comes out

# Inception

No army can withstand the strength of an idea whose  
time has come

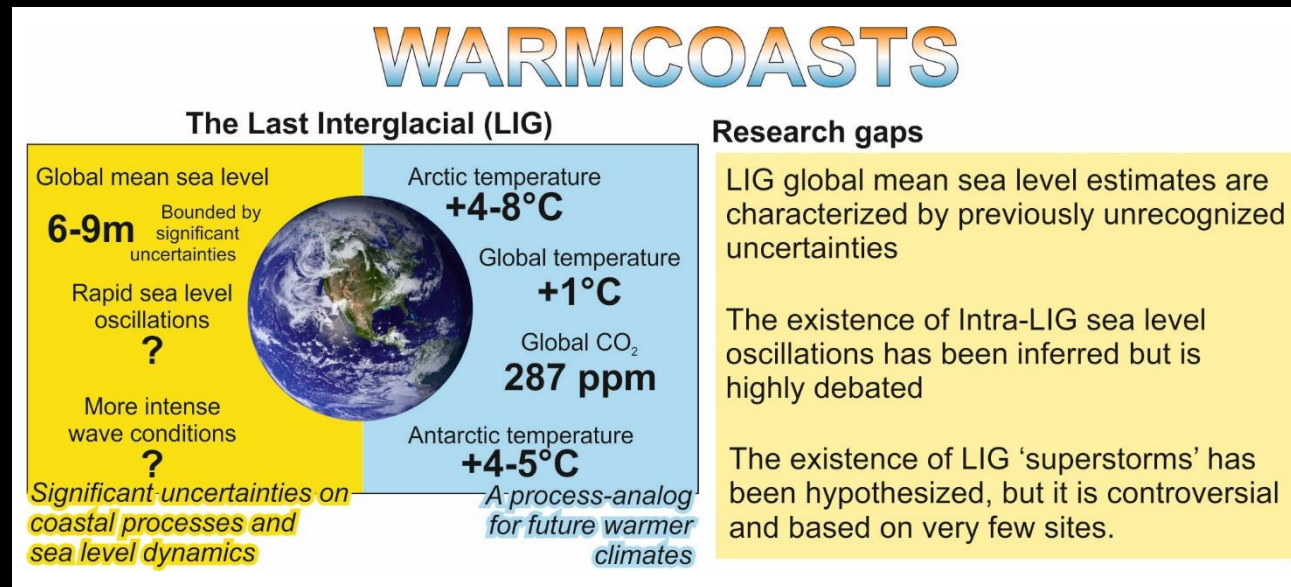
- *Victor Hugo*

# Inception

No army can withstand the strength of an idea whose time has come  
- Victor Hugo

Streamline your idea into a project draft by defining your ROAR points

## Research gaps



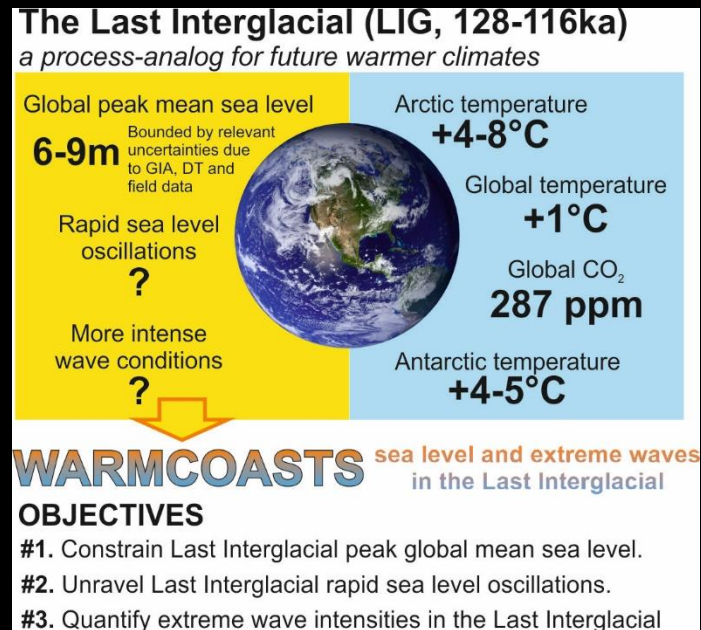
# Inception

No army can withstand the strength of an idea whose time has come

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Streamline your idea into a project draft by defining your ROAR points

