

The European Research Council



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ERC Synergy grants

Brussels, 12 September 2018

Agnes Kulcsar

Synergy grant call coordinator

Unit B2

Call and Project Follow-up Coordination



Overview



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- Features
- Preparing an application
- Evaluation process and timeline
- Evaluation principles and criteria
- Hints and tips

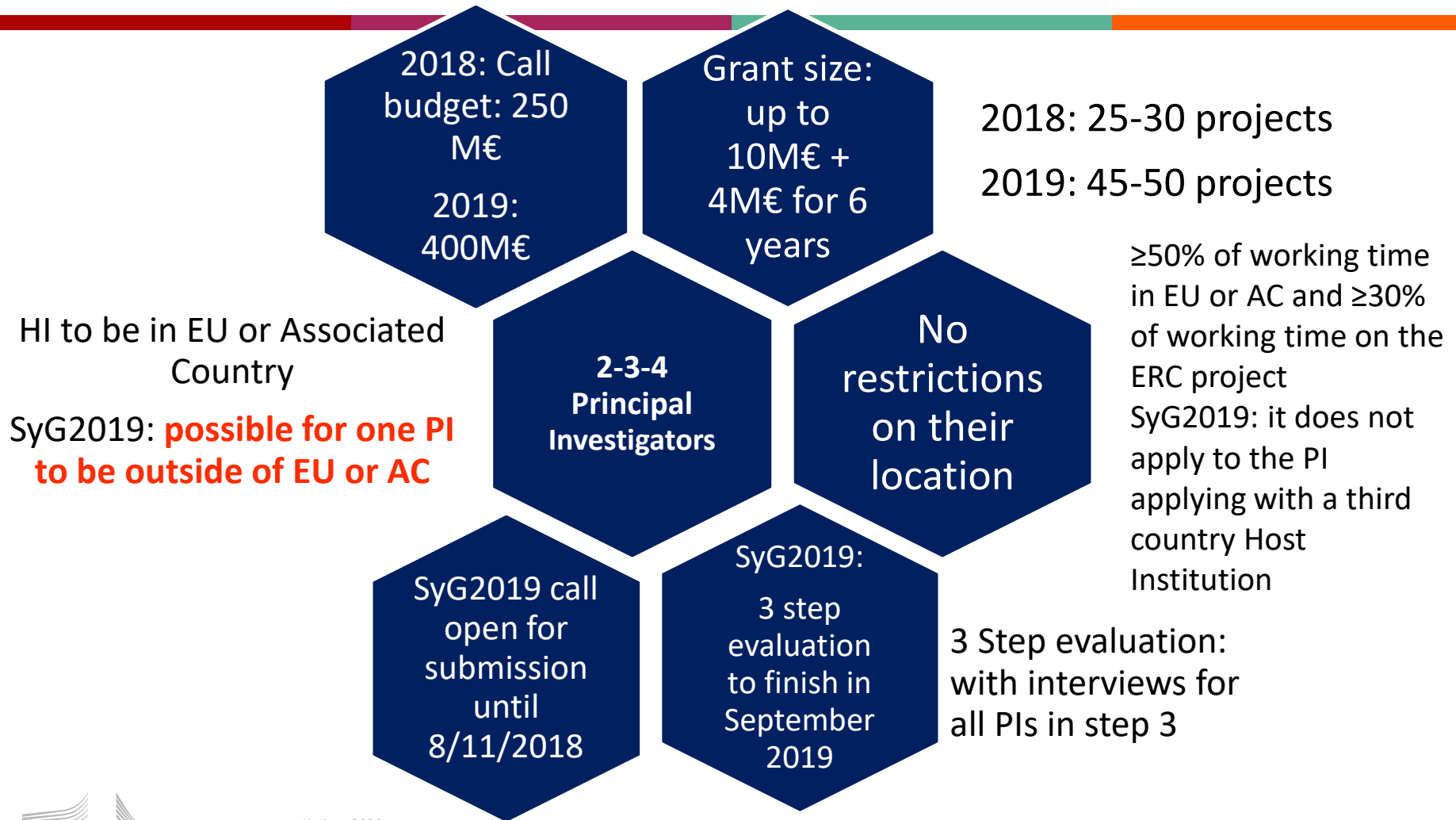


European
Commission

Horizon 2020
European Union funding
for Research & Innovation



Design of the Synergy call in a nutshell





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ERC Synergy 2019 – Key features

What to look for in a SyG proposal?

AMBITIOUS RESEARCH PROBLEM

- To promote substantial advances at the frontiers of knowledge,
- To cross-fertilize scientific fields,
- To encourage new productive lines of enquiry and new methods and techniques, including unconventional approaches and investigations at the interface between established disciplines,
- To enable transformative research not only at the forefront of European science but also to become a benchmark on a global scale.

SYNERGETIC ASPECT

- PIs must demonstrate the synergies, complementarities and added value that could lead to **breakthroughs that would not be possible by the individual Principal Investigators working alone.**



EQUALITY AMONG PIs

- With a designated corresponding PI (cPI) and corresponding HI (cHI) who will be the administrative contacts for the duration of the project

STRONG COMMITMENT

- PIs to engage genuinely in the collaboration
- $\geq 50\%$ of working time in EU or Associated Countries (AC) and
- $\geq 30\%$ of working time on the ERC project
- SyG2019: commitment requirements apply to PIs hosted in EU or AC

ERC Synergy 2019

Grant features



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2-3-4 PIs

- At various career stages
- Can apply from anywhere in the world when they apply
- One PI (not the corresponding PI) can apply with a Host Instit. outside of EU or Associated Countries

MAX 10 M€ + 4M€

- **Call budget for 2019: 400 M€**
- Allow for **funding of ~40 projects**
- Additional **max 4M€ globally** for the project

UP TO 6 YEARS

- Max of 10M€ reduced *pro rata* for shorter duration

4M€ MAX

IN ADDITION FOR

- 'start-up' costs for Principal Investigators moving to the EU or AC and/or
- the purchase of major equipment and/or

Deadline for SyG2019 proposal submission: 8 November 2019

ERC Synergy 2019

Based on core ERC principles



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EXCELLENCE AS SOLE CRITERIUM

- At project and at PI level
- Encompasses the synergetic aspects

'BOTTOM-UP'

- Research priorities and the configuration of the group determined by the individual investigators

NO DISCIPLINARY PRIORITIES

- Projects expected to cover more than one discipline or research field, but not obligatory

NOT 'CONSORTIA' TYPE

- Not loose collaborative projects
- With adequate working arrangements to suit the objectives of the project

PIs' TRACK RECORDS

- Either an early achievement track-record (Starting or Consolidator stage) or
- A 10-year track-record (Advanced grant stage), **whichever the applicants consider most appropriate** for their career stage

COMPLEMENTARY EXPERTISE

- Complementarity of the PIs is essential

JOINT EFFORT

- To foster research at intellectual frontiers
- To allow for new combination of skills and disciplines
- To bring together researchers be that from the same institution or different institutions in the country or EU and Associated Countries wide

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ERC Synergy 2019 - Proposal Structure (submissions on Participant Portal)



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Administrative forms (Part A)

- 1 – General information
- 2 – Administrative data of participating organisations
- 3 – Budget
- 4 – Ethics
- 5 – Call specific questions

*4-6 ERC keywords are submitted in a separate box
panels are not part of the submission*

Part B1 (submitted as pdf)

Evaluated in Step 1 & Step 2 & Step 3

Text box - Cross-domain nature explanation

- a – Extended synopsis 5 pages
- b – Curriculum vitae 2 pages ***per PI!***
- Appendix – Funding ID
- c - Track record 5 pages ***per PI!***

In step 1 only part B1 is reviewed.

Part B2 (submitted as pdf)

NOT evaluated in Step 1 (Step 2 and 3 only)

- Scientific proposal 15 pages
- a – State-of-the-art and objectives
- b – Methodology
- c – Resources ***(budget breakdown per PI + a joint one)***

Annexes

Commitment of the **corresponding** Host Institution, ethics docs, etc.

