

DFG funding: Programmes and Criteria for successful applications

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- 1. Some General Information on the DFG
- 2. Funding Instruments for Junior Researchers
- 3. Do's and Don'ts of Grant Writing



Agenda

1. Some General Information on the DFG

- 2. Funding Instruments for Junior Researchers
- 3. Do's and Don'ts of Grant Writing

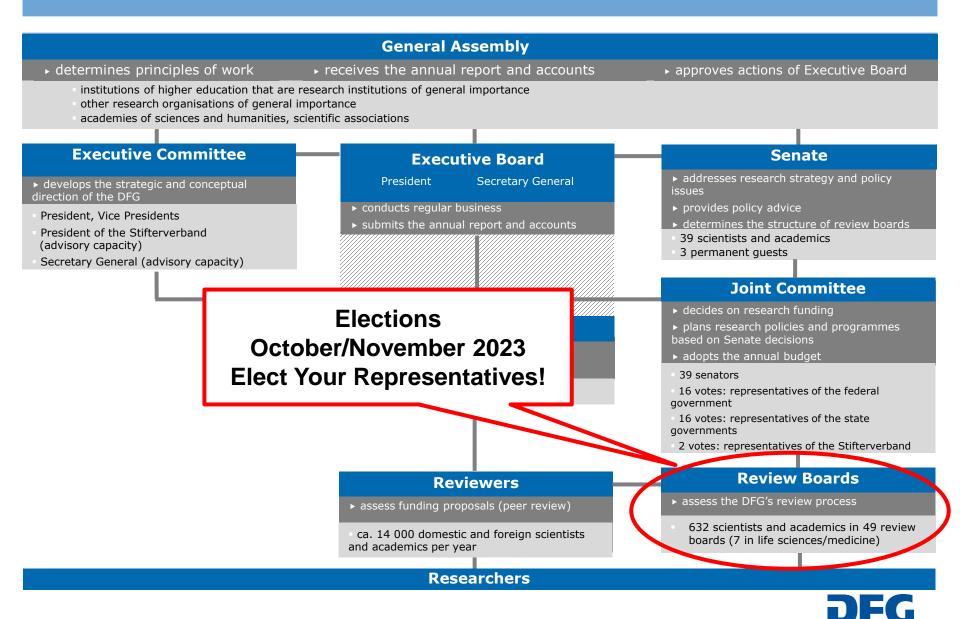




- The DFG is the central public funding organisation responsible for promoting research in Germany
- De jure a private association!
- Its members are:
 - German universities (70)
 - non-university research institutions (16)
 - German academies of sciences and humanities (8)
 - scientific associations (3)

DFG, German Research Foundation - DFG Member Organisations

How is the DFG structured?

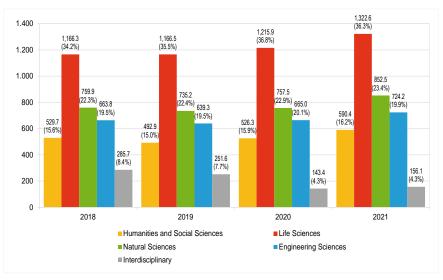


The DFG's Mission Statement

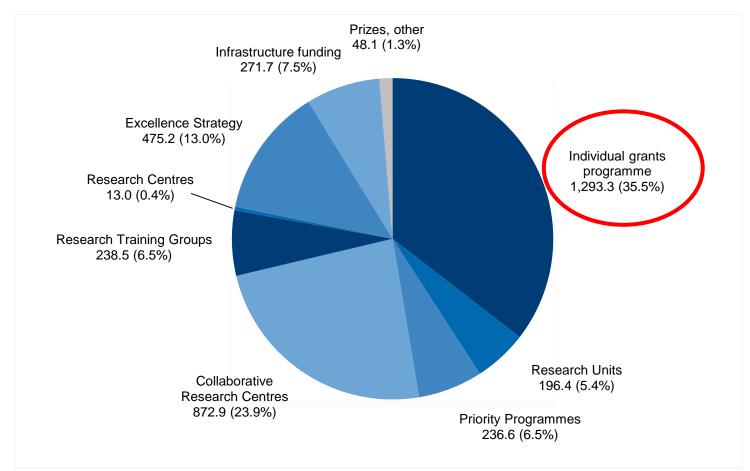
The DFG

- serves all branches of science and the humanities
- fosters scientific excellence through competition
- supports international cooperation in research
- advises political and social decisionmakers
- supports the transfer of knowledge between science and industry
- encourages the advancement and training of early career researchers