Research gaps  
Overarching goals



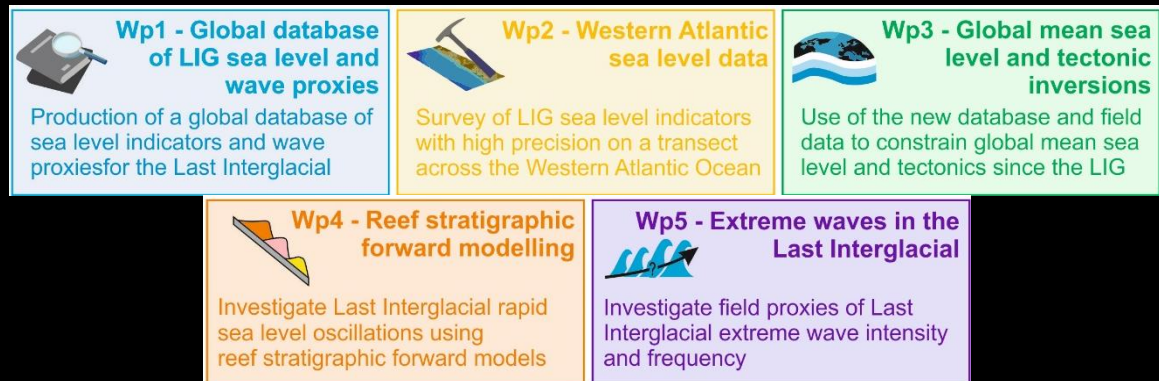
# Inception

No army can withstand the strength of an idea whose time has come

- Victor Hugo

Streamline your idea into a project draft by defining your ROAR points

Research gaps  
Overarching goals  
Actions



# Inception

No army can withstand the strength of an idea whose time has come

- Victor Hugo

Streamline your idea into a project draft by defining your ROAR points

**R**esearch gaps  
**O**verarching goals  
**A**ctions  
**R**elevance

Sea level rise will threaten  
**100 million people** by the end  
of this century

*Kopp et al., 2017  
Earth's future*



By 2050, sea level rise will cost  
**50 billion euros per year**  
(with adaptation measures)



*Hallegatte et al., 2013, Nature Climate Change*

# Inception

No army can withstand the strength of an idea whose  
time has come

- *Victor Hugo*

## Ask yourself the hard questions

Is my idea ground-breaking?

Is it feasible, but with risky aspects?

Is it incremental? (It should not be)

Do I really need a team and lots of money?

# Inception

No army can withstand the strength of an idea whose  
time has come

- Victor Hugo

## Get out there and challenge your colleagues

Sea level and extreme waves in the Last Interglacial: open questions and research directions 2

**The general idea: throw stones into a still pond**

- Back-of-the-envelope calculations
- Outlines of ideas
- More questions than answers

LIG peak eustatic sea level

A late-LIG sea level rise?

Increased storm activity in the LIG?

**START WRITING!**

# Writing

If I had more time, I would have  
written a shorter letter

- *Blaise Pascal*

# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

## 1. Follow the instructions!

Read and conform to all instructions found on the ERC website.



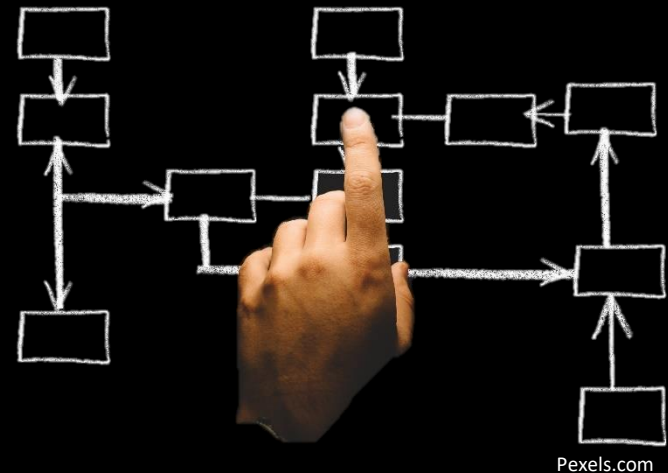
# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

## 1. Follow the instructions!

## 2. Break down your proposal into points

For each section, lay out in point form what you will discuss.



# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

1. Follow the instructions!
2. Break down your proposal into points
3. Know your audience

Describe your research proposal in non-technical terms. Use clear, plain language and avoid jargon.

**ACRONYMS.** We give hereafter a brief definition of common terminology used throughout this proposal. We refer the reader to a review paper by Rovere et al (2016a)<sup>5</sup> for further details.

**Eustatic Sea Level (ESL)** is a synonym for **global mean sea level**. Changes in ESL are driven by processes that cause changes in the volume or mass of the world ocean (i.e., ice melting or thermosteric processes)<sup>6</sup>.

**Glacial Isostatic Adjustment (GIA)** is the viscoelastic response of the Earth to the redistribution of ice and ocean loads<sup>7</sup>, and varies spatially according to the distance from former ice centers.

**Dynamic Topography (DT)** is caused by mantle flow that drives significant vertical motions of the crust along large areas<sup>8</sup>. Previously considered a significant driver of uplift/subsidence at scales of few million years, recently DT proved to be a significant process also in the reconstruction of LIG histories.

**Relative Sea Level (RSL)** is any sea level estimate that includes the sum of eustatic and other non-eustatic processes, such as GIA, DT and tectonics<sup>9</sup>. **RSL indicator** is any fossil coastal feature that can be used, once interpreted to assess the environment where it was formed, as a direct proxy for paleo RSL.

# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

1. Follow the instructions!
2. Break down your proposal into points
3. Know your audience
4. Make an impact in the first few sentences

Reviewers are very busy people. But they are also scientists, so they are keen to know new things. You must grab their attention and excite them about your project from the very beginning. Make it easy for them to understand (and thus fund) your proposal.



# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

1. **Follow the instructions!**
2. **Break down your proposal into points**
3. **Know your audience**
4. **Make an impact in the first few sentences**
5. **Have a clear title.**

It is important that the title of your project is understandable to the general public, reflects the goal of the study, and attracts interest.

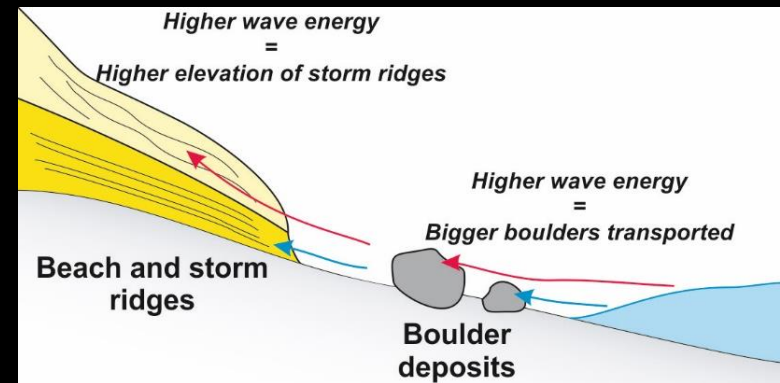


# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

1. Follow the instructions!
2. Break down your proposal into points
3. Know your audience
4. Make an impact in the first few sentences
5. Have a clear title
6. Care about your graphics!

Make your own graphics, your proposal should look sharp, fresh, exciting. Avoid as much as possible copy-paste.



# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

1. Follow the instructions!
2. Break down your proposal into points
3. Know your audience
4. Make an impact in the first few sentences
5. Have a clear title
6. Care about your graphics!
7. **Show that your research is feasible**  
Demonstrate that you are competent to conduct the research, and that you can tackle risks. Do not hide risks, state them and analyze them!



Source: Wikipedia

# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

1. Follow the instructions!
2. Break down your proposal into points
3. Know your audience
4. Make an impact in the first few sentences
5. Have a clear title
6. Care about your graphics!
7. Show that your research is feasible
8. Indicate how your research will make a  
“contribution to knowledge”

Claim a vision, tell it to the reviewer

**The final statement.** Our vision is that the results of this project the LIG, and will re-define the state-of-the-art. We envision that forthcoming IPCC or similar climate reports. A vision for a possible shown below. Bold letters indicate the numbers that we will be a

# Writing

If I had more time, I would have  
written a shorter letter  
- *Blaise Pascal*

1. **Follow the instructions!**
2. **Break down your proposal into points**
3. **Know your audience**
4. **Make an impact in the first few sentences**
5. **Have a clear title**
6. **Care about your graphics!**
7. **Show that your research is feasible**
8. **Indicate how your research will make a  
“contribution to knowledge”**
9. **Get the proposal reviewed and  
commented on by others**

Get feedback and edit. Then edit some more. And get more feedback. The more diverse opinion and criticism you receive on your proposal the better suited it will be for a multi-disciplinary audience.



Pexels.com

# Writing

If I had more time, I would have  
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- *Blaise Pascal*

