

## DFG funding: Programmes and Criteria for successful applications

MH Hannover, June 02, 2023

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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

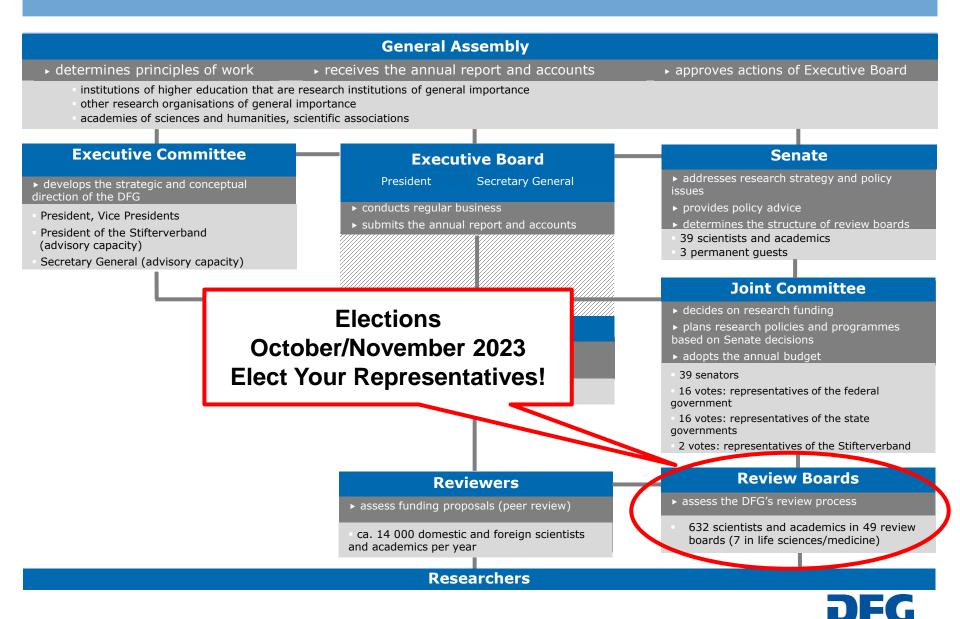




- The DFG is the central public funding organisation responsible for promoting research in Germany
- De jure a private association!
- Its members are:
  - German universities (70)
  - non-university research institutions (16)
  - German academies of sciences and humanities (8)
  - scientific associations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

