Research Information and the Selection of Germany‘s „Universities of Excellence“

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Research Information and the Selection of Germany‘s „Universities of Excellence“

Structure of the Presentation

1. What is the German Council of Science and Humanities?
2. What is the German Excellence Strategy?
3. How were Research Information used in the Selection of Germany‘s „Universities of Excellence“?
4. Lessons Learned and Road Ahead
1. The German Council of Science and Humanities

**Function**

The German Council of Science and Humanities provides advice to the German federal government and the state (Länder) governments on the structure and development of higher education and research.
1. The German Council of Science and Humanities

Activities

Main fields of activity:

- Matters of organisation and development of the higher education and research system
- University investments
- Institutional accreditation of private universities
- Institutional evaluations
- Evaluation of research infrastructure projects
- Excellence Initiative and Excellence Strategy
2. The German Excellence Strategy

**Background and Objectives**

"Administrative Agreement between the Federal Government and the State Governments in accordance with Article 91b Paragraph 1 of the Constitution on the Funding of Top-Level-Research at Universities – Excellence Strategy" (June 2016)

- Successor program to the **German Excellence Initiative** (2005/06 – 2017)
  - to **consolidate** and **promote** achievements of the Excellence Initiative
  - to foster **research excellence** and further performance areas (= teaching, transfer and research infrastructure) on an international level

- **Permanent program: 533 million € p.a.**

- **Competition** of ideas among universities

- **Academically-driven decision making process**

- **Two funding lines:** 1. Clusters of Excellence (DFG) & 2. Excellence Universities (WR)

- Applications by **single** universities or by **consortia** of 2 – 3 universities
2. The German Excellence Strategy

Two Funding Lines

<table>
<thead>
<tr>
<th><strong>WR</strong></th>
<th><strong>Universities of Excellence (11 funding cases selected in July 2019)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fund institutional strategies that promise to strengthen universities as a whole, i.e., with regards to areas of research, teaching, transfer, research infrastructure, etc.</td>
</tr>
<tr>
<td></td>
<td>Permanent institutional funding, but evaluation every 7 years</td>
</tr>
<tr>
<td></td>
<td>€10-15 million p.a. for single institution; €15-28 million p.a. for consortia</td>
</tr>
</tbody>
</table>

*Critical mass of research excellence as precondition for funding line “Universities of Excellence”*

<table>
<thead>
<tr>
<th><strong>DFG</strong></th>
<th><strong>Clusters of Excellence (57 projects selected in September 2018)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advance internationally competitive research areas at German universities</td>
</tr>
<tr>
<td></td>
<td>Project-based funding: 7 + 7 years</td>
</tr>
<tr>
<td></td>
<td>€3-10 million per funded project</td>
</tr>
</tbody>
</table>

*Single university:*

2 Clusters of Excellence

*University consortia:*

3 Clusters of Excellence
### Funding Criteria „Universities of Excellence“ (excerpt)

#### I. Status Quo and Prior Achievements

1. Coherence of the overall profile of the university/universities in light of the individual starting situation(s)
2. Level of performance:
   2.1 **Quality of research**
   2.2 Quality in the performance areas of teaching, transfer and research-infrastructure
   2.3 **Academic excellence of participating researchers**
3. Self-assessment and monitoring based on an analysis of strengths and weaknesses encompassing all performance areas and taking into account the starting situation(s)

#### II. Plans and Potential

4. Objectives, quality and long-term sustainability of the overall strategy
5. Effectiveness of the planned projects with regard to
   5.1 **improving the level of research performance**
   5.2 further developing the performance areas of teaching, transfer, and research-infrastructure (as applicable)
   5.3 **improving the framework conditions for researchers at all career levels**
   5.4 **advancing early career support (including early research independence) and equal opportunity**

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2. The German Excellence Strategy

*Priority of „Status Quo and Prior Achievements“*

*Primacy given to „Quality of Research“*

*Other performance dimensions and fields of activity are also important*
3. Research Information in Selection of “Universities of Excellence”

Research Information in the Proposals

- Mix of qualitative and quantitative data
- Proposals had to explain and demonstrate strategic orientation

Core and emerging research areas
Framework conditions and support structures
Research quality assurance system
Strengths and weaknesses in all areas
3. Research Information in Selection of “Universities of Excellence”

Research Information in the Proposals: Research Core Dataset (RCD)

- Data Annex with data according to RCD
- RCD is a standard specification to harmonise management of research information in Germany
- Enhances comparability of data
- Excellence Strategy involved largest RCD data collection to date

Data for 2017

Please provide data in accordance with the definitions in the Research Core Data Set, v 1.0. Please visit http://kerndatensatz-forschung.de/version1/Spezifikationstablelle_KDSF_v1.html for an explanation of the abbreviations inside square brackets (information in German only). Please round all percentages to one decimal place. All staff data should be provided regardless of the source of funding.