Funding 2018-21, by scientific discipline



Amount of research funding* awarded by programme for 2021 (in €m and %)



* Including programme allowance for indirect project costs





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DFG Funding Opportunities Eligibility



Researchers

- who have completed their scientific training, i.e. who hold a doctorate and
- who would like to work in Germany
- of any age
- conducting basic research

Please note: eligibility to apply for proposals is not restricted to DFG member institutions; if in doubt, contact the head office before applying!



DFG Funding Opportunities Funding Principles

- Research topic:
- open, bottom-up*
- Type of research:
- Note:
- Noto:

 basic research in any field of science and the humanities

individual career phases and family-related career breaks are considered

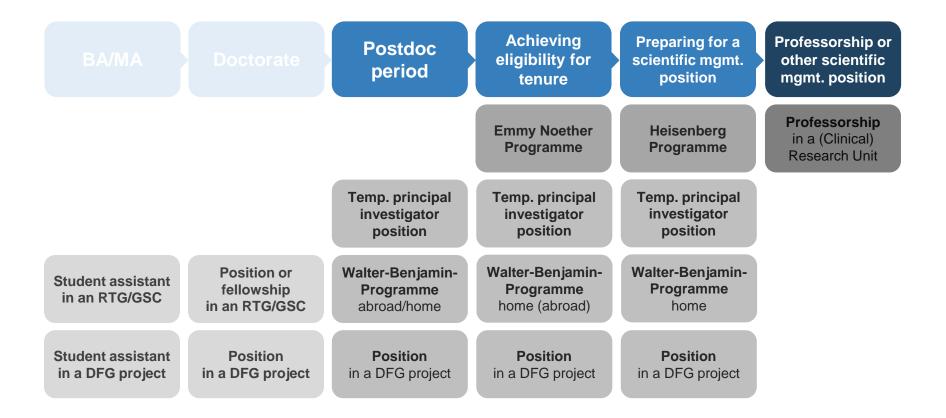


Deadlines:

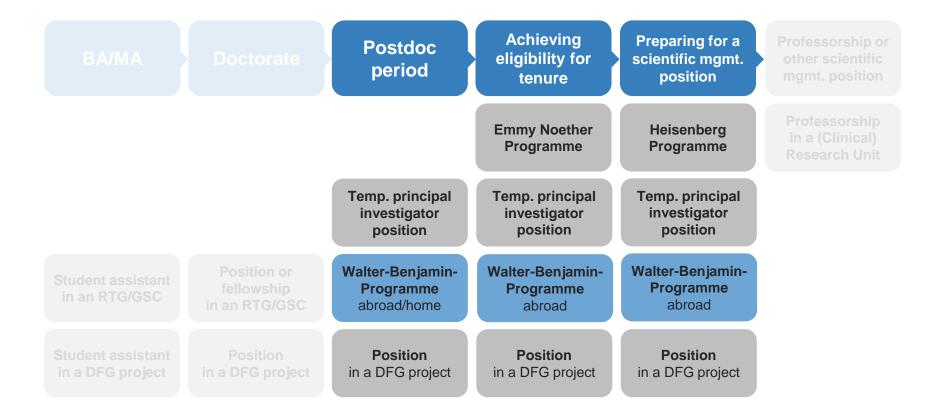
none*

* Exceptions: Priority Programmes, international activities, workshops for early career investigators

DFG Funding Opportunities For early career researchers



DFG Funding Opportunities For early career researchers



DFG Funding Opportunities Walter-Benjamin-Programme

Fellowships/positions for postdoctoral researchers for a research project abroad or at home to learn new methods or start in a new field of research