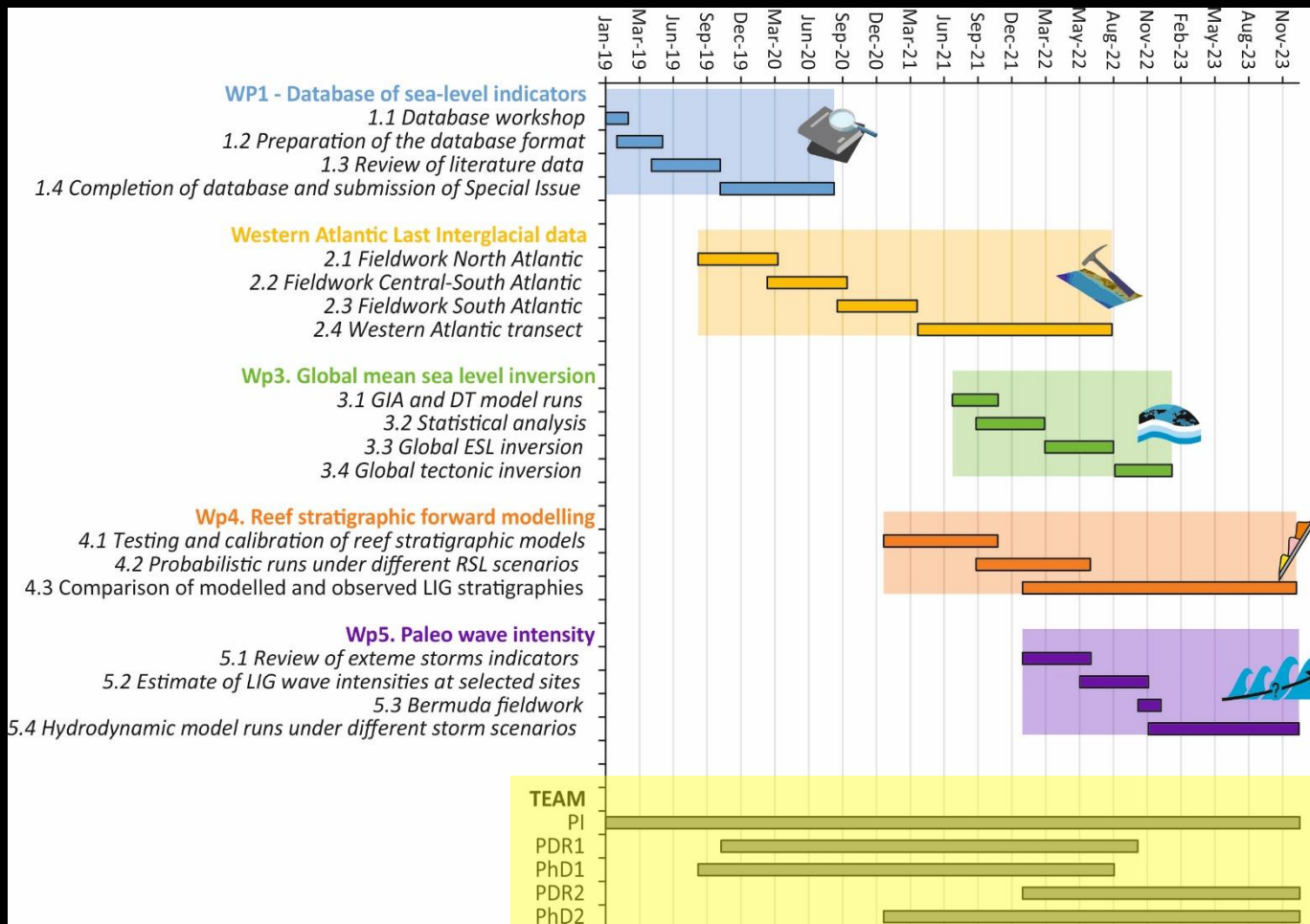
1. Follow the instructions!
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4. Make an impact in the first few sentences
5. Have a clear title
6. Care about your graphics!
7. Show that your research is feasible
8. Indicate how your research will make a  
“contribution to knowledge”
9. Get the proposal reviewed and  
commented on by others
10. **Spend time on your budget!**

The administration of your institute knows how to draft it,  
but you need to think about your needs



Pexels.com

# Budget (and workplan)



1. Describe each action
2. Assign researchers to each action
3. Describe the expertise needed
4. Budget for the team

If you have anything available at no cost...  
SAY IT!

Available Equipment  
Sea Level and Coastal Changes Group



## GNSS

Pro XRT Receiver  
Tornado Antenna  
Juno 5D handheld with Terrasync  
Trimble LaserAce 1000 Rangefinder  
Trimble Pathfinder Office



## Echosounders

BioSonics MX Aquatic Habitat  
Echosounder  
Deeper smart sonar PRO+  
10 INW Pressure Temperature  
loggers



## GIS laboratory

4 dedicated PCs  
DELFT 3D and Flexible Mesh  
DIONISOS Flow Stratigraphic model  
Global Mapper with LIDAR module  
Agisoft Photoscan  
Pix4D  
ESRI ArcGIS  
MATLAB  
Surfer & Grapher  
ENVI  
ATCOR  
Trimble Ecognition

