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DFG Funding Opportunities from a Reviewers Perspective

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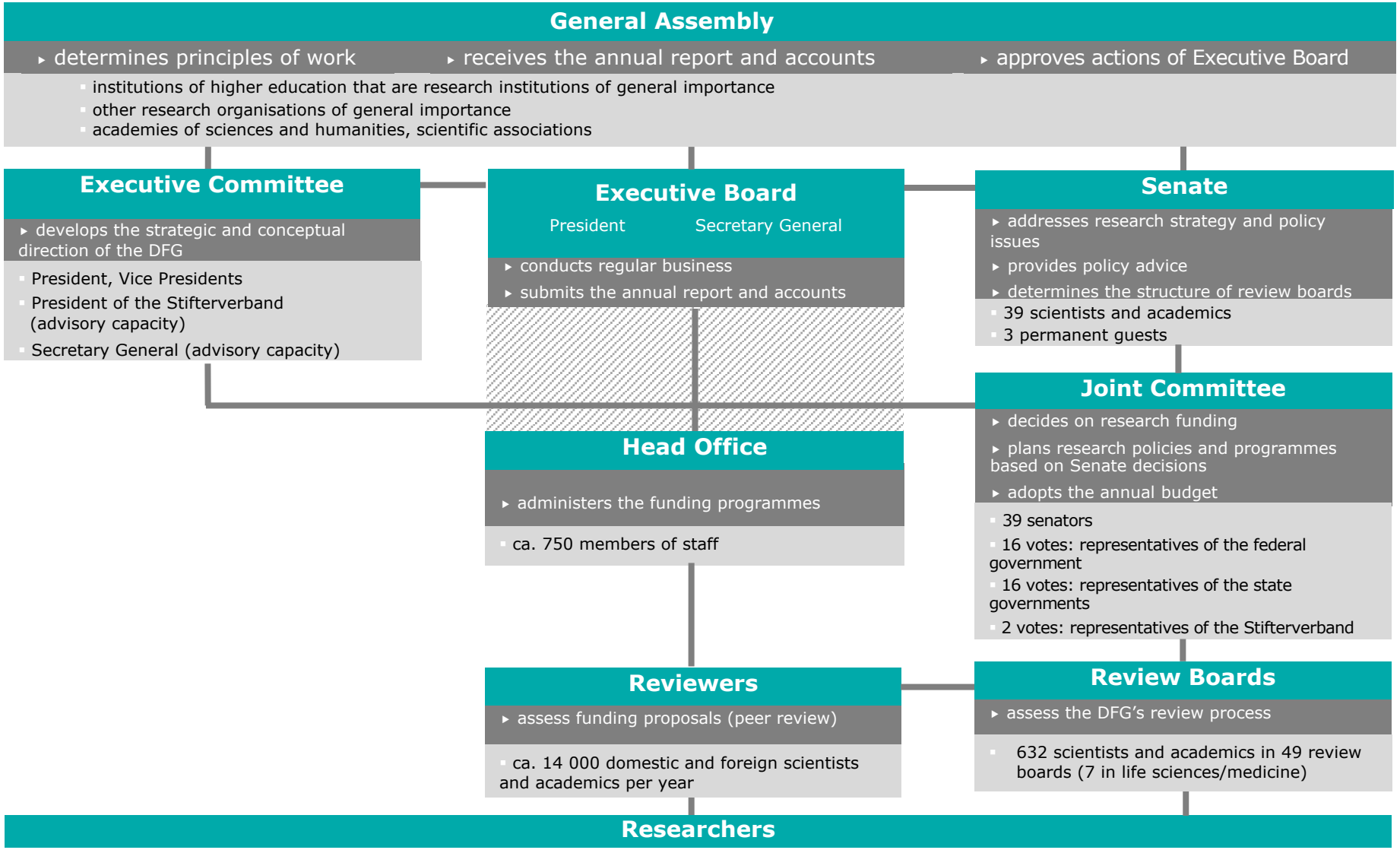
Elected member of DFG Fachkollegium 204 Immunology-Virology-Microbiology-Parasitology

20. September 2023

- DFG Structure
- Funding principles and eligibility
- Funding instruments for Postdoc / early career researchers
- Submitting and application
- How to write a good application

How is the DFG structured?