NO RESTRICTIONS FOR

- unsuccessful applicants to the 2017 and 2018 ERC Starting, Consolidator and Advanced grant calls
- Grantees whose running ERC project ends before 8 November 2020

RESTRICTION FOR

- PIs of proposals submitted to the ERC SyG 2018 call which received a C score in step 1 or a B score in step 1 or 2

RULES FOR PANEL MEMBERS OF

- SyG 2019 call
 - Cannot participate in the same call neither as PIs nor as team members
 - Will **not** be able submit proposals to **SyG 2021**
 - Can submit to any other ERC call in 2019, 2020, etc.
 - Will be able to submit to SYG 2020

ERC Synergy 2019

Restrictions on submissions

checked by ERCEA - only eligible proposals are evaluated



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A PI MAY PARTICIPATE IN
ONLY ONE ERC FRONTIER
RESEARCH PROJECT AT ANY
ONE TIME

- A PI to be part of only one:
 - SyG application
 - proposal published under the same ERC Work Programme
 - the first eligible proposal to be evaluated

- **BUT: not the whole SyG proposal can be declared ineligible, but only the PI concerned. This means that the proposal has to be evaluated by disregarding the CV, track record and contribution of the PI.**
- Applicants to check carefully if they are eligible or not before submitting an application to avoid complications for the Group and evaluation



ERC Synergy 2019

Intended restrictions for 2020 -2021 calls

Evaluation		Can a PI apply to		
Result of SyG2018	Step	StG/CoG/AdG call in 2020?	SyG call in 2020	SyG call in 2021?
C	1	no	no	no
B	1 and 2	yes	no	yes
B	3	yes	yes	yes
A	3	yes	yes	yes

All PIs whose proposal was rejected on the grounds of a breach of research integrity of one or more of the PIs in the SyG 2019 call for proposals may not submit a proposal to the calls for proposals made under Work Programme 2019.

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SyG 2018 Overview

Evaluators' profile – in step 1



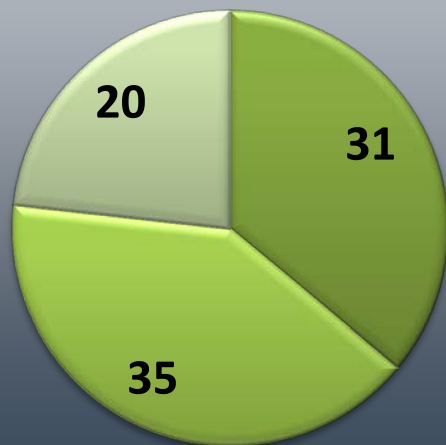
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186 Reviewers; 27 Nationalities; 59 Men and 28 Women

Scientific background

87 Panel Members - PM
(5 chairs and 6 vice chairs)

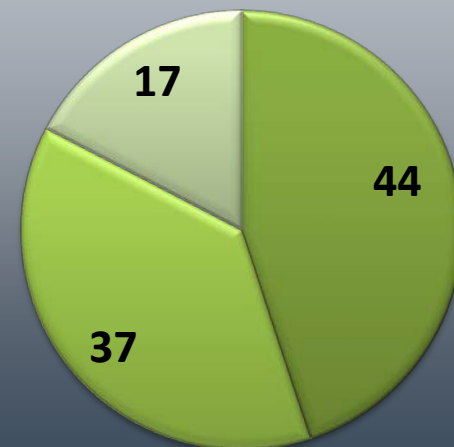


■ Life Sciences (LS)

■ Physical Sciences and Engineering (PE)

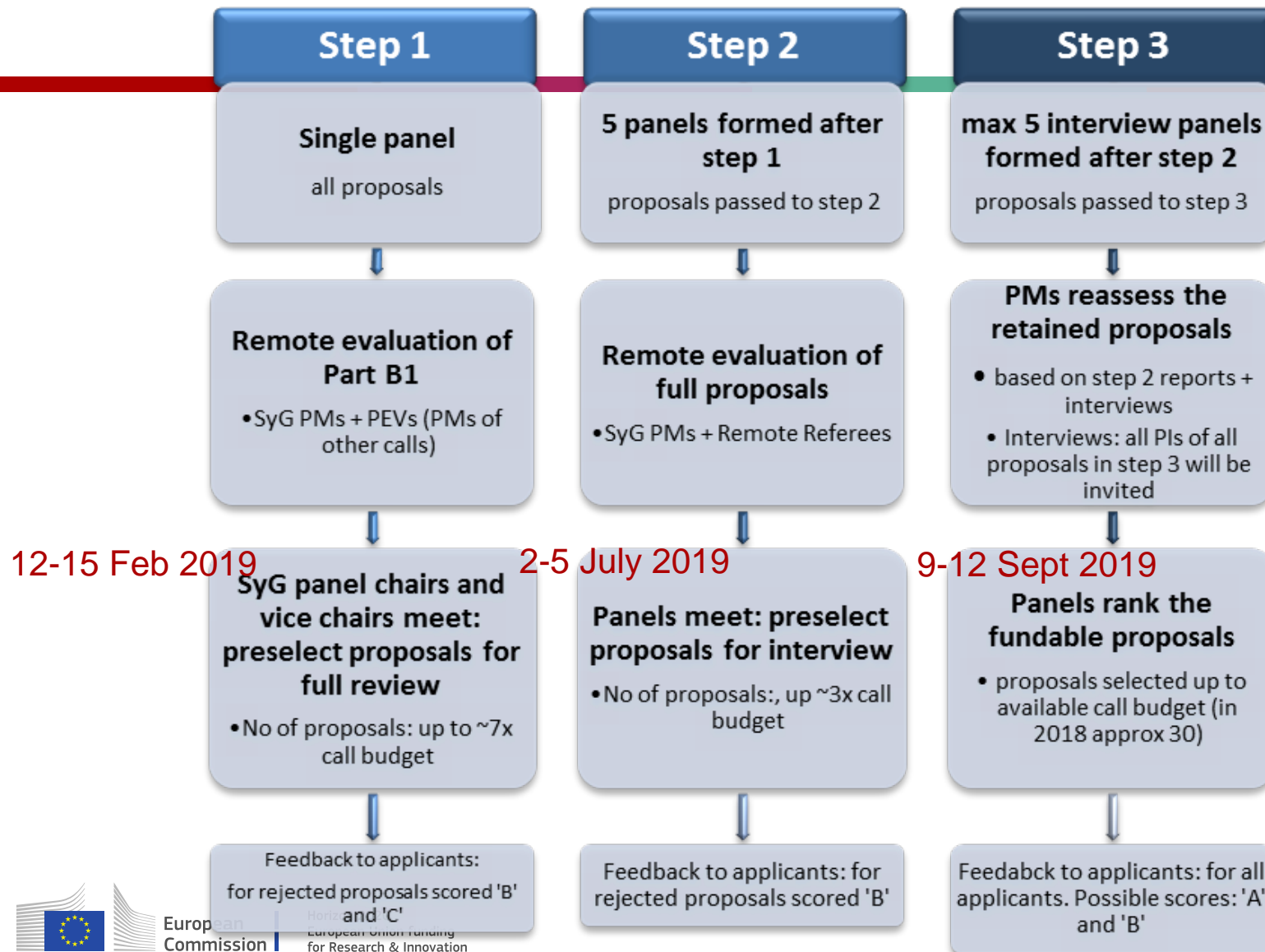
■ Social Sciences and Humanities (SH)

99 Panel Evaluators - PEVs
(PMs from other ERC Calls)





ERC Synergy 2019 - Evaluation process



ERC Synergy 2019

Evaluation timeline



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Submission deadline	8 November 2018
Initial Panel Chairs' meeting (5 chairs)	6 Dec 2018
Step 1 meeting (5 chairs and 6 vice chairs)	12-15 Feb 2019 (1 panel)
Step 2 meetings (all panel members)	2-5 July 2019 (5 panels)
Step 3 meetings (all panel members)	9-12 Sept 2019 (5 panels with interviews)
Expected feedback to applicants (with full evaluation reports)	12/04/2019 30/08/2019 31/10/2019

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What are the evaluation criteria?