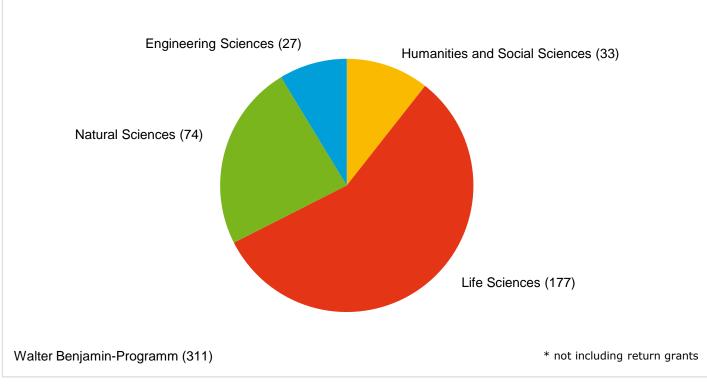
Choice of:

- Fellowship: Go abroad, training aspect is essential; learn new methods not established in Germany
- Position: Stay in Germany, a post-doctoral position is financed, project-related costs covered by hosting lab -> extend "unfinished" PhD work, also for applicants with limited mobility
- Rotation position: clinical scientists are relieved from clinical duties to allow for protected research time
- Possibility of max. 6-months return grant for abroad option



DFG Funding Opportunities Research fellowships (*Forschungsstipendien*)

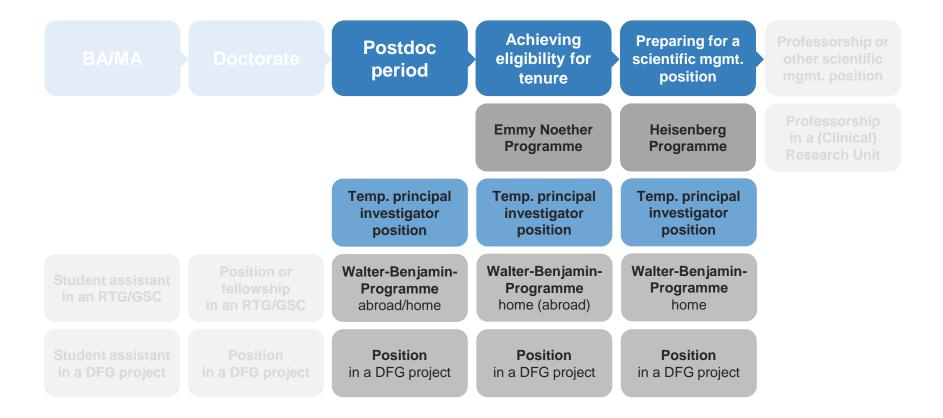
Number of new research fellowships* by scientific discipline 2021



➤ Funding rate ~63% DFG-wide!



DFG Funding Opportunities For early career researchers



DFG Funding Opportunities – Individual Grant Programme Incl. Temporary Position for Principal Investigators (*Eigene Stelle*)

- Offers an opportunity to pursue an individual research project in Germany
- Allows flexibility
- No deadlines
- Funding: staff, consumables, travel, instrumentation, publication funding
- Typically three-years of funding, extendable
- Additional module: Temporary position for principal investigator

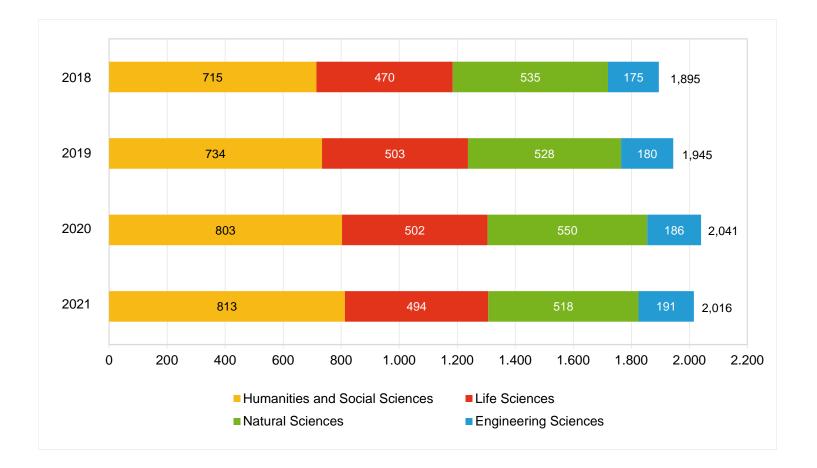


DFG Funding Opportunities Temporary Position for Principal Investigators (*Eigene Stelle*)