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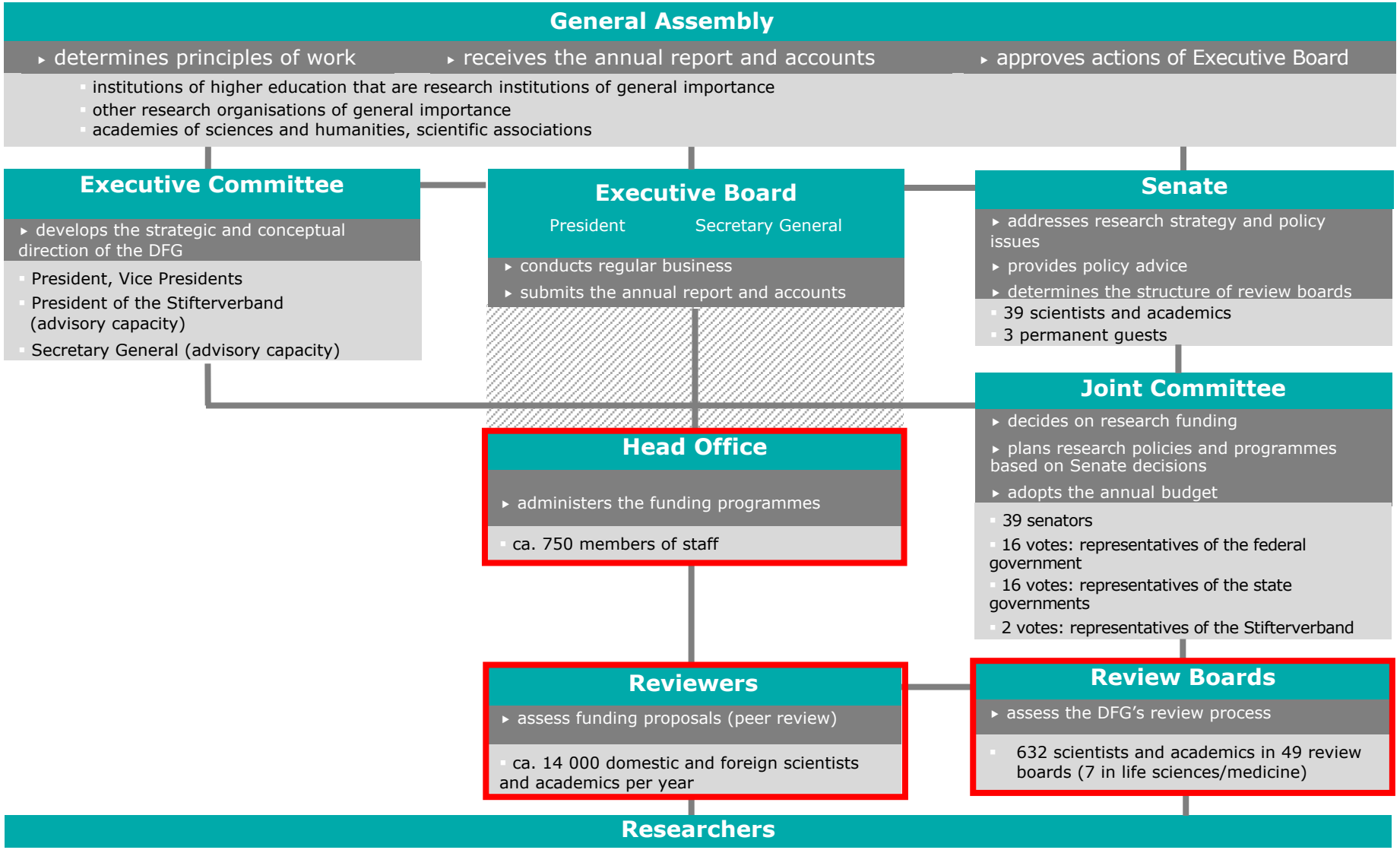