Excellence is the sole evaluation criterion



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EXCELLENCE OF THE RESEARCH PROJECT

- Ground breaking nature
- Potential impact
- Scientific approach
- Synergetic aspects
- In step 1 the feasibility is assessed only => methodology in step 2
- Resources are not assessed in step 1

EXCELLENCE OF THE PRINCIPAL INVESTIGATOR

- Each PI assessed according to their career benchmarks
- Intellectual capacity
- Creativity
- Commitment => evaluated in step 2 and 3 only



Scoring system



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At step 1 proposals are evaluated from a generalist perspective.

REMOTE PHASE

- Each reviewer working remotely and individually
- Giving grades from 1 (non-competitive) to 4 (outstanding), with 0.5 granularity
- Grading both the 'Research Project' and the group of 'Principal Investigators'

PANEL MEETING => final score communicated to the applicant

- Panel decision
- Score **A**: The proposal is of sufficient quality to pass to Step 2 of the evaluation;
- Score **B***: The proposal is of high quality but not sufficient to pass to Step 2 of the evaluation;
- Score **C***: The proposal is not of sufficient quality to pass to Step 2 of the evaluation.

***B and C-scored applications may be subject to resubmission restrictions in future calls**



Evaluation reports (ER)

Part of the feedback sent to the applicants



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STEP 1 REJECTED PROPOSALS

- Predefined standard panel comment based on the score, summarizing the decision taken by the panel
- Individual assessments, without names and grades
- Possible scores given by the panel: 'A', 'B', 'C'
- For 'A' score (passed to step 2) ERs are not provided

STEP 2 REJECTED PROPOSALS

- Carefully drafted panel comments for each rejected proposal
- Individual assessments, without names and grades
- Possible scores: 'A', 'B'
- For 'A' score (passed to step 3) ERs are not provided

STEP 3 ALL PROPOSALS

- Carefully drafted panel comments for each proposal
- Individual assessments, without names and grades
- Possible scores: 'A', 'B'
- Outcome based on ranking: 'A' –(funded; reserve; not funded, but excellent quality) 'B'- not fundable

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Hints and tips

How to prepare an ERC SyG proposal?

- Have a **bright, original and exciting idea** that requires the **joint effort** of 2 or 3 or 4 PIs
- **Design a research project** to implement the idea
 - It is not about a consortium, but about a tight-knit small group of PIs and their teams. The PIs are equal and indispensable for the project!
- Get a letter of support from a **corresponding Host Institution (in EU or any of the H2020 associated countries)**
 - The HI letter lists all the PIs, even if they will be engaged by other HIs
- **Write** the research proposal (carefully plan the resources)
 - Choose carefully the 4-6 keywords: applications are not submitted to a StG/CoG/AdG type of the panel
- **Get feedback** from your peers
- **Submit** your research proposal **before the deadline** -> fully electronic/web based submission system

Hints and tips

Questions to ask yourself as an applicant



Principal Investigators

- Is each of the PIs internationally competitive as a researcher at each of their career stage and in each of their discipline?
- Is each of the PIs able to work independently, and to manage a 6-year project with a substantial budget?
- How strong is the group of PIs as a whole?

Hints and tips

Questions to ask yourself as an applicant

Research Project

- Why is the proposed project important?
- Does it promise to go substantially beyond the state of the art?
- Has it the chance to cross-fertilize disciplines?
- What is the scientific transformative potential?
- Does it have a grand challenge that can boost European research?
- Why are we the best/only persons to carry it out?
- Why is this particular combination of the PIs the best for the project?
- Is the other person(s) really needed as a PI or only as a team member?
- Is it timely? (Why wasn't it done in the past? Is it feasible now?)
- What's the risk? Is it justified by a substantial potential gain? Do we have a plan for managing the risk?

Typical reasons for rejection

Principal investigators

- Insufficient track-record
- Insufficient (potential for) independence (StG and CoG)
- Insufficient experience in leading projects (AdG)
- Complementarity of PIs not evident enough

Proposed project

- Scope: Too narrow \leftrightarrow too broad/unfocussed
- Not synergetic enough; (SyG)
- Incremental research
- Work plan not detailed enough/unclear
- Insufficient risk management

Poor interview: prepare well! (all PIs in step 3 are invited to Brussels)



Hints and tips

Preparing an application

Differences in Part B1 and Part B2



In **Step 1: Panel members** (act as **generalists**) they see only **Part B1** of your proposal: Prepare it accordingly!

- Pay particular attention to the **ground-breaking nature** of the research project – no incremental research. State-of-the-art is not enough. Think big!
- For SyG: Synergetic aspects crucial (complementarity and possibly interdisciplinary to be emphasised)
- Know your competitors – what is the **state of play** and why is your idea and scientific approach outstanding?
- **Only the extended Synopsis is read at Step 1: concise and clear presentation** is crucial (**Outline** of the **methodological approach** – feasibility is assessed)
- Show , if applicable for StG and CoG profiles, the **scientific independence** in the CVs, the scientific leadership in the AdG profile



Hints and tips

Preparing an application

Differences in Part B1 and Part B2

- In **Step 2** : Both **Part B1 and B2** are sent to specialists around the world (**specialised external referees**)
 - Do not just repeat the synopsis
 - Provide **sufficient detail** on methodology, work plan, selection of case studies etc. (15 pages) (references do not count towards page limit)
 - Check coherency of figures, **justify requested resources** (outside of 15 pages)
 - Explain **involvement of additional team members** (it is possible to have further beneficiaries/partners in the project)
 - Provide alternative strategies to **mitigate risk**

In Step 3: no new reviews are written, but part B1 and B2 are re-assessed



Explain the budget properly!

- Budget analysis carried out in Step 3 evaluation.
- Panels have the responsibility to ensure that resources requested are reasonable and well justified.
- Budget cuts need to be justified on a proposal-by-proposal basis (no across-the-board cuts).

Not explained costs are often cut!

- Panels recommend a final maximum budget based on the resources allocated/removed.
- Panels do not 'micro-manage' project finances.
- Awards made on a 'take-it-or-leave-it' basis: no negotiations.
- Ask for funding for Open Access in case needed– this is obligatory in Horizon2020!

Rumour : *Ask for more money, the reviewers will anyhow cut it down.*

✗ **NOT true:** however, unexplained or non-motivated requests can be cut, so if you artificially inflate your budget, it will be reduced.



When writing the CVs

- Remember that the CVs/Track Records are as important as the project!
- Explain what has been each PI's own contribution to their key publications.
- Explain publishing habits in the field and country if needed.
- If the PI knows that he/she has gaps or other issues in the CV (e.g. co-authored publications), explain them.
- Describe activities which can indicate scientific maturity.
- Use the CV template provided by the ERC in the submission system

Rumour : *One needs publications in Nature/Science/High Impact Factor journals to succeed.*

✗ **NOT true:** in addition note: publishing with senior scientists (former supervisors) raises doubts about maturity/scientific independence.

SyG 2018 Overview

Evaluation data - 52% success rate at step 1



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	Step 1	Step 2
Proposal evaluated	295	154
Success rate	52%	47%
Average Duration (mths) (max 72)	69	70
Average # PIs	3.3	3.4
Average budget requested (million €)	8.4	9.3
Average # beneficiaries	3.0	3.2
Average # HIs	2.8	2.9
% submissions including partner organisations	23%	19%