- For postdoctoral researchers
- Duration of generally up to 3 years, extendable
- Position (E13 to E14 TVöD/TV-L) + project funds
- Full-time commitment to conduct the project mandatory. No other funding by the DFG or any other funders can be received!
- Documented scientific independence according to career stage often required by study section (not a set condition)

DFG Funding Opportunities Temporary Position for PI: New Awards by discipline 2018 to 2021





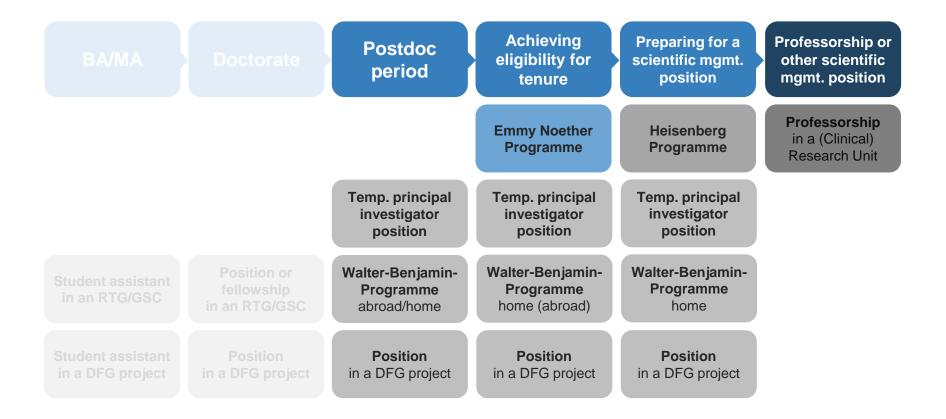
Temporary Substitutes for Clinicians Protected Research Time

Clinicians may be given protected research time free of clinical duties when conducting a project

- The DFG will grant funding for personnel that takes over clinical duties whilst staff involved in the project conducts the work
- Can be applied for in all DFG funding instruments
- Can be partially applied for, as part time or for a percentile of the project duration, e.g. 12 months
- **Details:** See guidelines "Module Temporary Substitutes for Clinicians" (*Modulmerkblatt Rotationsstelle*)



DFG Funding Opportunities For early career researchers



DFG Funding Opportunities Emmy Noether Programme

Emmy Noether Programme

- Path to early academic independence
- Eligibility for professorial appointment by leading own independent junior research group



Formal requirements

- ► Postdoctoral research experience of at least 2 and max. 4 years (medicine: up to 6 years), +2/1 years per child ♀/♂
- Substantial international research experience required



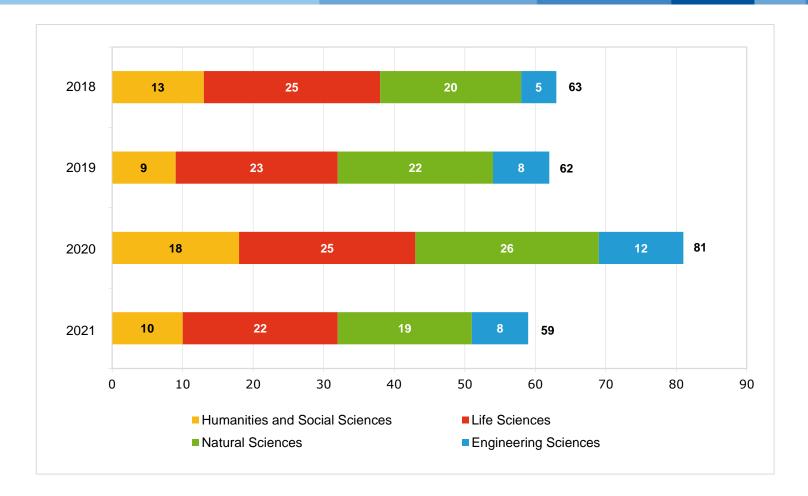
DFG Funding Opportunities Emmy Noether Programme