DFG, German Research Foundation - DFG Member Organisations

#### How is the DFG structured?

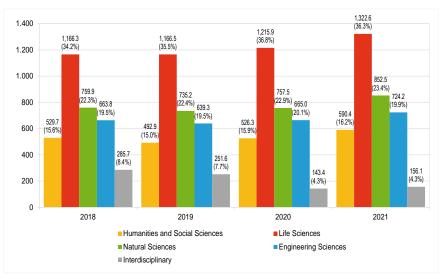


#### **The DFG's Mission Statement**

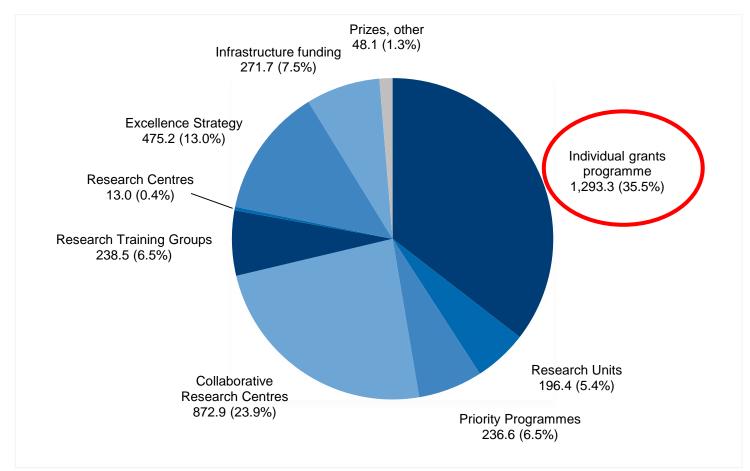
#### The DFG

- 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

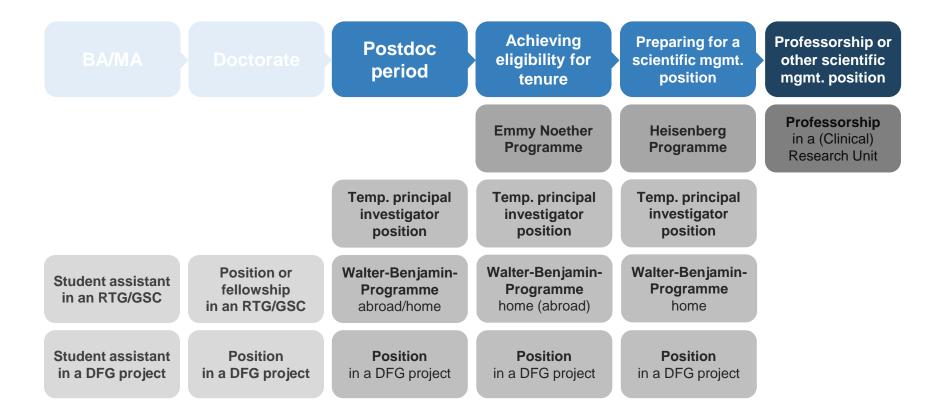


Deadlines:

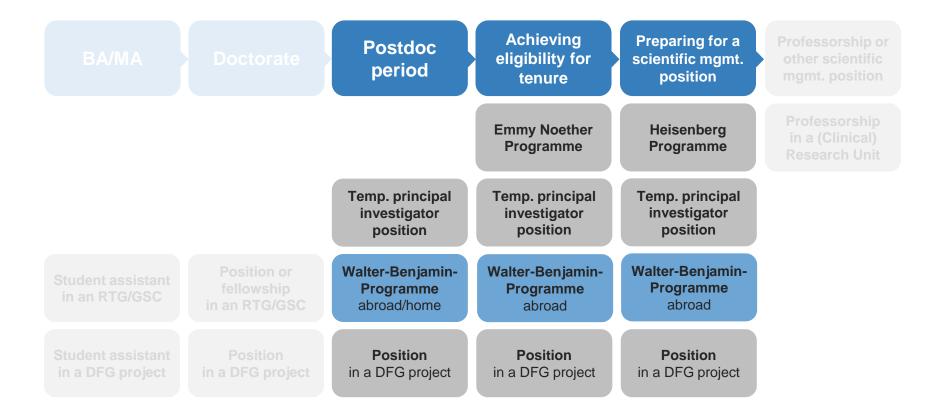
none\*

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

#### **DFG Funding Opportunities** For early career researchers



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## **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

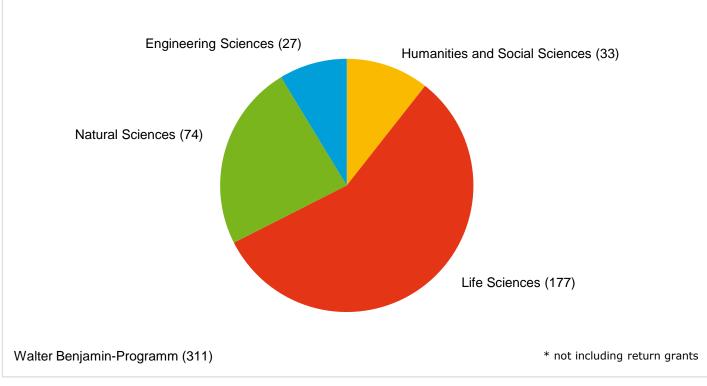
**Choice of:** 

- 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*)