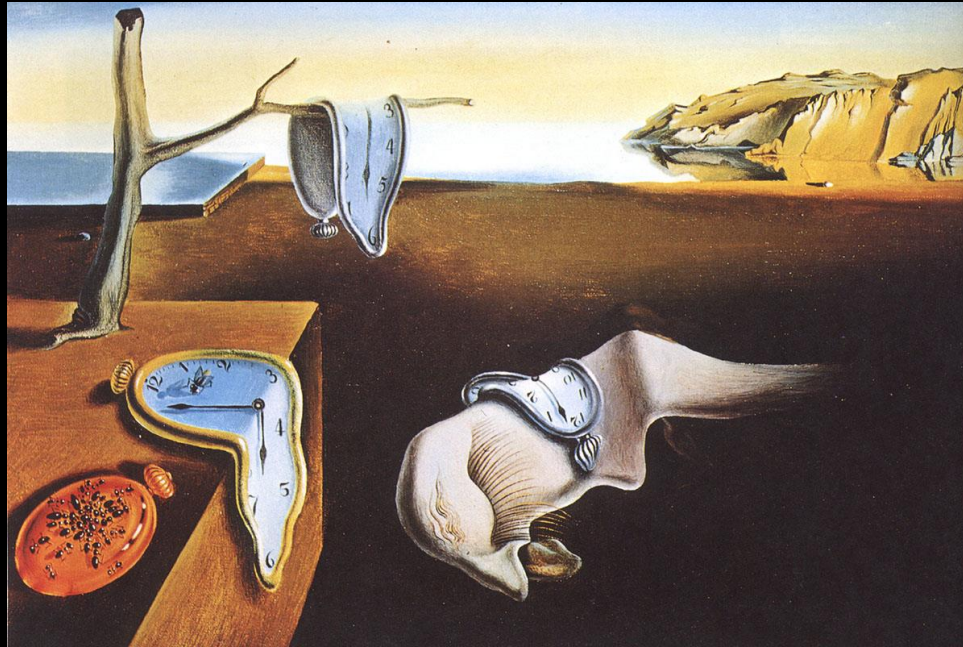


## Drones

DJI Phantom 2  
DJI Mavic Pro  
LA 300 Fixed wing  
Gopro 4 camera  
Sony RX III camera  
Parrot Sequoia Multispectral

# 1 YEAR

from inception  
to written proposal



Wikipedia

# The review process

## Part A

Info on:

Proposal and PI  
Host institution  
Budget

## Part B1

Info on:

PI track record  
Extended  
project synopsis

## Part B2

Info on:

Full project  
description including  
ethics and budget

# The review process

## Part A

Info on:  
Proposal and PI  
Host institution  
Budget

## Part B1

Info on:  
PI track record  
Extended  
project synopsis

## Part B2

Info on:  
Full project  
description including  
ethics and budget

Eligibility checks

Step 1 –  
Remote  
assessment by  
panel members  
on **Part B1**

Panel meeting

Proposals  
retained for  
step 2

# The review process

## Part A

Info on:  
Proposal and PI  
Host institution  
Budget

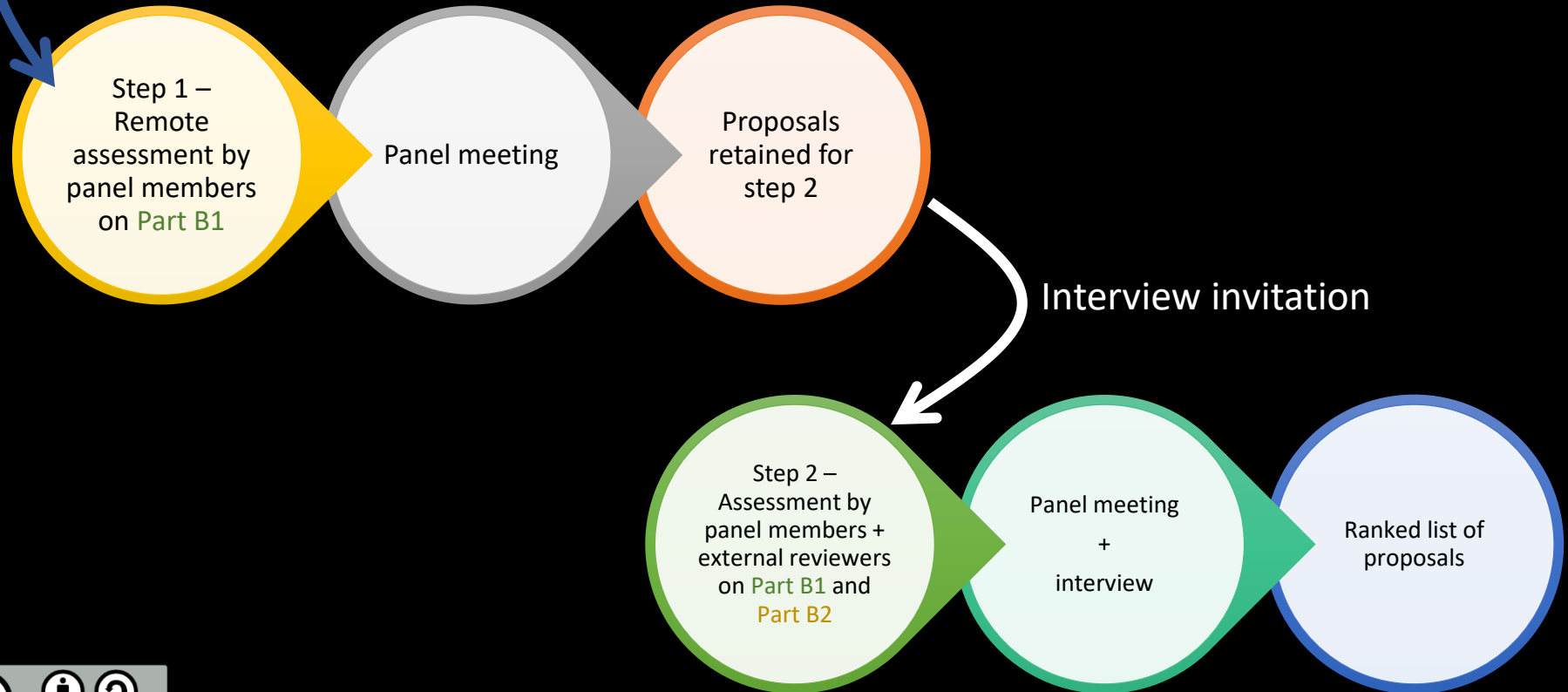
## Part B1

Info on:  
PI track record  
Extended  
project synopsis

## Part B2

Info on:  
Full project  
description including  
ethics and budget

Eligibility checks



# The review process

1984, Cesare Emiliani is accidentally sent his own proposal to review: comedic gold