SyG 2018 Step 1 Results

Applicants' ERC profiles – by career stage

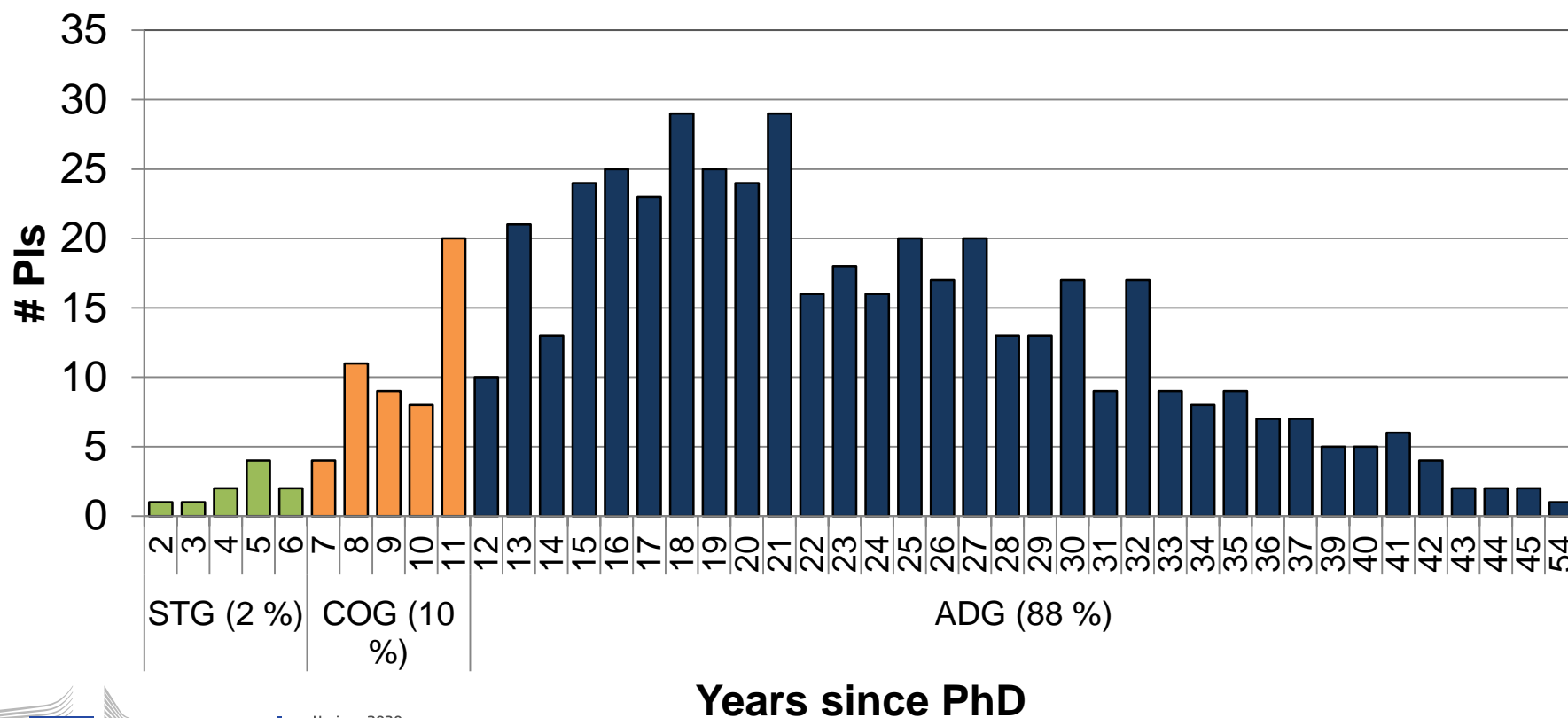
Similar profile distribution for submission data



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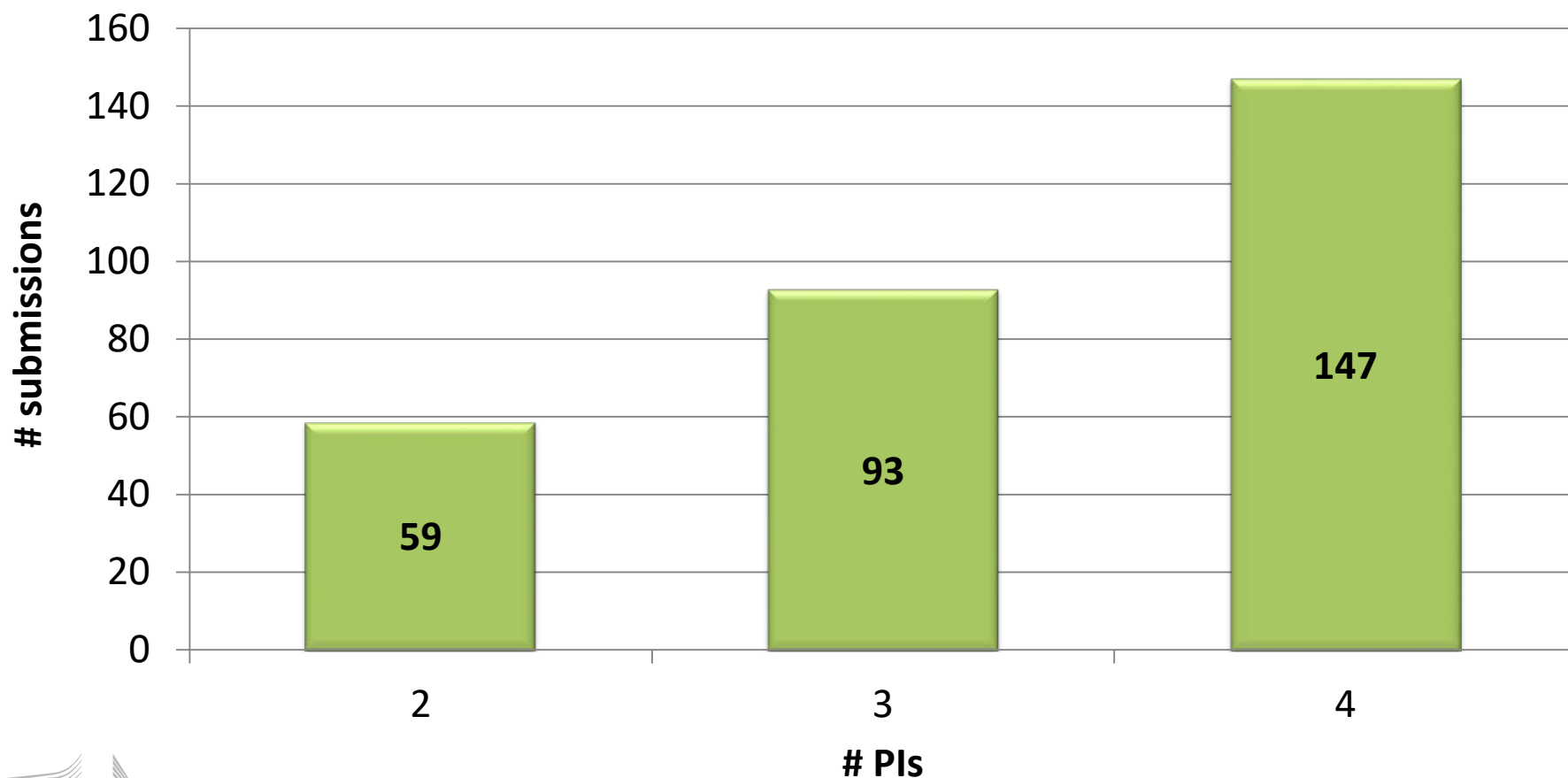
SyG 2018 PIs in step 2 by years since PhD from call deadline and no allowance for extensions