<table>
<thead>
<tr>
<th>Total budget including medicine (revenues) [Dr137]</th>
<th>€[...], million</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which third-party funding (revenues/proceeds) [Dr1a or Dr1b]</td>
<td>€[...], million</td>
</tr>
<tr>
<td>Total budget excluding medicine (revenues) [Dr137]</td>
<td>€[...], million</td>
</tr>
<tr>
<td>of which third-party funding (revenues/proceeds) [Dr1a or Dr1b]</td>
<td>€[...], million</td>
</tr>
<tr>
<td>Professors [Be19]</td>
<td>[...], FTE [Be1] / [...], persons [Be2]</td>
</tr>
<tr>
<td>of which male/female/not specified [Be7]</td>
<td>[...], % m / [...], % f / [...], % n.s.</td>
</tr>
<tr>
<td>of which from other countries [Na58]</td>
<td>[...], %</td>
</tr>
<tr>
<td>Academic staff (excluding professors) [Be68 minus Be19 minus Be18]</td>
<td>[...], FTE [Be1]</td>
</tr>
<tr>
<td>of which male/female/not specified [Be7]</td>
<td>[...], % m / [...], % f / [...], % n.s.</td>
</tr>
</tbody>
</table>
3. Research Information in Selection of “Universities of Excellence”

Research Information in the Proposals

- Data about, e.g.:
  - Third-party Funding
  - Staff
  - Publications
  - Research Prizes
  - Profile-forming Research Areas

No Rankings, no bibliometrics

C. Data annex
List of data annexes

- Basic data on the university

C.2. Data on the organisation and quality of research and support for early career researchers
  - C.2.1. Examples of important ongoing third-party-funded projects in research and in support for early career researchers since 2012 (maximum of 25)
  - C.2.4. Examples of outstanding researchers since 2012 (maximum of 25)
  - C.2.5. Examples of outstanding publications since 2007 (maximum of 25)
  - C.2.6. Examples of important external awards and prizes in research since 2012, including awards and prizes for early career researchers (maximum of 25)
  - C.2.7. Most important internal measures and effects in research and in support for early career researchers since 2007 (maximum of ten)
  - C.2.8. Brief descriptions of profile-forming research areas
3. Research Information in Selection of “Universities of Excellence”

Table C.1.2.

<table>
<thead>
<tr>
<th>Third-party funding revenues [Dr1a] or proceeds [Dr1b] by funding provider [Dr12]</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>DFG [Dr21]</td>
<td>$0 $m</td>
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<td>of which DFG funds from the Excellence Initiative</td>
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<td>EU [Dr95]</td>
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<tr>
<td>Federal government [Dr22] (not including Excellence Initiative funds)</td>
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<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
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<tr>
<td>Federal state (host state) (not including Excellence Initiative funds)</td>
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<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
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<td>Commercial business and other private activity [Dr25]</td>
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<td>Other third-party funding providers [Dr141]</td>
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<td>$0 $m</td>
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<tr>
<td>Not declared [Dr134]</td>
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<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
<td>$0 $m</td>
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<tr>
<td>Total</td>
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<tr>
<td>of which [Name of faculty]</td>
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<td>$0 $m</td>
</tr>
</tbody>
</table>
3. Research Information in Selection of “Universities of Excellence”

Table C.2.5.

C.2.5. Examples of outstanding publications since 2007 (maximum of 25)

If the author has left the university in the meantime, please add a footnote to her/his name stating in which year the author left the university.

<table>
<thead>
<tr>
<th>Author(s)* [Pu52]</th>
<th>Year of publication [Pu84]</th>
<th>Title [Pu5]</th>
<th>Publication type [Pu6]</th>
<th>Place of publication (e.g. title of journal)</th>
<th>Scientific discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Last name, first name]</td>
<td>[...]</td>
<td>[...]</td>
<td>[...]</td>
<td>[...]</td>
<td>[...]</td>
</tr>
</tbody>
</table>
3. Research Information in Selection of “Universities of Excellence”

Table C.2.8. (Excerpt)

| Structures and programmes for early career support | [Name]: [Funding amount if applicable] |
| Ongoing internal funding instruments if applicable | [Name]: [Funding amount if applicable] |
| Ongoing external funding instruments if applicable | [Name]: [Funding amount if applicable] |
| Five most important publications since 2007 | [Author(s)] [Year]:[Title], [Place of publication, if applicable no., pages] |
| Five most important doctorates since 2007 | […] |
| Five most important research successes since 2007 | […] |
| Contributions to other performance areas and areas of activity (e.g. teaching, transfer, research infrastructures, internationalisation, equal opportunity) [maximum of five] | […] |
| Important evaluation parameters for excellent academic achievements [maximum of ten] | […] |
3. Research Information in Selection “Excellence Universities”

Assessment of Research Information

- Peer review during on-site visits
- Import instrument to:
  - get first-hand impression of quality of research
  - ask about strategic development of research activities
  - engage researchers on all career levels
  - inquire about quality assurance system
3. Research Information in Selection “Excellence Universities”

Assessment of Research Information

- Excellence Commission got 19 evaluation reports and a table comparing research data of the applicants.
- Explicit information was given about the need to interpret research information in context and in light of multicausality.

Comparative data grouped by topic, e.g.
- Third-party funding:
  - by research area
  - per professor
  - rate of increase
  - from industry
  ...

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4. Lessons Learned and Road Ahead

- Multidimensional approach was effective:
  - Combining peer review and sets of indicators
  - Combining qualitative and quantitative information
  - Combining open formats and standardised specifications
  - On-site-visits

→ Good balance important, diverse expectations (acceptance, legitimation, ressources)

- Next Steps: Evaluation every seven years!