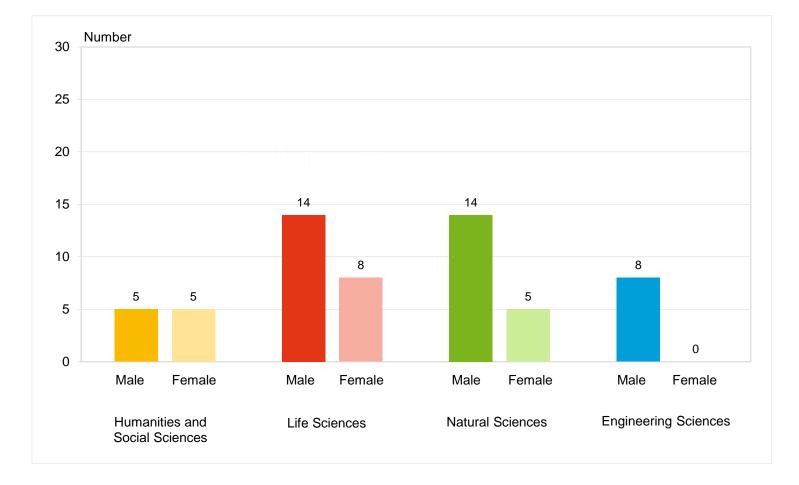
- For excellently qualified postdoctoral researchers
- ► Research in Germany → host institution becomes the employer
- Duration of generally 6 years
- Position (E15) + project funds staff, consumables, equipment, experimental animals, travel...
- Position for temporary substitutes for clinicians



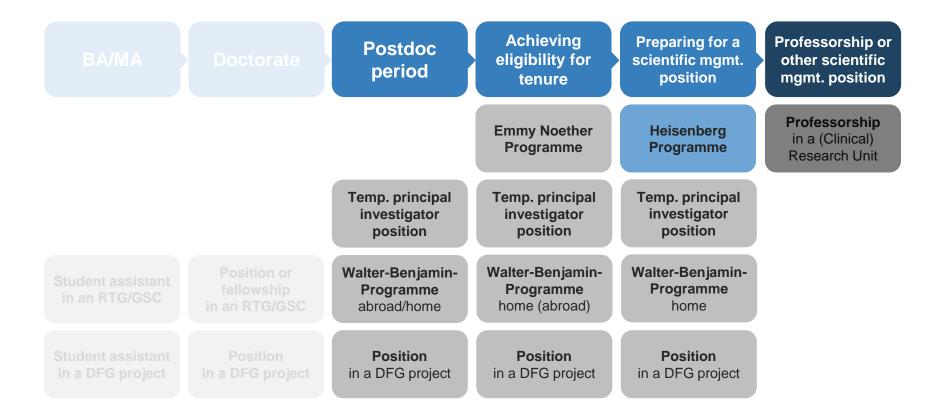
DFG Funding Opportunities ENP – Number of New Groups by Scientific Discipline 2018 to 2021



DFG Funding Opportunities ENP: New Proposals Approved in 2018, by Scientific Discipline + Gender



DFG Funding Opportunities For early career researchers

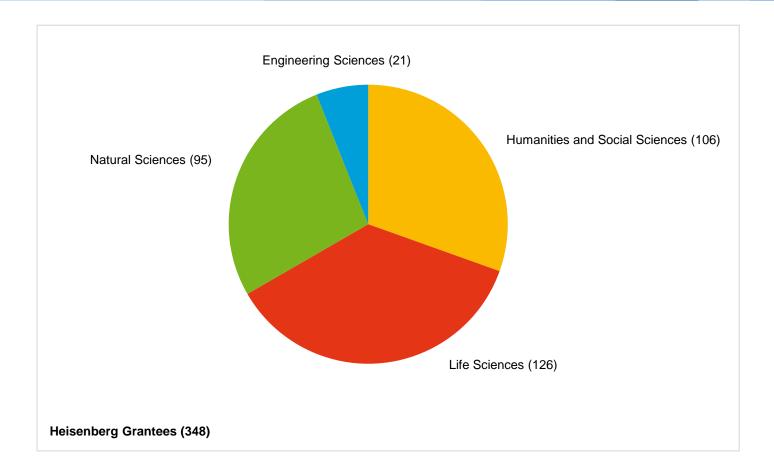


DFG Funding Opportunities Heisenberg Programme

- For researchers eligible for professorial appointment
- **Duration** of max. 5 years
- Flexible type of funding
 - Fellowship
 - Position E-15 TVöD/TV-L
 - Position for temporary substitutes for clinicians
 - Professorship W2 or W3 \rightarrow host university must establish permanent professorship
- ► Flexible research funds: € 12,000
- Fellowship and positions may be combined with research grant proposal
- Application for the Heisenberg Programme, decision on type of funding after approval



