

FUNDING OPTIONS IN EUROPE AND GERMANY

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QUICK PERSONAL BACKGROUND



- Studied biochemistry in Frankfurt (Germany) and Bath (UK)
- PhD in molecular and cell biology at EMBL in Heidelberg (Germany)
- Postdoc in virology at NIH (US)
- Scientific project coordinator in university clinic in Heidelberg (2009-2014)

Head of research office at Geisenheim university (since 2014)

FUNDING TO DO RESEARCH



- → Individual fellowship: designed to support the individual person to in order to develop both research skills and, eventually, their own research program
- → **Project based**: designed to fund a specific piece/ question of work. Varies in size (project associated with one person or collaborative project with many people involved, e.g. EU projects)



Do your background work: Funding bodies, eligibility and guidelines

Ask yourself:

- is this the right funding body to apply to, for your proposed research?
- What details are included in the funding opportunity announcement?
- What recent grants have they approved in a similar field to yours?
- Download and study the submission guidelines
- What are their other calls to funding?
- Does your research match their priorities?
- Do I know someone who has/had a grant from that funder?
- Get help and support: most universities have a research office open for everyone, students and staff alike
- Plan generous amounts of time to prepare the proposal. Check with your universities' requirements, not just proposal deadline



Defining the research question

- It will evolve as a result of reflection following a thorough literature review, discussions with other members of the research team or colleagues and input from collaborators
- area that has to be perceived as important within your specific discipline and beyond (but do not exaggerate)
- Will be modified in the light of practical considerations such as numbers of potential study participants and costs
- Be concise and clear and get feedback in advance
- Remember that not all reviewers will be specialists: ask colleagues, who are not experts in the field, to read it and provide input

Check funding criteria again



Detail the project, sticking to the guidelines: **TELL A GOOD STORY**

Usually

- Summary/ abstract
- Introduction/ Background
- Statement of problem, objective of project
- Materials and methods
- Milestones/ Deliverables
- Financial planning
- Impact
- Dissemination

Sometimes:

- Data management
- Effects on own career
- Ethics review (not just in medicine → data)



Avoid common pitfalls:

- Writing only for specialists in your field
- Proposing a project that does not meet the funding call criteria
- Not allowing yourself enough time
- Over-costing or poor budgeting
- Neglecting the impact plan
- Not clarifying your role or contribution in the project
- Unclear methodology
- Repetition
- Don't waste anyone's time (not yours, not the reviewers)



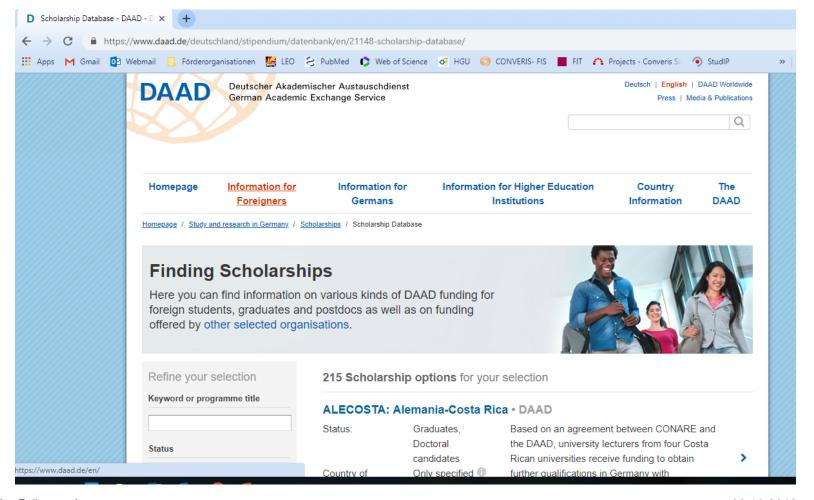
INDIVIDUAL FELLOWSHIPS FOR THESIS

GENERAL DATABASE FOR RESEARCH STAY IN GERMANY



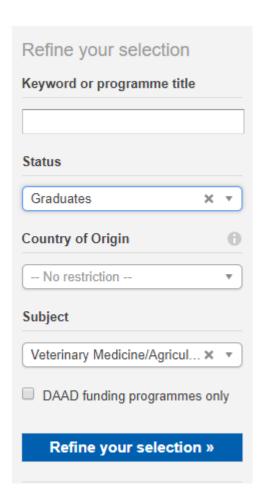
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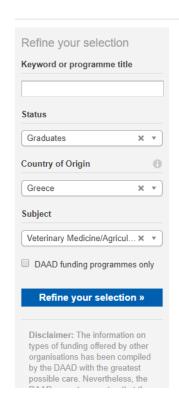
https://www.daad.de/deutschland/stipendium/datenbank/en/21148-scholarship-database/