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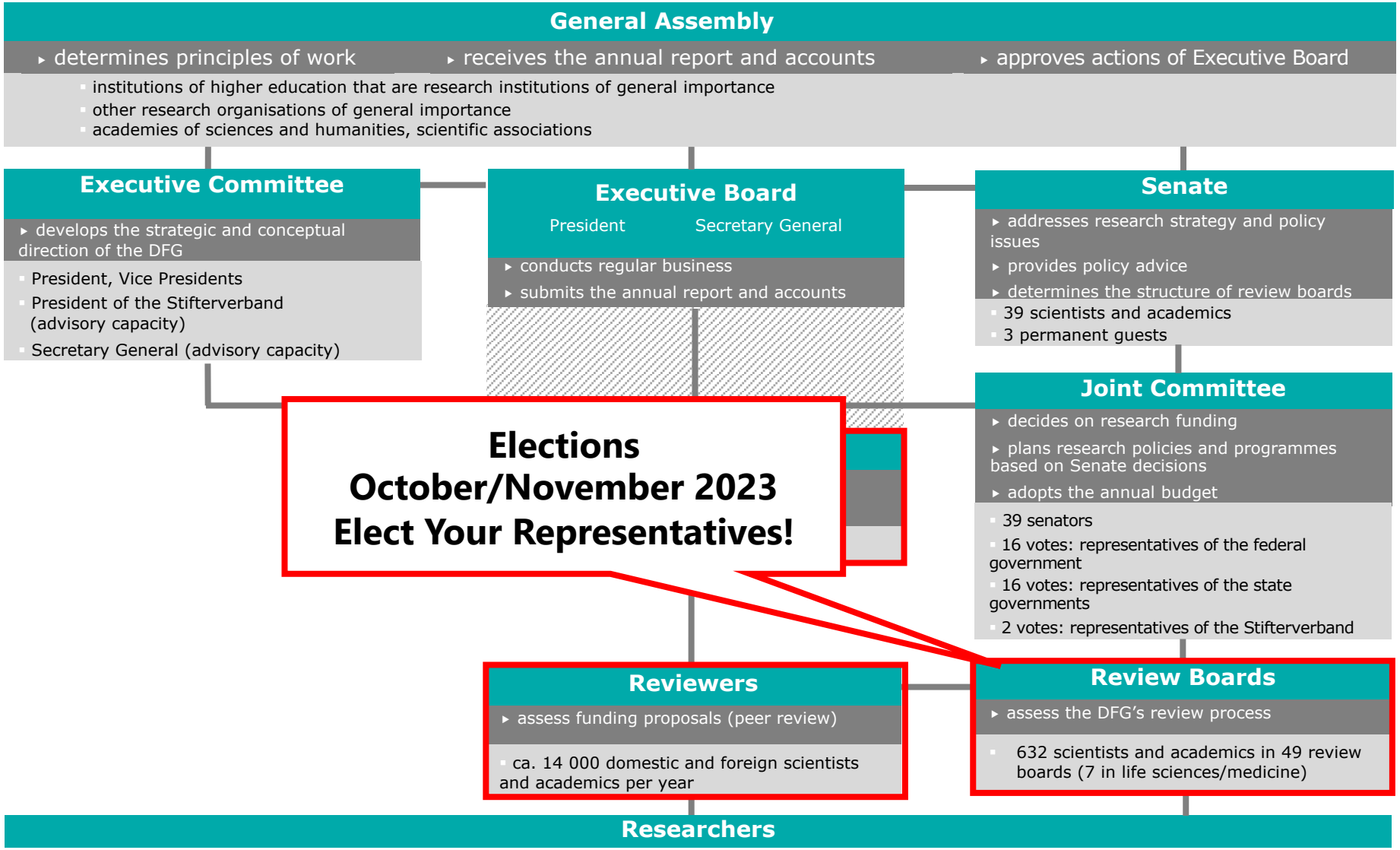

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DFG Funding : Who can apply?