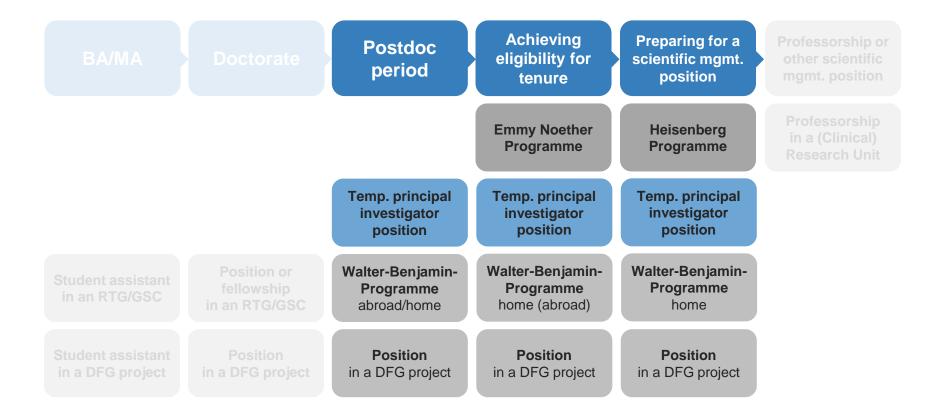
#### Number of new research fellowships\* by scientific discipline 2021



#### ➤ 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

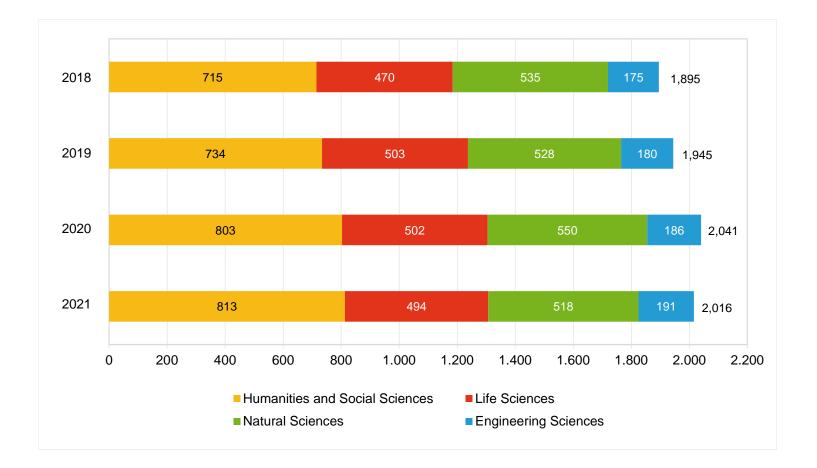


## **DFG Funding Opportunities** Temporary Position for Principal Investigators (*Eigene Stelle*)



- 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





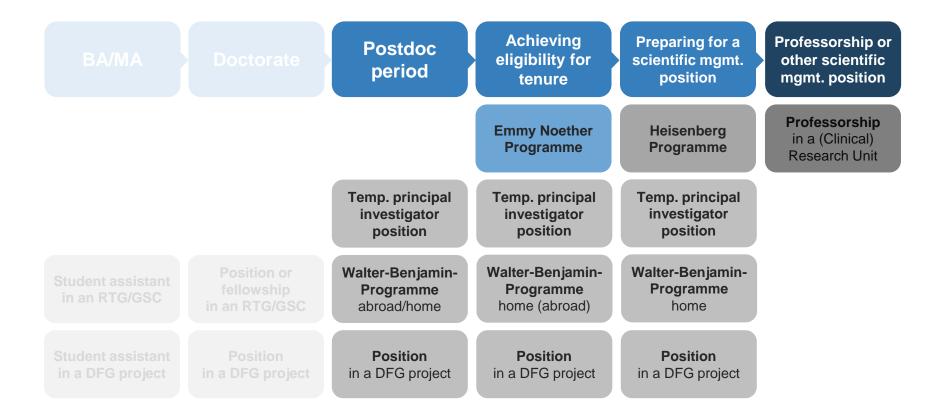
#### **Temporary Substitutes for Clinicians** Protected Research Time