GENERAL DATABASE FOR RESEARCH STAY IN **GERMANY**







25 Scholarship options for your selection

Practical Traineeships for Foreign Students of Natural and Technical Sciences, Agriculture and Forestry (IAESTE) • DAAD

Status: Undergraduates, IAESTE arranges internships for international Graduates students of the natural sciences, engineering Only specified Country of and agriculture and forestry... Origin:

Subject: Only specified

Re-invitation Programme for Former Scholarship Holders • DAAD

Status: Graduates. DAAD scholarships for former scholarship Postdoctoral holders wishing to carry out research or work projects and maintain their academic contacts in researchers, Faculty Germany....

Only specified Country of Origin:

Subject: Only specified

Research Grants - Cotutelle Doctoral Programmes • DAAD

Status: DAAD grants for doctoral candidates and young Graduates,

Doctoral scientists and academics wishing to complete a

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DBU PHD SCHOLARSHIP: GERMAN SKILLS REQUIRED!



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The DBU provides support in the following 13 funding topics:

- 1. Instruments and competencies of sustainability assessment, and reinforcement of sustainability consciousness and practice
- 2. Sustainable nutrition and sustainable management of foods
- 3. Development, design and acceptance of environmentally-friendly movable consumer goods
- 4. Renewable energies accelerating a revolution in decentralized heating, optimizing existing facilities and reducing negative environmental impacts
- 5. Climate- and resource-saving construction
- 6. Energy- and resource-saving neighborhood development and renewal.
- 7. Reduction of CO₂ emissions in energy-intensive industries
- 8. Resource efficiency through innovative materials technology
- 9. Flow management and efficient use of phosphorus and environmentally critical metals
- 10. Reduction of nitrogen use in agriculture
- 11. Integrated concepts and measures for the protection and management of groundwater and surface waters
- 12. Nature protection and sustainable use of nature in human-modified environments and protected areas
- 13. Preservation and securing of valuable national cultural assets against harmful environmental influences.

14. Open topic

DBU PHD SCHOLARSHIP



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What we expect from you

- you aim at innovative and sustainable solutions for current environmental issues within your PhD thesis
- above-average university degree
- your PhD project covers current environmental topics in Germany or global issues with relevance for Germany
- sufficient skills of German; application and interview are in German; your PhD thesis has to be undertaken at a German university
- you have not started your PhD thesis yet; if you have been working scientifically on your topic since more than one year after obtaining your university degree, we consider that you have started your PhD thesis
- please check our guidelines in German for further information: Förderleitlinien

DBU PHD SCHOLARSHIP



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Funding

- up to 60 PhD scholars are funded per year; you can check our <u>database</u> for project examples
- funding period: 36 months
- monthly grant: 1.500 €
- monthly material expenses: 210€
- further material expenses if applicable

Mentoring

- mentoring by DBU staff
- one week seminar per year for presenting your results, excursions and interdisciplinary networking
- support to organize own scientific workshops
- invitation to events of the DBU
- networking between scholars and alumni via the web-based platform Stipnet

DBU PHD SCHOLARSHIP



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Application procedure (only in German)

- First of all, please check the requirements detailed in our guidelines in German: Förderleitlinien. You can save a lot of time and work!
- register online
- complete all required fields and upload a detailed description of your intended research work in German (check our <u>Förderleitlinien</u> for the outline)
- submit all needed documents (check our <u>Förderleitlinien</u> for the details) by regular mail indicating your reference number until 15th of January/ 15th of June respectively (date stamp)



PROJECT GRANTS

NATIONAL



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German Federal Ministry of food and agriculture (BMEL)

https://www.bmel.de/DE/Ministerium/StellenangeboteAusschreibungen/_Functions/Ausschreibung_table.html

German Ministry for Education and Research (BMBF):

- Calls tend to be with deadlines within a few months
- Mostly mobility for international projects with the ultimate goal of applying for EU funding
- Research projects often on a national scale
- https://www.bmbf.de/foerderungen/
- Get the newsletter!