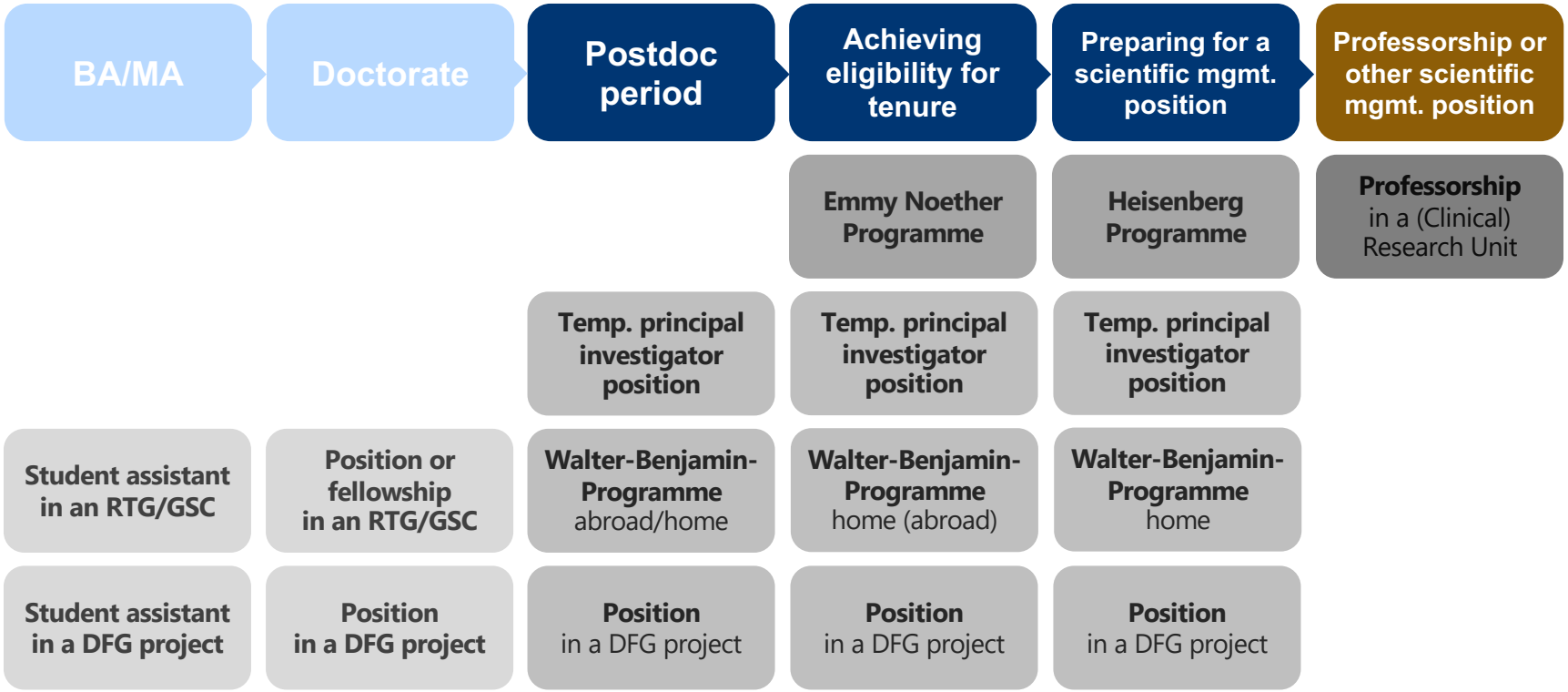
Researchers

- 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**

DFG Funding Principles

- **Research topic:** open, bottom-up*
- **Type of research:** basic research in any field of science and the humanities
- **Note:** individual career phases and family-related career breaks are considered
- **Deadlines:** none*

DFG Funding Opportunities for early career researchers



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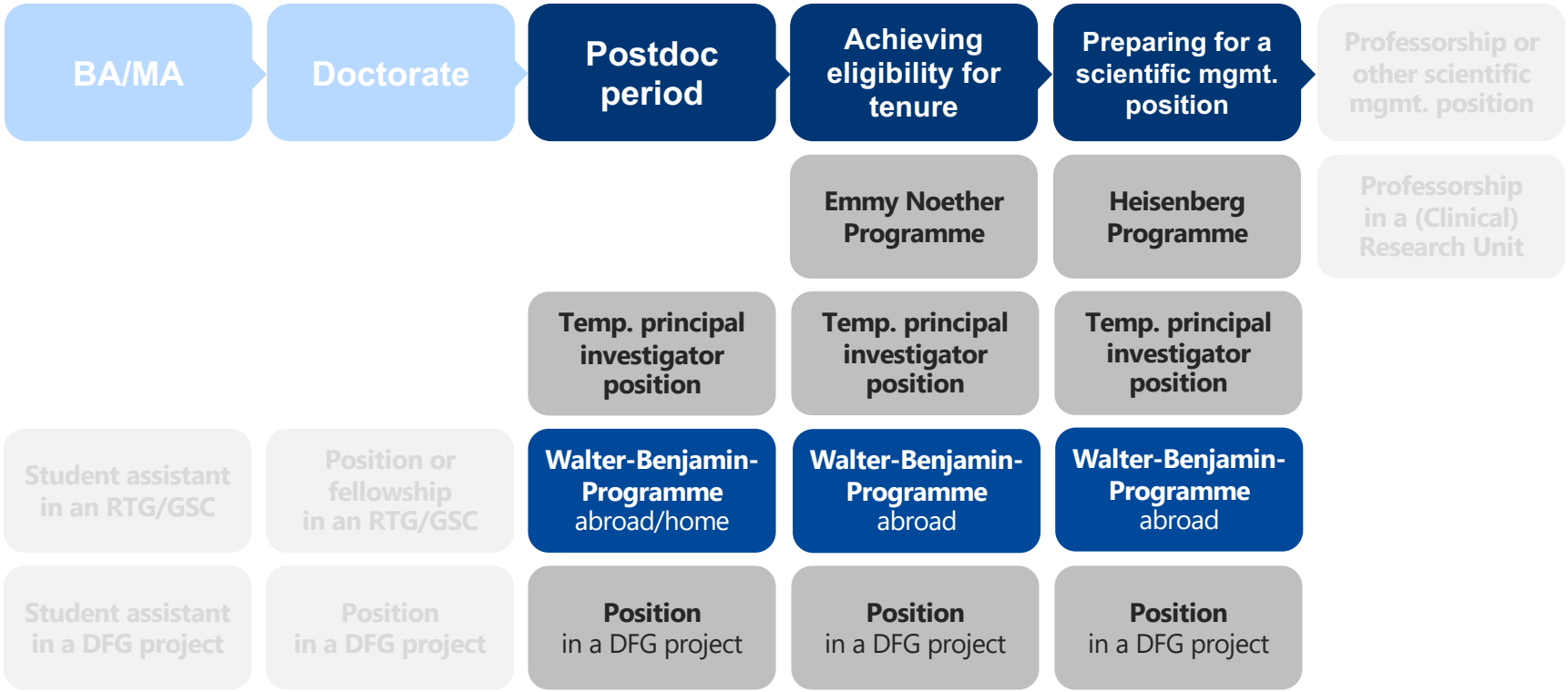