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



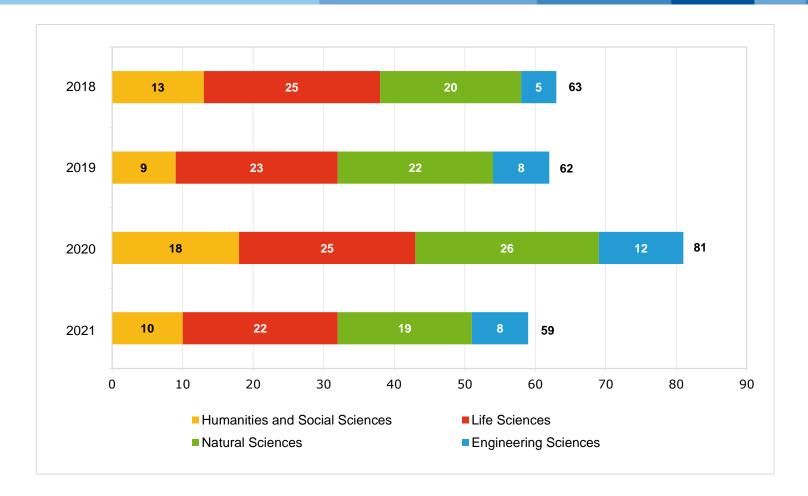
## **DFG Funding Opportunities** Emmy Noether Programme



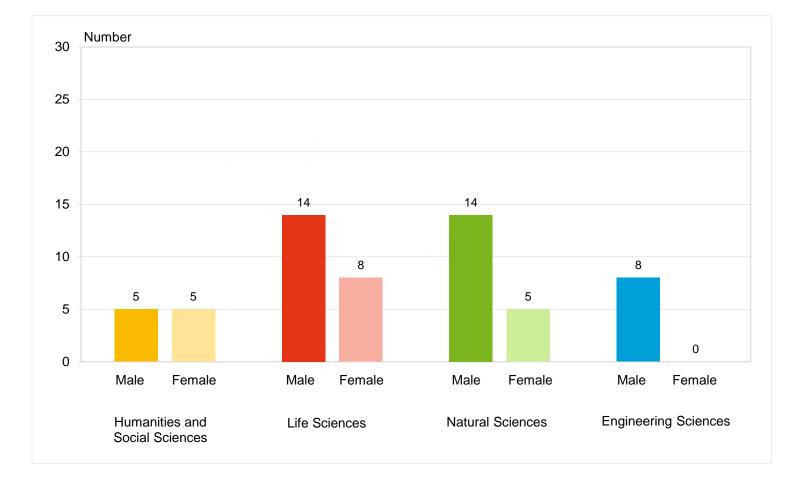
- For excellently qualified postdoctoral researchers
- ► Research in Germany → host institution becomes the employer
- Duration of generally 6 years
- Position (E15) + project funds staff, consumables, equipment, experimental animals, travel...
- Position for temporary substitutes for clinicians