ZIM

- Projects with SMEs
- https://www.zim.de/ZIM/Navigation/DE/Foerderangebote/Kooperationsprojekte/kooperationsprojekte.html



EU FUNDING



PRIMA - PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA

PRIMA



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→ build research and innovation capacities and to develop knowledge and common innovative solutions for agro-food systems to make them sustainable, and for integrated water provision and management in the Mediterranean area, to make those systems and that provision and management more climate resilient, efficient, cost-effective and environmentally and socially sustainable, and to contribute to solving water scarcity, food security, nutrition, health, well-being and migration problems upstream

PRIMA



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 15 countries are formal participants of the initiative. 11 EU member states (Croatia, Cyprus, France, Germany, Greece, Italy, Luxembourg, Malta, Portugal, Slovenia, Spain), Israel, Tunisia and Turkey, Algeria

http://prima-med.org/

New Calls for Proposals expected at the beginning of 2019

HORIZON2020



Part I – Excellent Science

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

Part II – Industrial Leadership

- Leadership in Enabling & Industrial Technologies (LEIT)
- Information and Communication Technologies
- Nanotechnologies, Advanced
 Materials, Advanced
 Manufacturing and Processing
 and Biotechnology
- Space
 - 2. Access to Risk Finance
 - 3. Innovation in SMEs

Part III – Societal Challenges

- 1. Health, demographic change and wellbeing
- 2. Food security, sustainable agriculture, marine, maritime and inland water research and the bioeconomy
- 3. Secure, clean and efficient energy
- 4. Smart, green and integrated transport
- 5. Climate action, environment, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- 7. Protecting freedom and security

Part IV Spreading excellence & widening participation

Part V Science with & for Society

Non-nuclear direct actions of the Joint Research Centre (JRC)

The European Institute of Innovation and Technology (EIT)

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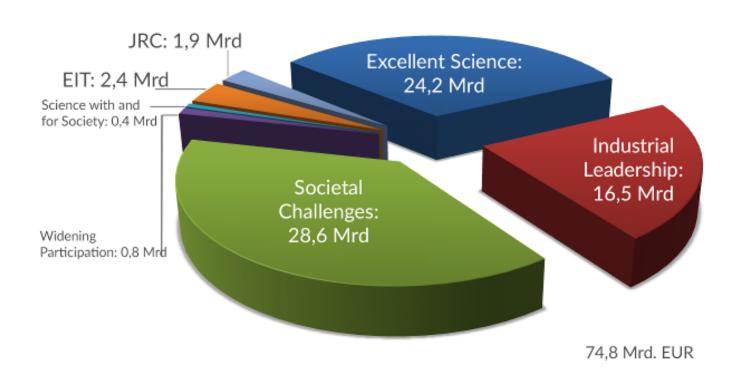
Funding options 09.10.2018

HORIZON2020



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Horizon 2020 Budget



- / - -

HORIZON 2020



Framework programme

Horizon 2020

Every 7 years

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Working programme

Every 2 years

Calls

Yearly

Projects



Horizon 2020

Work Programme 2018-2020

 Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy

Important notice on the Horizon 2020 Work Programme

This Work Programme covers 2018, 2019 and 2020. The parts that relate to 2019 and 2020 are provided at this stage on an indicative basis. Such Work Programme parts will be decided during 2018 and/or 2019.

- Call Sustainable Food Security
- Call Rural Renaissance

Searched WP for keywords:

- greenhouse (only in GHG)
- Protected (only protected areas/ landscapes)

- Glass (0 hits)

Funding options 09.10.2018



LC-SFS-15-2018: Future proofing our plants

Specific Challenge: It is well established that current food systems are under pressure due to the compounded effects of population growth, urbanisation, migration, resource scarcity, increasing demand for animal protein, land use change, climate change. Under certain circumstances, higher temperatures and CO₂ concentration are leading to enhanced plant growth but often lower quality, with subsequent impact on food value chains. Also, food production systems strongly rely on plant resources for food or feed but also often depend on chemical inputs that could have negative impacts on both the environment and on human and animal health, resulting in lower system resilience and increased societal concerns. A plausible way to tackle the challenges is future proofing those plants' qualities that could serve as a path to increased nutrition security and sustainable food systems. Now the time has come to capitalise on the results of decades of extensive plant research, while strategically moving towards a system approach to food chains.

Scope: Proposals shall map, assess and prioritise the technologies and methodologies for plant (both terrestrial and aquatic) improvement with a focus on enhancing plant nutrition efficiency and yield, enhancing nutrition and sensory quality, and ensuring environmental protection. Existing and new approaches and technologies should be assessed to best encompass future research and innovation aiming at plant improvement, while developing a holistic approach to exploit the potential of plant research. Following the RRI principles, proposals should ensure that societal actors (researchers, citizens/CSOs, policy makers, businesses, etc.) are brought together to align the forthcoming research programmes with the values, needs, and expectations of society. Gender aspects should also be considered.