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DFG - Walter-Benjamin-Programme

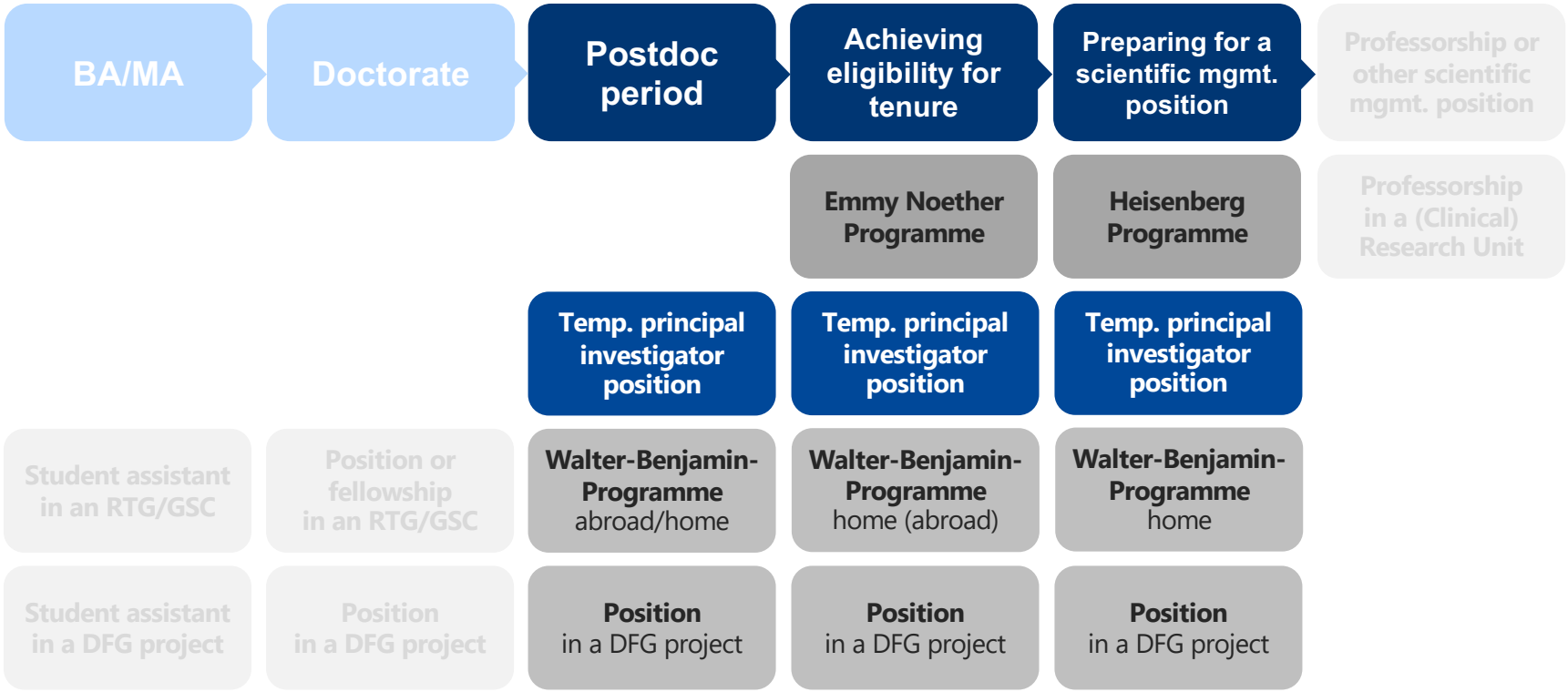
- Fellowships/positions for **postdoctoral** researchers for a research project **abroad** or **in Germany** to learn new methods or start in a new field of research