DFG Funding Opportunities New Grants in the Heisenberg Programme in 2021





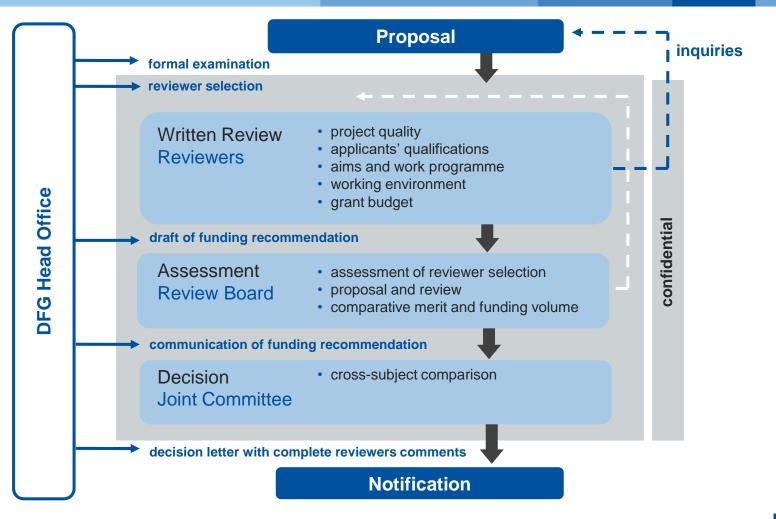
DFG Funding for Early-Career Researchers Study *Forschungsförderung und Karrierewege* (2017)

Study about DFG funding instruments and career paths

- Compares the career paths of more than one thousand applicants in 2007 and 2008 in funding programmes relevant to early-career researchers
- Early Career Researchers funded by the ENP or the HP were highly successful in gaining professorships



Proposal and Review Process In the Individual Grants Programme





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Hallmarks of project funding The DFG funding philosophy

- In the centre of every proposal submitted to the DFG is a scientific project; every proposal must have convincing scientific merit to be considered for funding
- Funding of an individual, a scientific career or a scientific structure is a desired side effect; in coordinated programmes, the benefit for (a) scientific structure(s) is essential (e.g. University, topic...)
- All disciplines are in direct competition to ensure the best of science is funded
- Importance of a topic is not sufficient for approval
- → Funds are exclusively granted to further the scientific progress (in accordance with the CoARA Agreement (<u>https://coara.eu</u>)

Proposal and Review Process Basic Advice

- Carefully review and follow the guidelines and proposal *instructions in their latest versions*; changes are made frequently
 - \rightarrow Relevant information can be found on the DFG website
- Contact us if you have any questions
- Put yourself in the reviewers' shoes
- Seek honest criticism from colleagues
- Start with smaller projects
- Plan a feasible timeline: On average, the time to decision is over six months



Proposal and Review Process Modular Funding Opportunities

Guideling	DEG form 52.01 - 012 Module Basic Module	DF9 form 1.91 - 04/14 Guidelines for Publicatic	Module Temporary F	Guidelines for the Written Review	PAge 1 of 7
Research		A proposal must inclu			
	A module can only be : mine which modules a relevant to your propos	List of Publicat Bibliography: a plicant and othe	A module can only be mine which modules relevant to your propo I. Objective		
	Use the basic modul instrumentation nece of project findings.	Whereas reviewers not required to reac The DFG prescrib publications:	This module allows y of your project.		
	II Description To enable you to specific funding: 1 Funding for	 Publication 1.1 Publication must b 	Temporary position clusively on their p used for employme abroad. Possibilitie limited.		
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The review process Criteria for funding decisions

Relevant Criteria:

- Scientific quality and originality
- Qualification of scientists involved
- Hypothesis & strategy
- Working environment

Irrelevant criteria:

- Age, Gender, Nationality
- Previous DFG-record



What is required for a good proposal? (1)

General considerations:

- Think like the reviewers to make their job as easy as possible
- Think of your application as your scientific business card like a job application!
- Ask a colleague for a critical reading!
- Avoid the "copy-paste-problem": "aim 1, aim 2, goal 4, phase 5"

Essentials:

- Give all the information neccessary, but only that
- Ensure easy reading and clear presentation
- Follow the guidelines reviewers will appreciate it! (They have them, too!!)