TRANSITION AND THE HOLOCENE BASED ON A DETAILED ANALYSIS OF CARBONATE MINERAL  
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 FORMATION AND THE HOLOCENE BASED ON A DETAILED ANALYSIS OF CARBONATE MINERAL

What a fantastic proposal this one is! Now, I knew that Emiliani is a genius (he told me so himself, several times), but I did not know he was a genius of such transcendental proportions!

As I was reading through this proposal following the luminous thread of Emiliani's thought, I could't help asking myself at practically every turn of a phrase, "why didn't I think of that!" It has been a very wearying experience indeed, but also a very enlightening one.

Is there any question in anybody's mind that the Last Deglaciation is important? Is it not the key to the evolution of our modern environment? Emiliani thinks that he can come up with a conclusive resolution of the critical events that ushered in the modern age by studying the sediments in the Cariaco Trench. Now, is an example of what I mean when I say, why the heck didn't I think of it myself? Now, the Cariaco Trench has been there for ages and ages, a dubious little hole on a Third World shelf. We all knew that it had lots of Pleistocene sediments, but did we do anything about it? Absolutely we did not. We were too busy sacking NSF and running more and more cores which did not do anything except proving over and over again that Emiliani was right in 1966.

For the proposal under consideration I have nothing but unabashed praise. The proposal speaks for itself ("Only an asshole of septic tank profundity"--Emiliant told me in a dazzling display of superior English--could fail to understand the unconstrained import of this proposal.

WALL AND ☒ EXCELLENT ☐ VERY GOOD ☐ GOOD ☐ FAIR ☐ POOR

has the cores, the problem, and the equipment. He also has Dr. Price, the senior Microbeam engineer now on the American Plate, and the cooperation of Kurt Bostrom in Stockholm, all of this at no cost. The budget, therefore, is extraordinarily modest. I conclude that this proposal is not only outstanding, but also a huge bargain for NSF.

And now I would like to speak in confidence. There is more to this proposal that meets the eye. Emiliani has shown me (in confidence) his newest composite isotopic curve with the time scale fixed by radiometric dates. I have examined it in minute detail. There is an amazing correspondence [Emiliani, pers. comm.] between all insolation maxima and minima at high latitude, large and small, and the major and minor isotopic inflexions. The Postglacial is an exception. Emiliani has come to the unbelievable conclusion that we are right now smack in the middle of the biggest glaciation of them all, and that the so-called Postglacial is entirely artificial--the result of inadvertent climate modification (forest fires) by prehistoric men beginning about 12,000 y ago. At first I was stunned, but Emiliani has a lot of good arguments and even some evidence (although he assured me that good ideas need no evidence). Anyway, it seems that Emiliani has a paper with NATURE presenting this explosive notion and recommending that we keep pumping CO<sub>2</sub> into the atmosphere to keep the earth from freezing. He also points out that the 'nuclear winter' of Sagan and Co. could be brought about by much less megatonnage than recommended. 'In other words--he says--we can have our nuclear holocaust at a bargain cost to the taxpayer if we don't dilly-dally and get it off during the present glacial age.'

Now, this is what I call penetrating thinking. Emiliani intends to prove that the Pliocene is indeed artificial by adding to the work to be done on the Carriacou Trench cores a detailed study of the concentration

# The review process

Y OF THE PROPOSED RESEARCH (INCLUDING BUDGET AND INSTITUTIONAL CAPABILITY)

What a fantastic proposal this one is! Now, I knew that Emiliani is a genius (he told me so himself, several times), but I did not know he was a genius of such transcendental proportions!

luminous thread



European Research Council  
Executive Agency

Established by the European Commission

Brussels, 24 April 2018  
Ares(2018)2146554

Review session: Step 1

Alessio ROVERE  
Leobener Strasse 2, FVG-OST building, Room 0200  
28359 Bremen  
Germany

Dear Dr. ROVERE,

**Subject: Additional information on the interview**

As announced in our previous communication, please find below additional information regarding your interview.