Choice of:

- **Fellowship:** Go abroad, training aspect is essential
- **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 - protected research time

- Possibility of max. 6-months return grant for abroad option

DFG Funding Opportunities for early career researchers



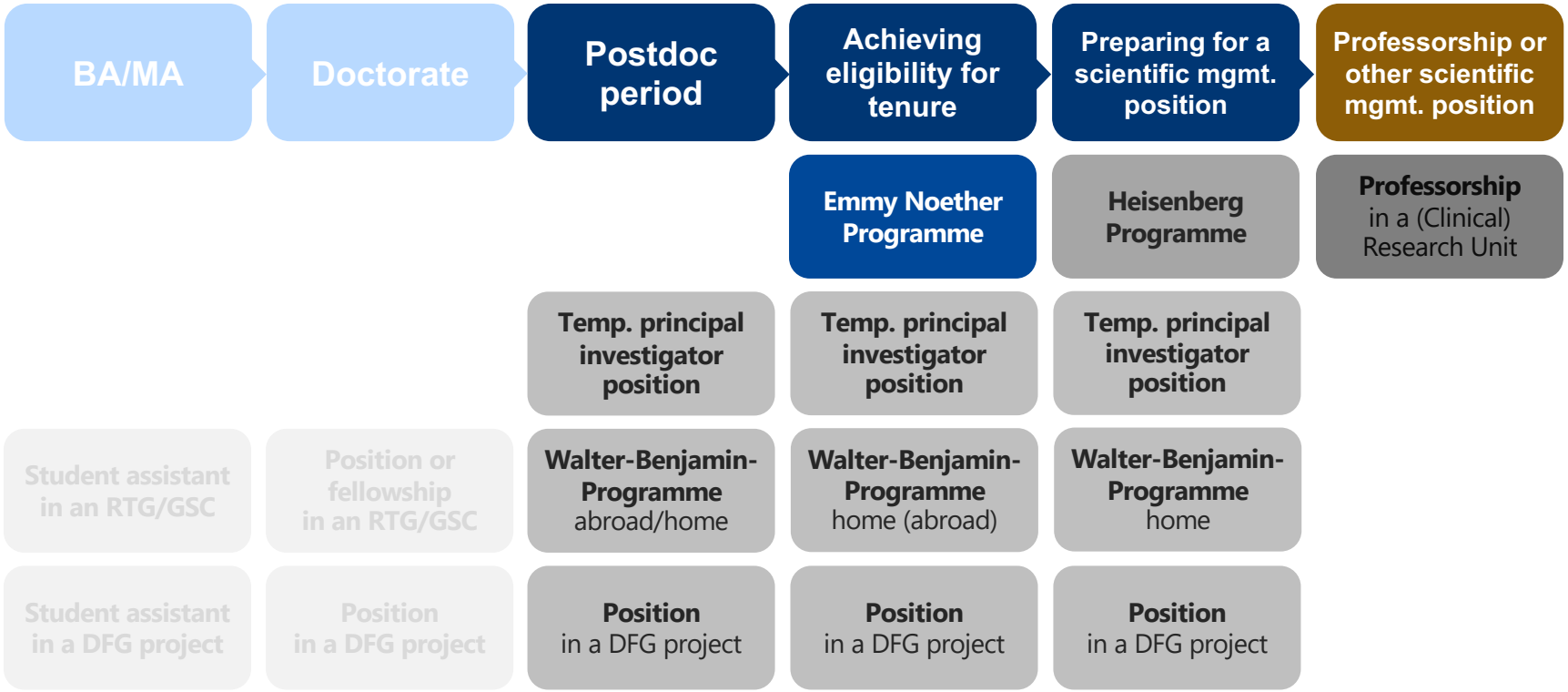
Individual Grant Programme

- individual research project in Germany
- Allows flexibility
- No deadlines
- Funding: staff, consumables, travel, instrumentation, publication funding
- Typically three-years of funding, extendable