SyG 2018 Overview

Submissions by number of PIs grouped per proposal

SYG 2018 Submissions by # PIs per proposal



SyG 2018 Overview

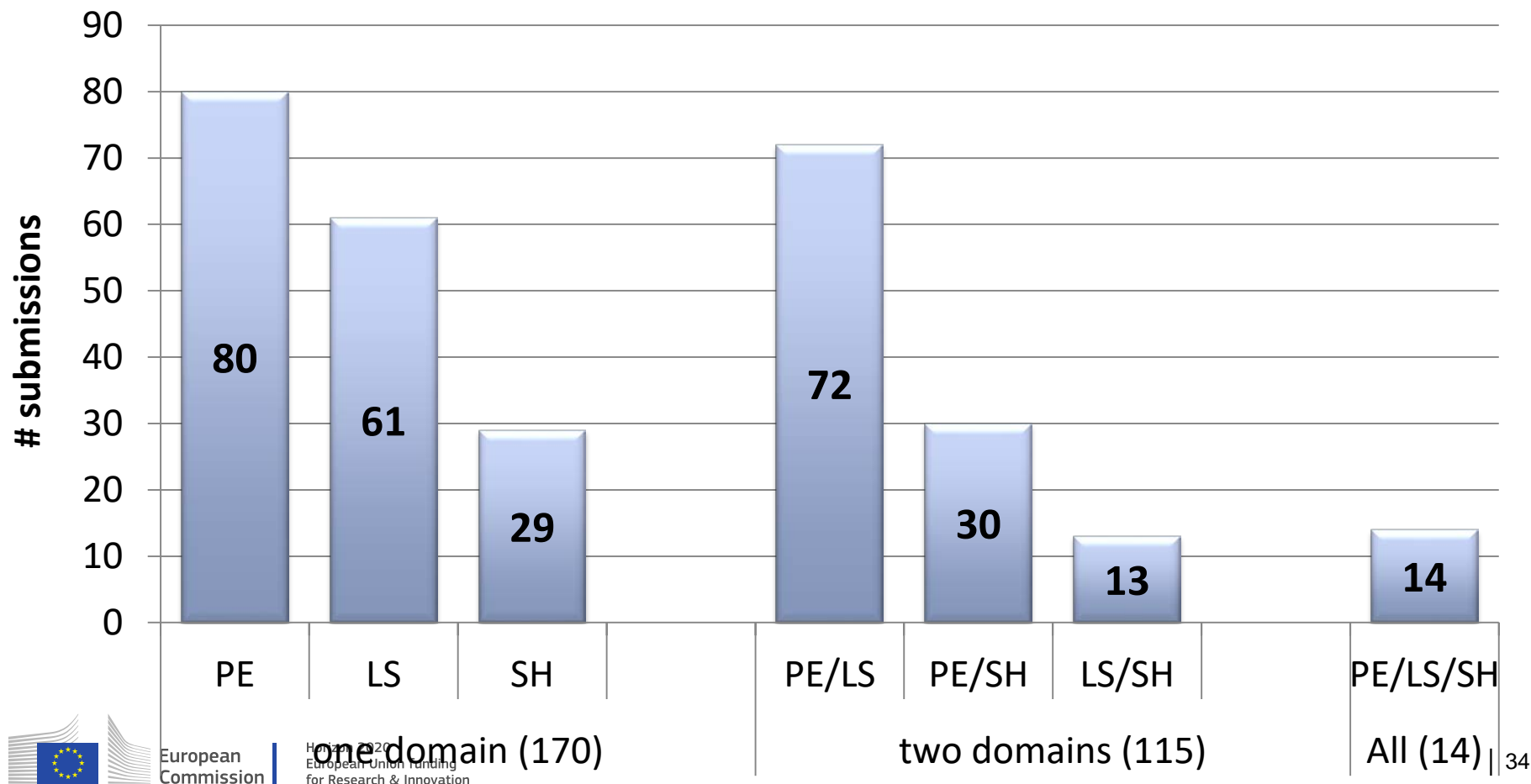
Inter-domain classification of submitted proposals



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SYG 2018 classification from abstracts





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Take home messages

- ERC foresees to be a highly competitive call
 - only exceptional proposals are likely to be funded that will demonstrate that the **truly ambitious** research questions could lead to breakthroughs **only through the joint effort** of the complementary and synergistic group of PIs.
- ‘Synergy’ is not simply a successful collaboration
 - The interaction would yield something more than just the sum of the individual parts.
 - To yield possibly either unforeseen, completely new science, to cross fertilize disciplines or to solve important research problems that until now could not be dreamt of solving.
 - Not loose consortia type of projects
- Tough future restrictions on submissions planned
 - applicants to think twice before applying: PIs evaluated with a **C score in 2019 will not be able to apply to any** ERC call in 2020.

Preparing your application

Information sources

- Check the **ERC website** for latest funding opportunities: <https://erc.europa.eu/>
 - July 2019: videos about ongoing Synergy grants will be published
- **Register early**, get familiar with the European Commission's Participant Portal system, download the templates and start filling in the forms
<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>
- View the **step-by-step video** Introduction to application process, including tips & tricks for the interview: <https://vimeo.com/94179654>
- Use the **help tools and call documents** (**Information for Applicants**, Work Programme, Frequently Asked Questions) to prepare your proposal
 - 💡 Read the guidelines carefully!
 - 💡 Find out about the formatting rules and page limits to respect!
 - 💡 Check statistics on ERC website
- **Talk to your Institution's grant office and other ERC grantees**
- **Contact your National Contact Point if you have questions**

Thank you!

Don't hesitate to contact us:
ERC-SYG-APPLICANTS@ec.europa.eu



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Extra slides

Evaluation form for the reviewers in the online SEP tool (slight changes foreseen for 2019 – consult the ERC 2019 Work Programme)

– Criterion 1 - RESEARCH PROJECT

Current score: - / 4.0 ; Threshold 0

Your score: *

☐ 1.0 - Non-competitive ☐ 1.5 ☐ 2.0 - Very Good ☐ 2.5 ☐ 3.0 - Excellent ☐ 3.5 ☐ 4 - Outstanding

Ground-breaking nature and potential impact of the research project

To what extent does the proposed research address important challenges?

To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?

To what extent is the proposed research high risk/high gain?

Comments: *

Scientific Approach

To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is high risk/high gain?

To what extent does the proposal go beyond what the individual Principal Investigators could achieve alone?

To what extent does the proposal require and demonstrate significant synergies, complementarities and scientific added-value to enable it to achieve its objectives?

To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project?

To what extent does the proposal involve the development of novel methodology?

To what extent are the proposed timescales and resources necessary and properly justified?

Comments: *



These questions are not addressed in step 1

Evaluation form for the reviewers in the online SEP tool (slight changes foreseen for 2019 – consult the ERC 2019 Work Programme)



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– Criterion 2 – PRINCIPAL INVESTIGATORS

Current score: - / 4.0 ; Threshold 0

Please click here for more information

Your score: *

☐ 1.0 - Non-competitive ☐ 1.5 ☐ 2.0 - Very Good ☐ 2.5 ☐ 3.0 - Excellent ☐ 3.5 ☐ 4 - Outstanding

To what extent have the PIs demonstrated the ability to propose and conduct ground-breaking research? *

☐ Non-competitive ☐ Very Good ☐ Excellent ☐ Outstanding

To what extent do the PIs provide evidence of creative independent thinking? *

☐ Non-competitive ☐ Very Good ☐ Excellent ☐ Outstanding

To what extent have the achievements of the PIs typically gone beyond the state of the art? *

☐ Non-competitive ☐ Very Good ☐ Excellent ☐ Outstanding

To what extent does the PI demonstrate the level of commitment to the project necessary for its execution and the willingness to devote a significant amount of time to the project (min 30% of the total working time on it)? *

☐ Non-competitive ☐ Very Good ☐ Excellent ☐ Outstanding

Comments:

This question is not addressed in step 1

Possibility to comment on each PI in the comment box

Advanced, Consolidator and Starting Grant PI profiles are welcome – the AdG standard regarding PI quality should not be imposed on all candidates

Background for the reintroduction of the Synergy grant call in 2018



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- 2012-2013: two pilot Synergy Grant calls
 - 1.5 & 3% success rate: 24 projects selected
- 2014: the ad-hoc Synergy Working Group of the Scientific Council decided to assess the pilot funding scheme
 - Assessment report delivered – December 2015
- 2016: the Scientific Council decided to re-launch the scheme
 - Implementation: 2018 Work Programme

Background

Synergy Grant Assessment Report



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- Synergy Grant scheme would be a valuable addition to the current ERC frontier schemes because of:
 - Its high international recognition - putting European research on the global map, often in leading position;
 - The highly ambitious research goals it will trigger – that cannot be achieved by a single PI;
 - The complementarity of PIs/teams it favours;
 - The cross-fertilisation of disciplines and signs of new fields emerging it generates;
 - The close collaboration it triggers which goes much beyond any regular EU framework collaborative project.