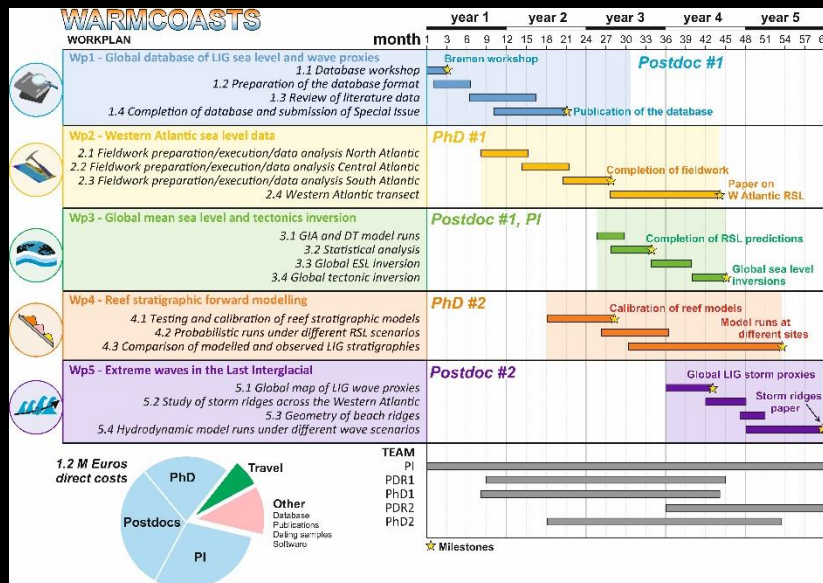
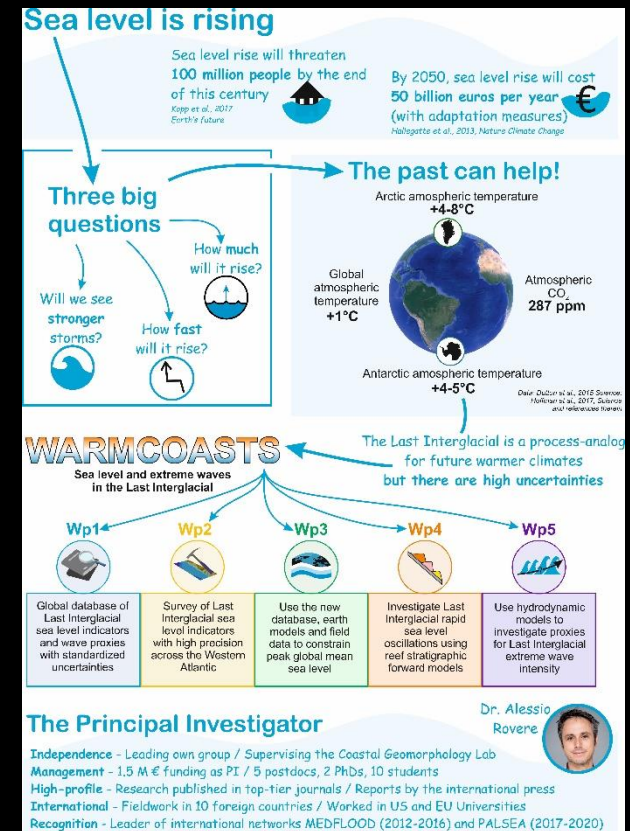
<b>Applicant name</b>	Alessio ROVERE
<b>Applicant address</b>	Leobener Strasse 2, FVG-OST building, Room 0200 28359 Bremen Germany
<b>Panel:</b>	PE10
<b>Interview date:</b>	14 June 2018
<b>Interview slot:</b>	11:00 - 12:10

# Interview

It usually takes me more than three weeks to prepare a good impromptu speech  
- Mark Twain

## 1. Follow the instructions!

PE 10 (Earth sciences) has a 5 minutes presentation and 20 minutes discussion. STAY ON TIME  
Slide printouts are possible – Ask if an infographic is accepted as well.



# Interview

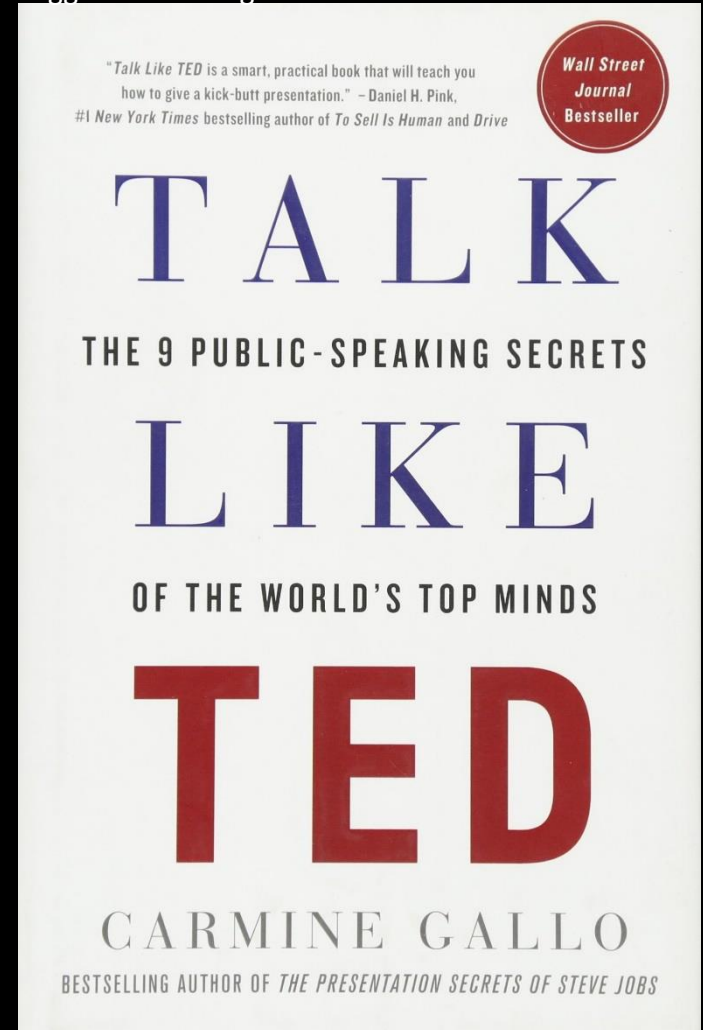
It usually takes me more than three weeks to prepare a good impromptu speech  
- Mark Twain