Temporary Position for Principal Investigators (*Eigene Stelle*)

- For **postdoctoral** researchers
- Research in **Germany** → the host institution becomes the employer
- **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 for early career researchers



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

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**

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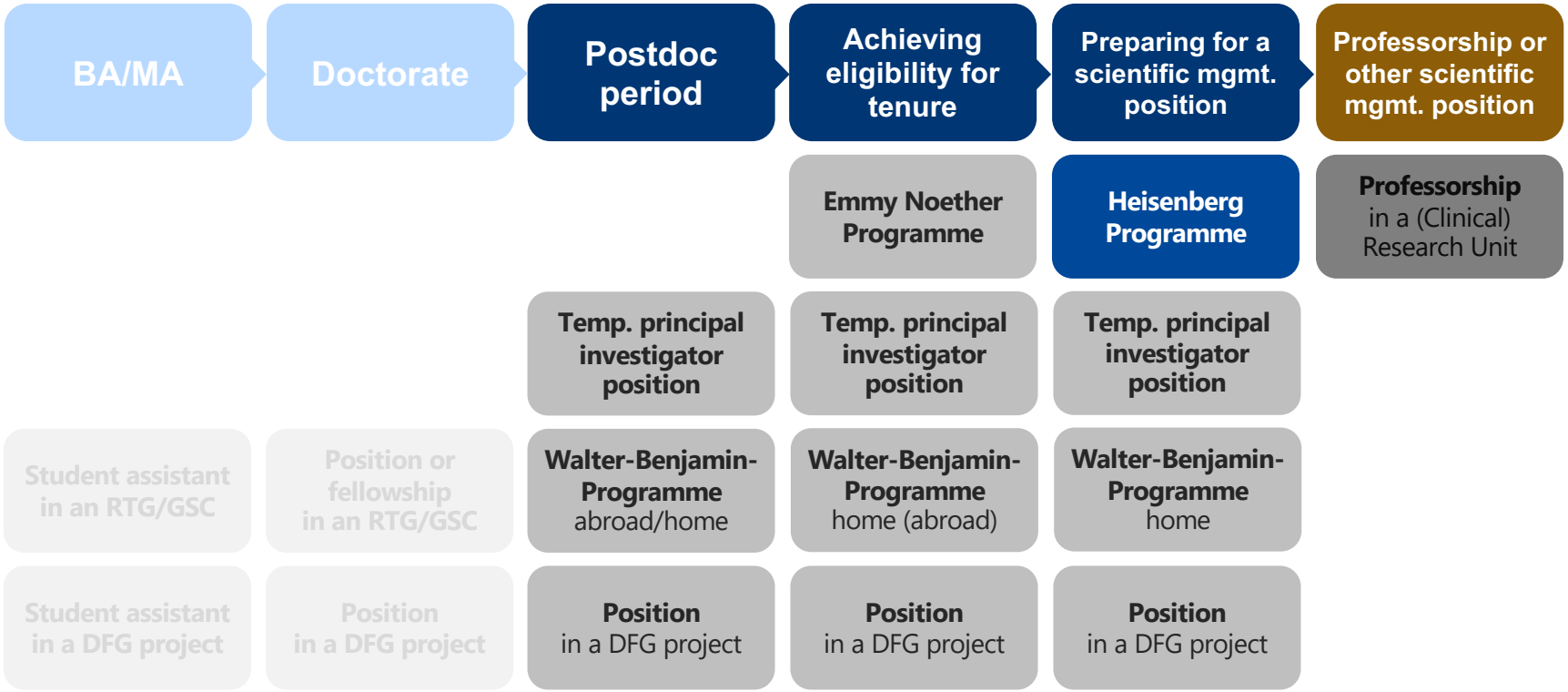

Heisenberg Programme

- 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 → 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

Interaction with the DFG

Important questions:

- Who is responsible for me at the DFG?
- What can I ask?
- What are DFG employees allowed to tell me?
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Critical points:

- Choice of the Review board
- Contact head office
- Treasure head office experience and advice, especially before 1st application EN or Heisenberg and in case of rejection

What happens to my application to the DFG

- Plausibility check upon receipt of the application
- Selecting experts to assess the application
- Obtaining at least two expert opinions on the application
- Discussion of the application and the reports in the Fachkollegium (=Review board- meets 3-4 times a year)
  - Two review board members read the application and the reports
  - Vote on the eligibility of the application
  - Comparative assessment of applications across disciplines
  - Funding recommendation or rejection
- Notice to Applicants

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How do I (successfully) submit a DFG application

- What is my topic?
- Why is the topic relevant and why is my question interesting?
- Why am I particularly qualified to work on this topic? Can I apply with someone else?
- What preparatory work do I need for an application? Publications and unpublished data…
- What kind of “support” do I need?
- Do I need collaborators?