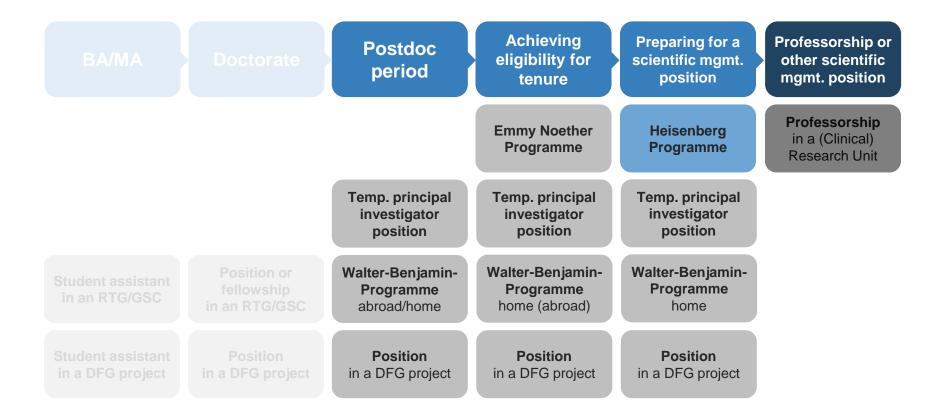
#### **DFG Funding Opportunities** ENP – Number of New Groups by Scientific Discipline 2018 to 2021



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



#### **DFG Funding Opportunities** For early career researchers

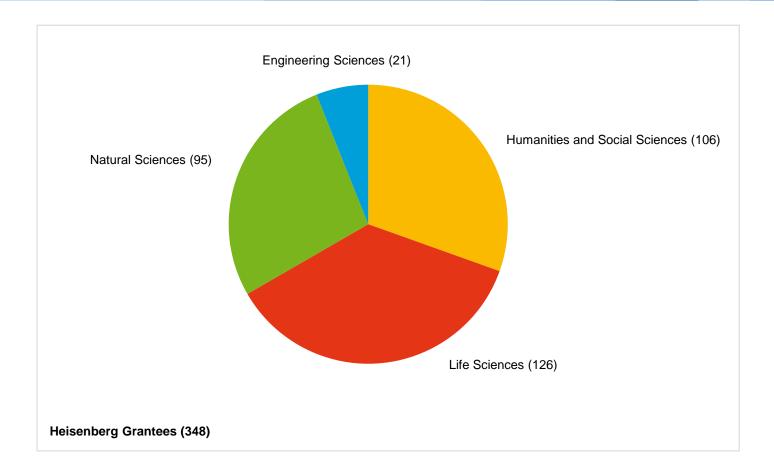


## **DFG Funding Opportunities** Heisenberg Programme

- 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





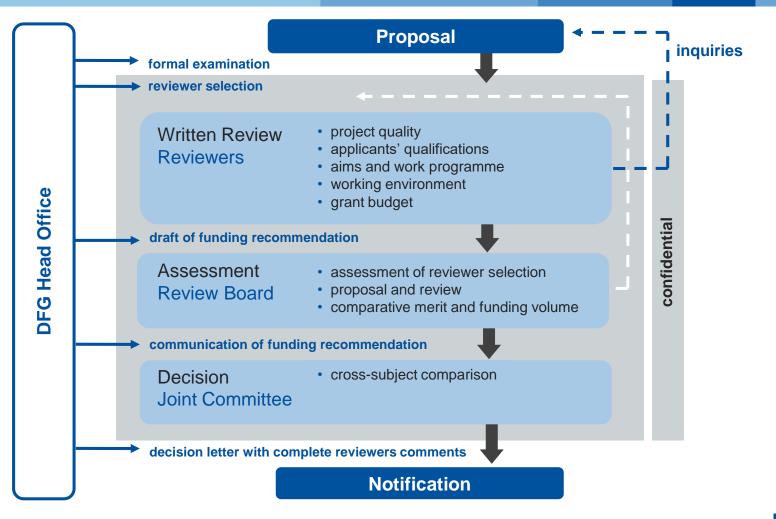
## **DFG Funding for Early-Career Researchers** Study *Forschungsförderung und Karrierewege* (2017)

# 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 <b>Guidelines</b> for Publicatic	Module Temporary F	Guidelines for the Written Review	PAge 1 of 7
Research		A proposal must inclu			
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	The DFG 9 For specific The follow	<ul> <li>need n</li> <li>must ir</li> <li>must f</li> </ul>	During DFG-funde teaching or non- however, you ma lations applicable		
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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>