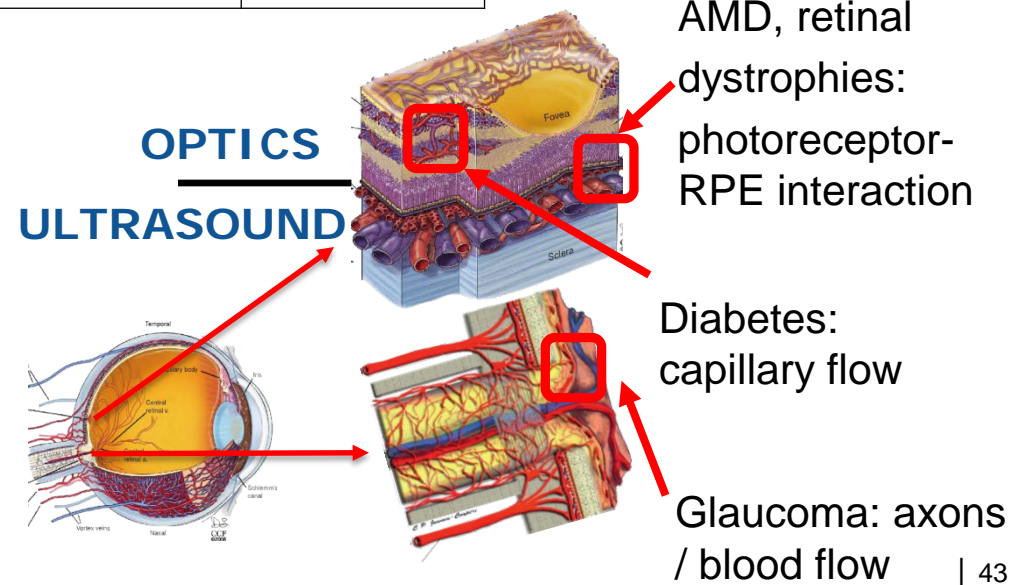


Example of Synergy projects

- **HELMHOLTZ** – *"Holistic evaluation of light and multiwave applications to high resolution imaging in ophthalmic translational research revisiting the helmholtzian synergies"*

José-Alain SAHEL	Fondation Voir et Entendre	FR
Mathias FINK	Fondation Pierre-Gilles de Gennes	FR

"The eye, a 'small brain' with **easily accessible structures**, at the crossroad of human diseases"



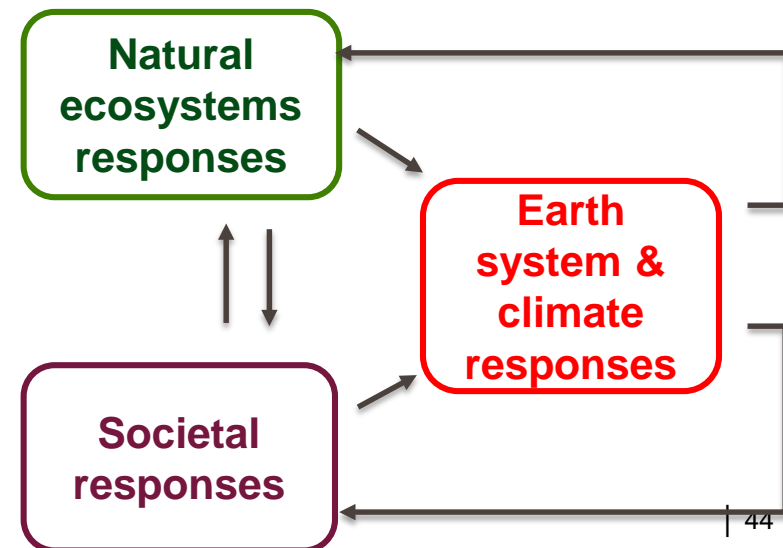


Example of Synergy projects

- **IMBALANCE-P** – *"Effects of phosphorus limitations on Life, Earth system and Society"*

Josep Penuelas	Centro de Investigacion Ecologica y Aplicaciones Forestales	ES
Michael Obersteiner	International Institute for Applied Systems Analysis	AT
Ivan Janssens	Universiteit Antwerpen	BE
Philippe Ciais	Université de Versailles Saint- Quentin-en-Yvelines	FR

"Quantify the **responses of ecosystems** and society in a world increasingly rich in N and C but **limited in Phosphorus**"

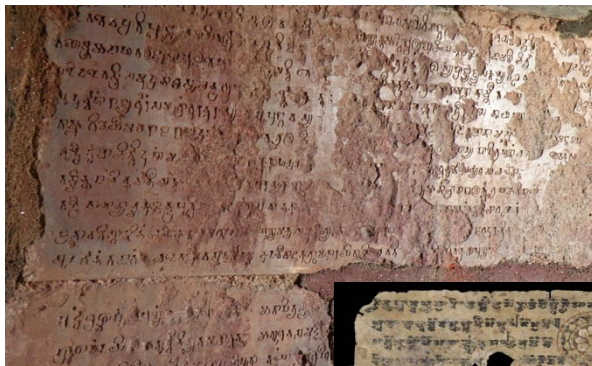


SyG 2013: Proposals selected for funding

- **ASIA – "Beyond Boundaries: Religion, Region, Language and the State"**

Michael WILLIS	British Museum	UK
Sam Julius van SCHAIK	The British Library	UK
Nathan HILL	School of Oriental and African Studies, University of London	UK

Rethink Asian history and present a bold picture that demonstrates how South, Central and Southeast Asia functioned as a cosmopolitan entity





SyG 2013: Proposals selected for funding

- **Ice2Ice** – *"Arctic Sea Ice and Greenland Ice Sheet Sensitivity"*

Eystein Jansen	University of Bergen	NO
Kerim Nisancioglu	University of Bergen	NO
Jens Christensen	Danish Meteorological Institute	DK
Bo Møllersøe Vinther	University of Copenhagen	DK

12 500 000 €



Determine the impact of **Arctic sea ice melting** on climate and possible melting of **Greenland ice sheet**



SyG 2013: Proposals selected for funding



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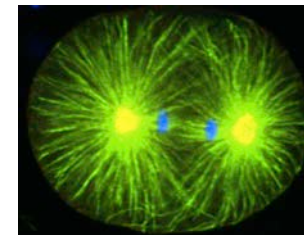
- **MODELCELL** – *" Building a Model Cell to Achieve Control of Cellular Organization "*

Marileen Dogterom	Stichting Fundamenteel Onderzoek der Materie (FOM)	NL
Anna Akhmanova	Universiteit Utrecht	NL

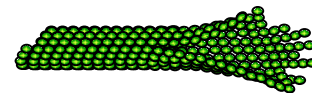
'Understand the **self-organizing principles** of cells'



'Reconstitute, understand, and control the self-organization of **functional cytoskeletal systems**'



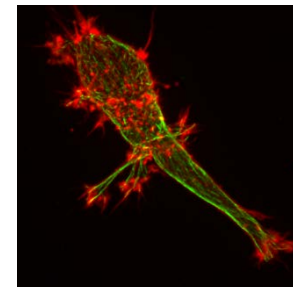
Dividing cell



Microtubule



Actin



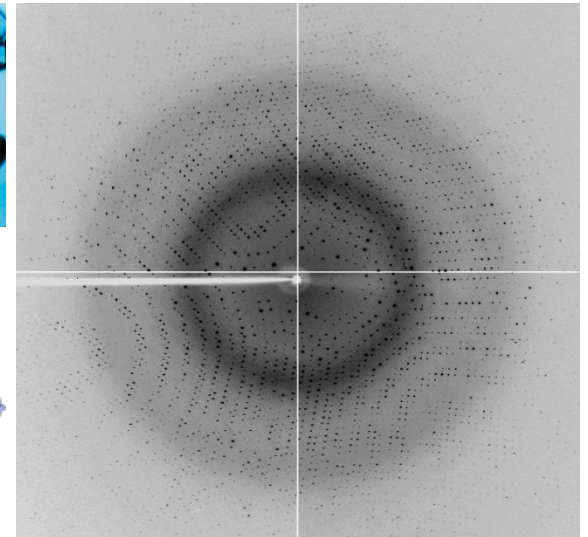
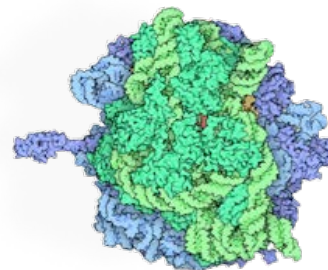
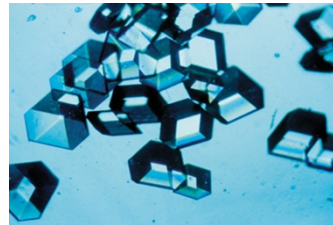
Moving cell

SyG 2013: Proposals selected for funding

- **AXSIS** – *"Frontiers in Attosecond X-ray Science: Imaging and Spectroscopy"*