The Commission considers that proposals requesting a contribution from the EU of the order of EUR 3 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

RESEARCH AND INNOVATION ACTION



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Action primarily consisting of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. For this purpose they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment. Projects may contain closely connected but limited demonstration or pilot activities aiming to show technical feasibility in a near to operational environment.

NEW FRAMEWORK PROGRAMME: HORIZON EUROPE



- On 7 June 2018: EC published its proposal for **Horizon Europe**, the next Framework Programme for Research and Innovation (2021-2027).
- proposed budget allocation includes 4.1 billion
- three pillars: Open Science, Global Challenges & Industrial Competiveness, and Open Innovation, complemented by an additional fourth programme area "Strengthening the European Research and Innovation Area".

 The Open Science pillar (€25.8 billion) will support frontier research through the European Research Council (€16.6 billion), funds fellowships and exchanges for researchers through Marie Skłodowska-Curie Actions (€6.8 billion), and invests in research infrastructures (€2.4 billion)

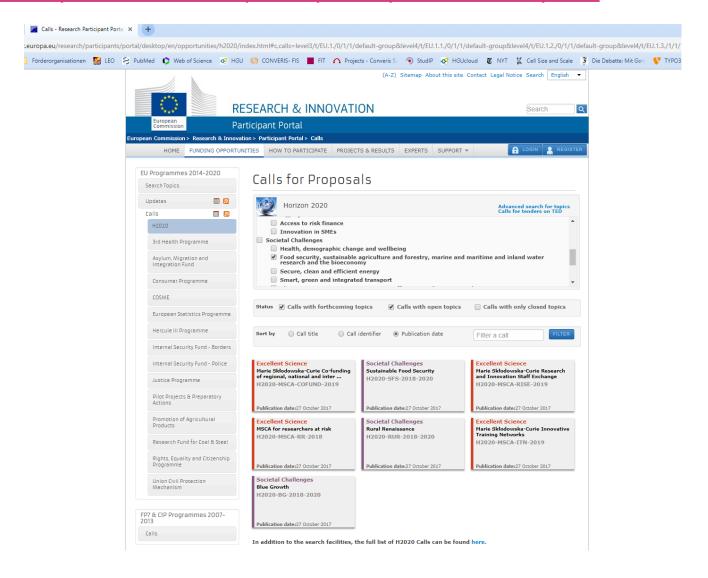


- Global Challenges and Industrial Competiveness pillar (€52.7 billion) will support research relating to societal challenges, technological and industrial capacities, and sets the basis for EU-wide missions aiming to tackle bold and ambitious goals with a high societal relevance.
 - Health: €7.7 billion
 - Inclusive & Secure Society: €2,8 billion
 - Digital & Industry: €15 Mrd. billion
 - Climate, Energy & Mobility: €15 billion
 - Food & Natural Resources: €10 billion
- The Open Innovation pillar (€13.5 billion) aims to support market-creating innovation via the European Innovation Council (€10 billion). In addition, this pillar also covers the European Institute of Innovation and Technology (EIT, €3 billion).
- The main components of the "Strengthening the European Research Area" part (€2.1 billion) are "sharing excellence" (€1.7 billion); and "reforming and enhancing the European R&I system" (€400 million), also covering the next generation Policy Support Facility.





http://ec.europa.eu/research/participants/portal/desktop/en/





MARIE SKŁODOWSKA-CURIE ACTIONS



MARIE SKŁODOWSKA-CURIE RESEARCH AND INNOVATION STAFF EXCHANGE (RISE)

RISE



- Objective: The RISE scheme will promote international and intersector collaboration through research and innovation staff exchanges
- <u>Scope</u>: Support is provided for the development of partnerships in the form of a joint research and innovation project. This is aimed at knowledge sharing via international as well as intersectoral mobility, based on secondments of research and innovation staff (exchanges) with an in-built return mechanism.
- RISE should exploit complementary competences of the participating organisations, as well as other synergies, and enable networking activities, organisation of workshops and conferences to facilitate sharing of knowledge, new skills acquisition and career development for research and innovation staff members.