## 1. Follow the instructions!

## 2. Practice make you perfect

Watch presentations online (Ted Talk). Take a presentation course, learn how to stand on the podium and how to present. Record your talk, keep changing it until you are happy with it. Ask feedbacks from colleagues and organize trial panels.

### Suggested reading



# Interview

It usually takes me more than three weeks to prepare a good impromptu speech

- Mark Twain

1. Follow the instructions!
2. Practice make you perfect
3. Be confident

It is your project, your idea, and it is brilliant. If you are there, the panel thinks you are good. They just need to confirm the impression they had on paper



Wikipedia

# Interview

It usually takes me more than three weeks to prepare a good impromptu speech

- Mark Twain

1. Follow the instructions!
2. Practice make you perfect
3. Be confident
4. Study your panel

ERC panels from previous years are available online. How they are composed in terms of expertise? Someone you know in your field?



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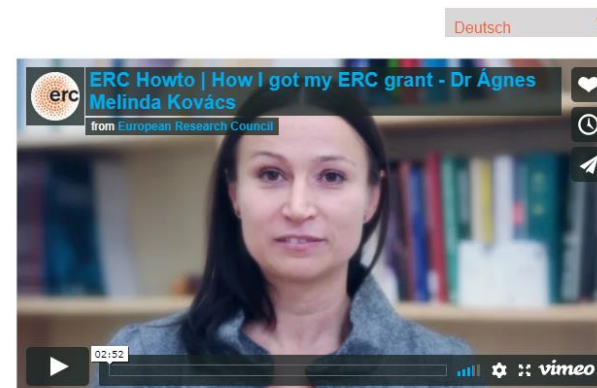
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## STARTING GRANTS



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Are you a talented early-career scientist who has already produced excellent supervised work, is ready to work independently and shows potential to be a research leader? The ERC Starting Grant could be for you.



### Who can apply?

Researchers of any nationality with **2-7 years of experience since completion of PhD** (Extensions are possible under certain circumstances — see the latest [ERC Work Programme](#)), a scientific track record showing great promise and an excellent research proposal



### What proposals are eligible?

#### Criteria

Applications can be made in **any field of research**  
The ERC's grants operate on a 'bottom-up' basis without predetermined priorities.

#### Location

Research must be conducted in a **public or private research organisation** (known as a Host Institution/HI). It could be the HI where the applicant already works, or any other HI located in one of **the EU Member States** (see also **eligibility of UK legal entities**) or **Associated Countries**

#### Host Institution

Applications for an ERC grant must be submitted by a single Principal Investigator (PI) in conjunction with and on behalf of their Host Institution, called the applicant legal entity.

Grants are awarded to the Host Institution with the explicit commitment that this

### OPEN CALL

There are currently no open calls for Starting Grants

### ON-GOING EVALUATIONS

[Timeframe Starting Grant 2019](#)

### UPCOMING CALL

See 'OPEN CALL'

### USEFUL DOCUMENTS

[ERC Work Programme 2019](#)  
[ERC Starting Grants 2019 – Information for applicants](#)  
[ERC Guide for Peer Reviewers 2019](#)

More documents are available in the [ERC document library](#) or on the [Funding and Tenders Portal](#)

### CHOOSE YOUR PANEL

[ERC peer review evaluation panels \(2019 calls\)](#)

### COMPOSITION OF EVALUATION PANELS

ERC Starting Grant 2019:  
[Panel Chairs](#)  
[Panel Members](#)

ERC Starting Grant 2018:  
[Panel Chairs](#)  
[Panel Members](#)

Click [here](#) to check Panel Chairs and Panel Members from previous calls

# Interview

It usually takes me more than three weeks to prepare a good impromptu speech

- Mark Twain

1. Follow the instructions!
2. Practice make you perfect
3. Be confident
4. Study your panel
5. Know your weaknesses

And turn this into a strength. Try to anticipate questions and pre-formulate the best possible answers. If it makes you feel better, use additional slides. But remember that when you answer they should focus on you, not on the slides...

Thank you for your attention and  
happy grant writing!