Franz Xaver Kaertner	Universitaet Hamburg	DE
Ralph W. Assmann	Deutsches Elektronen-Synchrotron	DE
Henry Nicholas Chapman	Universitaet Hamburg	DE
Petra Fromme	Arizona State University- moving from US to DESY Hamburg	DE

Design and construct new **X-Ray sources** to perform **attosecond diffraction and spectroscopy** of biomolecules and apply to imaging photosynthesis processes

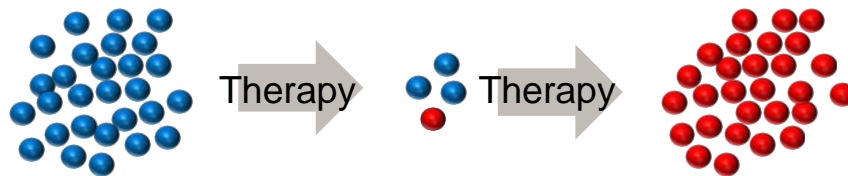


SyG 2013: Proposals selected for funding

- MERiC** – "*Mechanisms of Evasive Resistance in Cancer*"

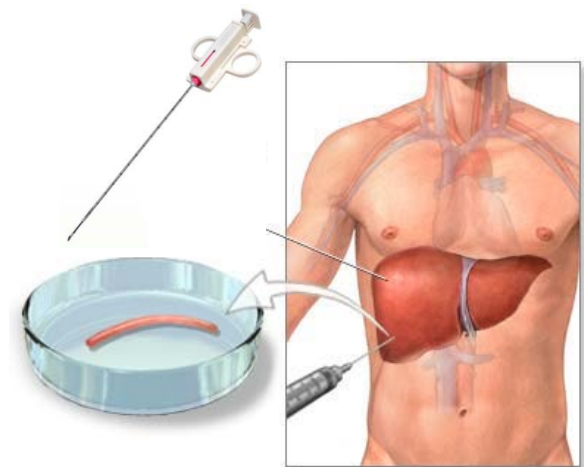
Michael N. Hall	University of Basel	CH
Niko Beerenwinkel	Eidgenössische Technische Hochschule Zürich (ETHZ)	CH
Gerhard Christofori	University of Basel	CH
Markus Heim	University Hospital of Basel	CH

'Why do certain **cancerous tumours** develop **resistance** to targeted therapies?'



Pathway 2

→ Tumor cell proliferation



SyG 2013: Proposals selected for funding



European Research Council
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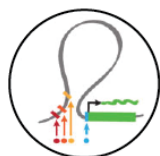
- **4D-GENOME** – *"Dynamics of human genome architecture in stable and transient gene expression changes"*

Miguel Beato del Rosal	Fundació Privada Centre de Regulació Genòmica	ES
Thomas Graf	Fundació Privada Centre de Regulació Genòmica	ES
Guillaume Filion	Fundació Privada Centre de Regulació Genòmica	ES
Marc Martí-Renom	National Center for Genomic Analysis	ES

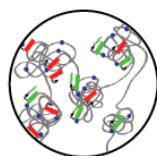
'Do **temporal changes** in the genome **3D structure** contribute to gene regulation?'

12 272 645 €

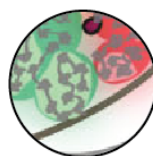
10Kb 100Kb 1Mb 10Mb 100Mb Genome



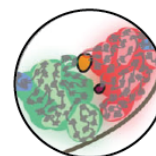
Looping



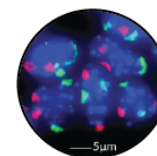
Topologically
Associating
Domains (TADs)



Lamina
Associated
Domains (LADs)



Chromosome
Territories



Chromosome
Positioning



SyG 2013: Proposals selected for funding



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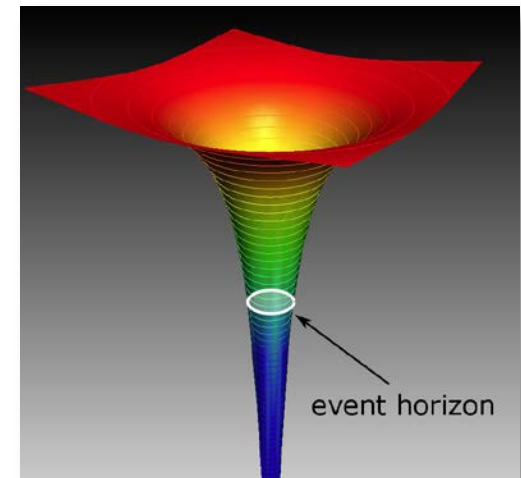
- **BlackHoleCam** – *"Imaging the Event Horizon of Black Holes"*

Heino Falcke	Stichting Katholieke Universiteit / Radboud University Nijmegen	NL
Micheal Kramer	Max-Planck-Institut für Radioastronomie	DE
Luciano Rezzolla	Max Planck Institute for Gravitational Physics/Albert Einstein Institute	DE

'Are **black holes** just a theorist's dream?'

'Prove the existence of **event horizons**, one of the **cornerstones of general relativity**'

13 975 744 €

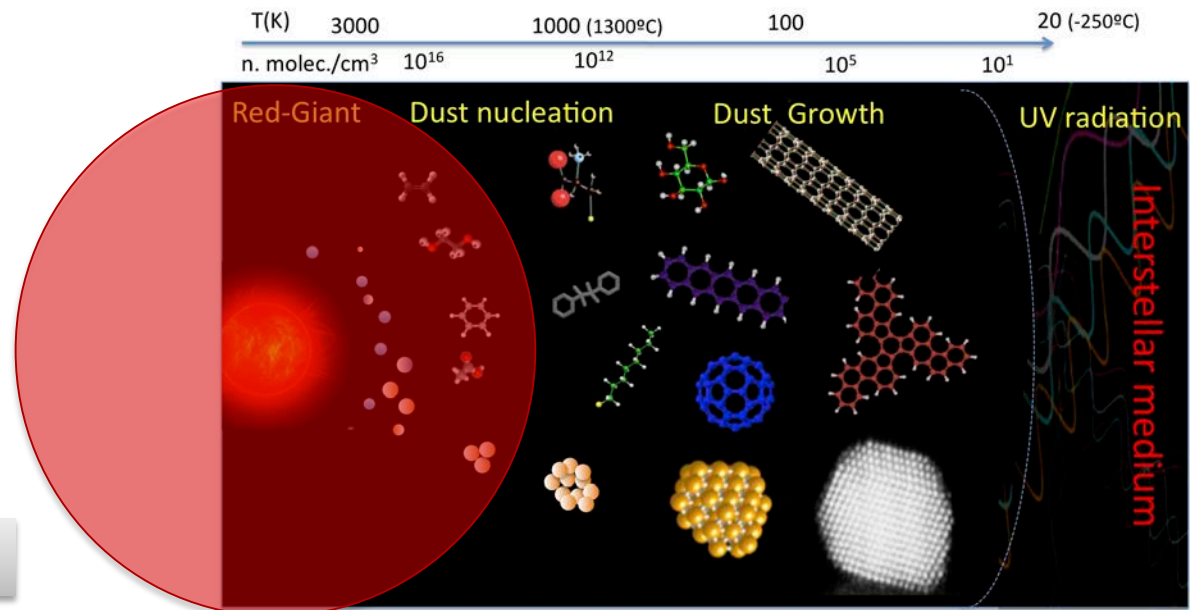


SyG 2013: Proposals selected for funding

- **NANOCOSMOS** – *"Gas and Dust from the Stars to the Laboratory: Exploring the NanoCosmos"*

José Cernicharo Quintanilla	CSIC/Centro de Astrobiología	ES
José Ángel Martín Gago	CSIC/Instituto de Ciencia de Materiales de Madrid	ES
Christine Joblin	CNRS/Université Paul Sabatier	FR

'Understand the formation of **cosmic dust** and **chemical complexity** in space and on Earth '