What is required for a good proposal? (2)

Core virtues:

Hypothesis: *Exactly* what do you want to prove, falsify, find out? Generating data to develop a hypothesis is usually not approved; that is considered a prerequisite

Work plan / strategy:

- Is the work program as core of the application appropriate, original, novel, but not overloaded? Discuss why strategies chosen by others may not have worked!
- Focus! Which are your primary goals? Prioritize!

Alternative strategies: What do you do when your strategy fails?

→ Develop "Plan B"!

Funds applied for: Be realistic - your application is not the only one in this year!

Consider this: Expensive first applications are harder to get approved; a grant should fund a focused scientific project, not your whole team! The expectation is to *first prove you are able to deliver on a project proposed and funded*.

A scientists' original sins

This is Important!!!

Never Ever:

- Neglect/omit literature contradicting your hypothesis
- cite your own papers only and ignore the competition
- re-assess or ridicule other peoples findings they may be your reviewers (or the reviewer appreciates their data)!
- do not swap authors when "equally contributed": this constitutes scientific misconduct!

Instead:

- Discuss other peoples' data this might be inspiring to the reviewer and shows you contribute your own ideas to the research field
- cite as in PubMed, including title, mark shared authorships by asterisks;
 highlight your name (helps reviewers!)



Proposal and Review Process If at first you don't succeed...

- Don't be discouraged
- Take reviewer comments seriously but not personally: You are not reviewed as a person, it's all about your proposal!
- Consult the DFG Head Office if you need advice or feel that you have been treated unfairly
- Read reviewer comments meticulously they will give you essential advice for revising your proposal to be more successful
- If you disagree with critique in the reviews, discuss it in the revision
- A rebuttal letter may be included with the revision



Advice for Applicants Research career

- Develop your own and independent research profile
- Publish independently (if possible)
- Be flexible find the best environment for your research
- Build networks of collaboration partners
- Develop alternative plans
- Take advantage of advice and information services





Advice for Applicants Your CV

- Structure it clearly
- Include prizes, fellowships and awards
- Include time away from research (relating to family or illness, dependent care, etc.)
- List up to 10 of your most important publications





Advice for Applicants Grant budget

- No upper limits, *but:*
- Needs to be realistic and justified by the project
- Supplemental, project-specific needs vs. existing resources at the higher education institution
- Talk to others or seek advice from other grant applicants, recipients, institutions/organisations
- Information on staff salaries provided on the DFG website



Advice for Applicants From a reviewer's perspective

- Is the project important regarding its scientific impact?
- Is the project idea timely and original?
- Will the project result in significant findings? What new knowledge will be generated – what gaps in current knowledge would be filled?
- Is the applicant (or team of applicants) suitably qualified to carry out the project successfully?
- Are the proposed methods up to date and suitable for addressing the research question?
- Can the work programme be completed within the proposed timeframe?

Advice for Applicants 10 golden rules for submitting a proposal

- 1. The proposal follows the guidelines and instructions and does not exceed the maximum allowable length.
- 2. The proposal is clear, precise, well structured and understandable to a non-expert audience.
- 3. The project idea is original and contributes considerably to our understanding of scientific (and social) questions.
- 4. The scientific aims are focused on central questions, theses and hypotheses, embedded in the broader context.
- 5. The descriptions of the current state of research are up to date and relate directly to the project's objectives.

Advice for Applicants 10 golden rules for submitting a proposal

- 6. The preliminary work and personal track record reflect the qualifications and academic/scientific independence of the applicant.
- 7. The work programme is clear and follows a realistic timeline.
- 8. The methods are tailored to address the issues at hand and utilize state-of-the-art or even novel techniques
- 9. The proposed budget is consistent with the work programme.
- Information relevant to the proposal, such as unpublished manuscripts are discussed and written agreements with significant cooperation partners are included.



Thank you very much for your attention... ... any questions?

Find your responsible program officer on the DFG website!

For more information...

- ▶ on the DFG: <u>www.dfg.de/</u>
- on DFG-funded projects: <u>www.gepris.dfg.de/en</u>
- 2018 Funding Atlas: <u>http://www.dfg.de/sites/foerderatlas2018/</u>
- on over 30,000 German research institutions: <u>http://www.gerit.org/de</u>