RISE



- Consortium has to consist of at least 3 partners:
 - International exchange: 2 different MC/AC and 1 TC
 - Intersectoral: can be 3 MC/AC but one partner has to be non-academic
- Duration: up to 48 months for total projects
- Budget: maximum of 540 person-months

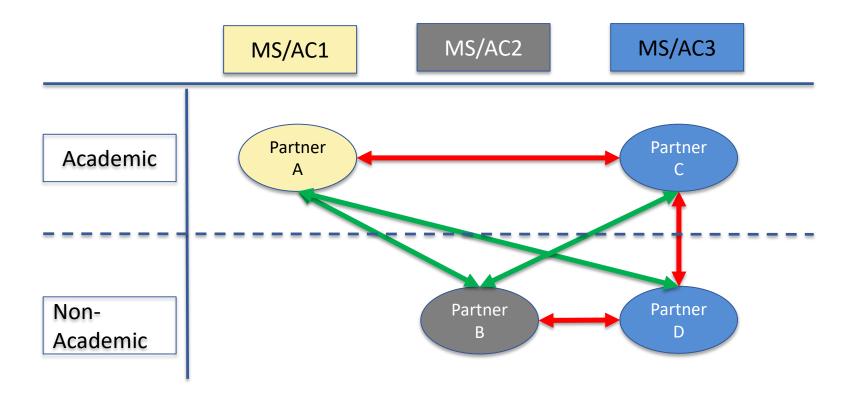
	Institutional unit cost/ person-month secondment	
Staff member unit costs/ person-month secondment	Research, training and networking costs	Management and indirect costs
€2.000	€1.800	€700

- Cost cover travel expenses, stay etc. but NOT salary
- Duration of secondment/ researcher: 1-12 months, can be split in several single stays
- Applicable for all staff (contract with home institute for at least 6 months prior to secondment), staff has to return to home institution





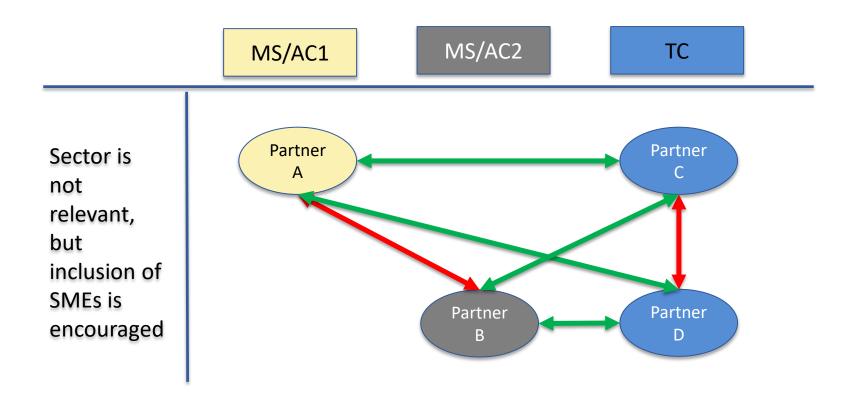
Example Intra-European Exchange







Example Europe-Third Country Exchange



RISE



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- ➤ High-income countries (Australia, Brazil, Canada, China, India, Japan, Mexico, New Zealand, Republic of Korea, Russia, United States) can be Partner organisations, but part of their participation must be funded from their own budget and they need to contribute unique skill set
- > SMEs should be part of networks
- > Funds training networks, conferences, network activities etc.
- > Success rate in 2016: 23%
- ➤ Deadline for 2018: March 21st, 2017



MARIE SKŁODOWSKA-CURIE INNOVATIVE TRAINING NETWORKS (ITN)

ITN – INNOVATIVE TRAINING NETWORK



- → Improvement of career opportunities of Early Stage Researchers within a structured training network
- → Structuring already existing training capacities for researchers at the beginning of their career
- → European Training Networks (ETN): at least 3 partners from 3 different EU Member States (MS) and/or Framework Programme Associated Countries (AC); recommended participation of partners from the non-academic sector; training shall comply with the "EU Principles for Innovative Doctoral Training"
- → European Industrial Doctorates (EID): at least 2 partners from different MS/AC; at least one of the partners must be able to award a doctoral degree, at least one institution must come from the non-academic sector
- → European Joint Doctorates (EJD): at least 3 institutions from 3 different MS/AS, which must be entitled to award doctoral degrees; at least 2 institutions from different MS/AC must award a joint, double or multiple doctoral degree

ITN – INNOVATIVE TRAINING NETWORK



- Funding of networks for up to 4 years
- A maximum of 540 person months (not more than 180 for the European Industrial Doctorates with only 2 partners)
- funding for research costs, training, networking activities and coordination, as well as for management and overheads
- For a duration of 3 36 months
- only Early Stage Researchers can be funded
- Deadline 2017: Jan 17th, 2017 (usually beginning/mid January)

Success rates in 2015:

Overall 7,4%,

European Training Networks (ETN) → 6,8%

European Industrial Doctorates (EID) → 10,5%

European Joint Doctorates (EJD) → 10,5%