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- What kind of "support" do I need? Core facilities, Bioinformatics, Imaging, knowledge/external expertize
- Do I need collaborators?

How do I structure a DFG proposal

- Definition of topic, specific question and work program
- Write an informative abstract?
- What knowledge/information do reviewers need to understand my application? Introduction and “state-of-the-art” as well as own preparatory work…
- How do I formulate an understandable and stringent work program
  - Goals and concrete work steps in a clear work program
  - Methods
  - “Pitfalls” & “Contingency Plans”
  - ”Ambition"? Is there stringency in the application?

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What do people like to forget?

- Detailed description of the necessary funds
- Animal testing? Estimation (statistic!) of the animals required for the experiments / ethics for patients work
- Core facilities? Separate costs can be requested
- Job description of requested positions comprehensibly justified?
- Equipment necessary to carry out the project?

General considerations for a good proposal

- Make the job of the reviewer as easy as possible

  Give all necessary information, but **only** those

  Ensure easy reading and clear presentation

- Ask colleagues / mentors for a critical reading!

General considerations for a good proposal

Never Ever:

- Neglect/omit literature contradicting your hypothesis
- cite your own papers only and ignore the competition
- re-assess or ridicule other peoples´ findings
- do not swap authors when „equally contributed“: this constitutes scientific misconduct!

Instead:

- Discuss other peoples‘ data
- cite as in PubMed, mark shared authorships by asterisks; **highlight** your name

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

Grant Budget

- No upper limits, ***but:***
- Needs to be realistic and justified
- Supplemental, project-specific needs vs. existing resources at the higher education institution
- Seek advice from other grant applicants, recipients, institutions/organisations
- Information on staff salaries provided on the DFG website and automatically calculated upon proposal upload

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**?

Criteria for evaluating an application

Person

- Scientific excellence
- Experience-based performance ("puppy protection")
- Internationally visible for the subject of the application

Application

- Interesting and innovative topic
- Convincing concept
- Stringency of the work program
- Technologies and methods used are adequate and target-oriented for the successful processing of the work program
- Cost in relation to the work program

Examples of criticisms

- Overloaded – overambitious – not feasible in the planned time with personnel and time requested
- Lack of Novelty
- Missing focus
- Too descriptive
- 'Fishing expedition' / Large screening effort without a prioritization strategy / without a contingency plan If nothing is found
- Missing hypothesis
- Experimental models not up-to-date; other existing models not considered
- Key literature / data not cited / not considered
- Preliminary data insufficient to support the work program / hypothesis / technology planned
- Missing expertize
- Lack of contingency plan

- Choice of host institution
- Independent profile

Criteria for evaluating an application

4 categories for project evaluation

Category 1 excellent projects (publications excellent, outstanding project, two enthusiastic reviews)

Category 2 very good project (very good publication situation, very good project, two favorable reports)

cutoff

Category 3 good project (good publication situation, good project, mixed expert opinion situation)

Category 4 ok projects - rejection recommended by reviewers

Funding rate at the DFG approx. **30%**

What do I do in case of rejection?

- Don’t be discouraged
- Take reviewer comments seriously but not personally
- Gather information!
- Can I submit a revised application?
- What should I pay particular attention to when revising? Read reviewer comments carefully – they will give you essential advice for revising your proposal.
- You can add point-by-point reply
- What are the chances of success after a rework?
- Who sees my revised application? Reviewers, review board members?

Tips:

- Write an interesting project "with heart and soul"
- Courage to take (calculated) risks
- Write an ambitious but realistic project
- Attention to details
- Clear reasoning and planning of experiments: from hypothesis to experiment to result
- Realistic cost estimate
- Information needed for the evaluation of the project is available, formulated in a comprehensible manner and easy to find

Advice for Applicants

1. The proposal follows the guidelines and instructions.
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

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.
10. Information relevant to the proposal, such as unpublished manuscripts are discussed and written agreements with significant cooperation partners are included.

Finger crossed for your proposals!

For more information…

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