SyG 2013: Proposals selected for funding

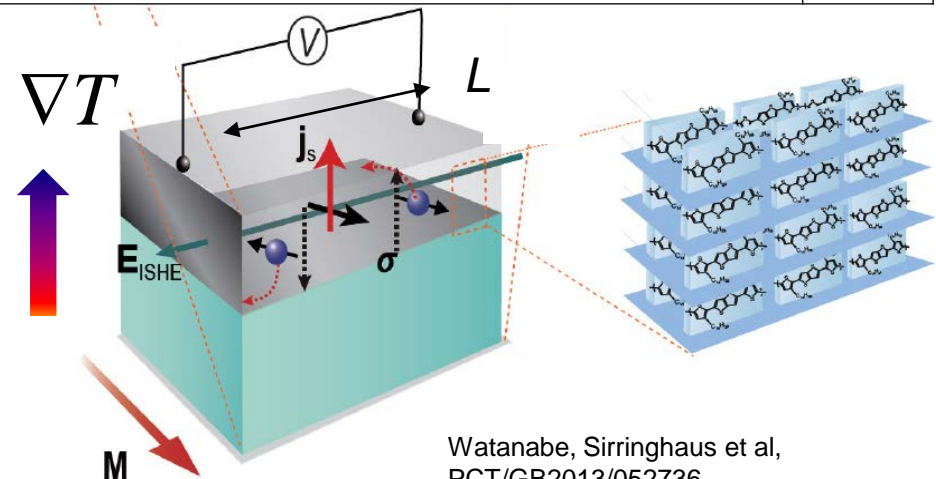


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Established by the European Commission

- **SC2** – *"Spin-charge conversion and spin caloritronics at hybrid organic-inorganic interfaces"*

Henning Sirringhaus	University of Cambridge	UK
Joerg Wunderlich	Hitachi Europe	UK
Jairo Sinova	Johannes Gutenberg Universitaet Mainz – moving from US	DE
Iain McCulloch	Imperial College of Science, Technology and Medicine	UK

'Combine **spintronics** and **organic electronics** to discover novel physical phenomena and design new materials'



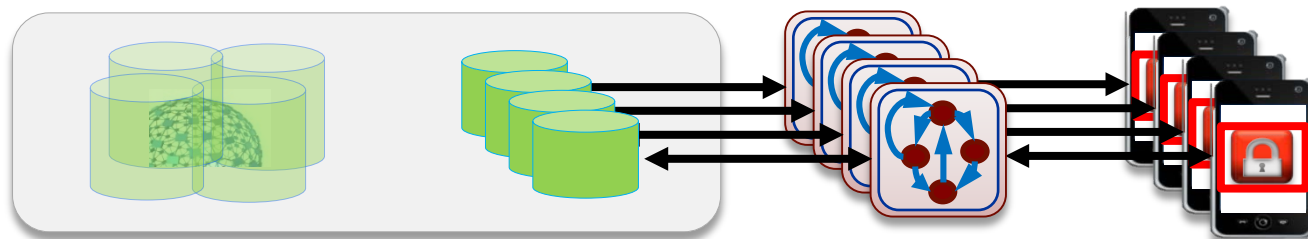
Watanabe, Sirringhaus et al,
PCT/GB2013/052736

SyG 2013: Proposals selected for funding

- **imPACT** – *"Privacy, Accountability, Compliance, and Trust in Tomorrow's Internet"*

Michael Backes	Universitaet des Saarlandes	DE
Peter Druschel	Max Planck Institute for Software Systems	DE
Rupak Majumdar	Max Planck Institute for Software Systems	DE
Gerhard Weikum	Max Planck Institut für Informatik	DE

'Develop solutions to control **exposure of personal information**, link all **actions** to **responsible actors**, ensure **conformance with policies**, assess **trustworthiness of information**



Sealed user **Attested app on**
privacy models user devices

SyG 2013: Proposals selected for funding



European Research Council
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- **SOMICS** – *"Constructing Social Minds: Coordination, Communication, and Cultural Transmission"*

Günther Knoblich	Central European University	HU
Josep Call	MPI for Evolutionary Anthropology	DE
György Gergely	Central European University	HU
Dan Sperber	Central European University - moving from FR	HU

'What makes **humans** capable of **developing cultures** that are uniquely richer, more complex, and accumulative?'



SyG 2012: List of proposal selected for funding PE



European Research Council
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- **BioQ** – *"Diamond Quantum Devices and Biology"*

- Corresponding PI : Martin Bodo Plenio

- Corresponding HI: ULM Univ.

€11.2m

- » PI2: Fedor Jelezko (ULM Univ.)

- » PI3: Tanja Weil (ULM Univ.)

- **HETERO 2D** – *"Novel materials architecture based on atomically thin crystals"*

- Corresponding PI : Konstantin Novoselov

€13.3m

- Corresponding HI: Manchester Univ

- » PI2: Andrea Ferrari (Cambridge Univ.)

- » PI3: Vladimir Falko (Lancaster Univ.)

SyG 2012: List of proposal selected for funding PE



European Research Council
Established by the European Commission

- **QC-LAB – “Quantum Computer Lab”**

€15m

- Corresponding PI : Leo Kouwenhoven
- Corresponding HI: Delft University of Technology
 - » PI2 Caro Beenakker (Leiden Univ.)
 - » PI3 Lieven Vandersypen (Delft Univ.)

- **Q-MAC– “Frontiers in Quantum Materials Control”**

€9.6m

- Corresponding PI : Andrea Cavalleri
- Corresponding HI: University of Hamburg
 - » PI2 Antoine Louis Maurice Georges (Ecole Polytechnique)
 - » PI3 Dieter Hans Jaksch (Oxford Univ.)
 - » PI4 Jean-Marc Serge Thierry Triscone (Geneve Univ.)

SyG 2012: List of proposal selected for funding PE



European Research Council

Established by the European Commission

- **UQUAM** – *"Ultracold Quantum Matter"*

- Corresponding PI : Immanuel Bloch

- Corresponding HI: Max Planck

€9.8m

- » PI2 Peter Zoller (Innsbruck Univ.)

- » PI3 Jean Dalibard (CNRS)

- » PI4 Ehud Altman (Weizmann Univ.)

SyG 2012: List of proposal selected for funding LS



European Research Council
Established by the European Commission

- **COMBATCANCER**– *"Combination therapies for personalized cancer medicine."*

- Corresponding PI : Antonius Berns
- Corresponding HI: Het Nederlands Kanker Instituut

€14.6m

- » PI2 Michael Rudolf Stratton (Welcome trust)
- » PI3 Daniel Peeper (Het Nederlands Kanker Instituut)
- » PI4 David Adams (Welcome trust)

- **I2move** – *"An Intelligent Implantable MOdulator of Vagus nervE function for treatment of Obesity"*

- Corresponding PI : Christofer Toumazou
- Corresponding HI: Imperial College

€7.2m

- » PI2 Stephen Robert Bloom (Imperial College)

SyG 2012: List of proposal selected for funding LS



European Research Council
Established by the European Commission

- **dHCP**– *"The Developing Human Connectome Project"*

- Corresponding PI : Anthony David Edwards

- Corresponding HI: King's College London

- » PI2 Joseph Hajnal (King's College)

- » PI3 Daniel Rueckert (Imperial College)

- » PI4 Stephen Smith (Oxford Univ.)

€14.9m

- **ToPag** – *"Toxic protein aggregation in neurodegeneration"*

- Corresponding PI : Franz Ulrich Hartl

- Corresponding HI: Max Planck

- » PI2 Matthias Mann (Max Planck)

- » PI3 Ruediger Klein (Max Planck)

- » PI4 Paul Wolfgang Baumeister (Max Planck)

€13.9m

SyG 2012: List of proposal selected for funding SH



European Research Council
Established by the European Commission

- **Dd.POP**– *"Domestic Devotions: The Place of Piety in the Renaissance Italian Home"*

- Corresponding PI : Mary Laven
- Corresponding HI: Cambridge univ.

€2.3m

- » PI2 Abigail Brundin (Cambridge univ.)
- » PI3 Deborah Howard (Cambridge univ.)

- **NEXUS1492** – *"NEXUS 1492. New World Encounters in a Globalising World."*

- Corresponding PI : Corinne Lisette Hofman
- Corresponding HI: Leiden Univ.

€14.8m

- » PI2 Gareth Rees Davies (Amsterdam Univ.)
- » PI3 Ulrik Brandes (Konstanz Univ.)
- » PI4 Willem Johannes Willems (Leiden Univ.)