HAMBURG RESEARCH ACADEMY

THE GERMAN ACADEMIC SYSTEM – WHAT IS IT ALL ABOUT AND HOW TO USE IT STRATEGICALLY FOR YOUR CAREER

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PART 1: „SPECIAL FEATURES“ OF THE GERMAN SYSTEM

PART 2: WHO IS WHO IN THE SYSTEM

PART 3: CAREERS WITHIN THE GERMAN SYSTEM

PART 4: YOUR CAREER PATHS

⇨ YOU WILL GET THIS PRESENTATION VIA EMAIL!

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MANY WORKSHOPS, SESSIONS AND PERSONAL ADVISING AVAILABLE VIA THE HAMBURG RESEARCH ACADEMY

- Find events open to early career researchers in Hamburg (HRA and beyond) via our „course portal“: https://www.hra-hamburg.de/unser-angebot/kursangebot.html

  ⇨In the summer semester 2022 there will be courses on the WissZeitVG, research funding applications (what suits me // from idea to proposal), networking, and more!

- Check out our individual advising sessions: https://www.hra-hamburg.de/en/unser-angebot/beratungsangebot.html

- Sign up for our newsletter! https://www.hra-hamburg.de/en/ueber-uns/newsletter.html

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PART 1: „SPECIAL FEATURES“ OF THE GERMAN SYSTEM

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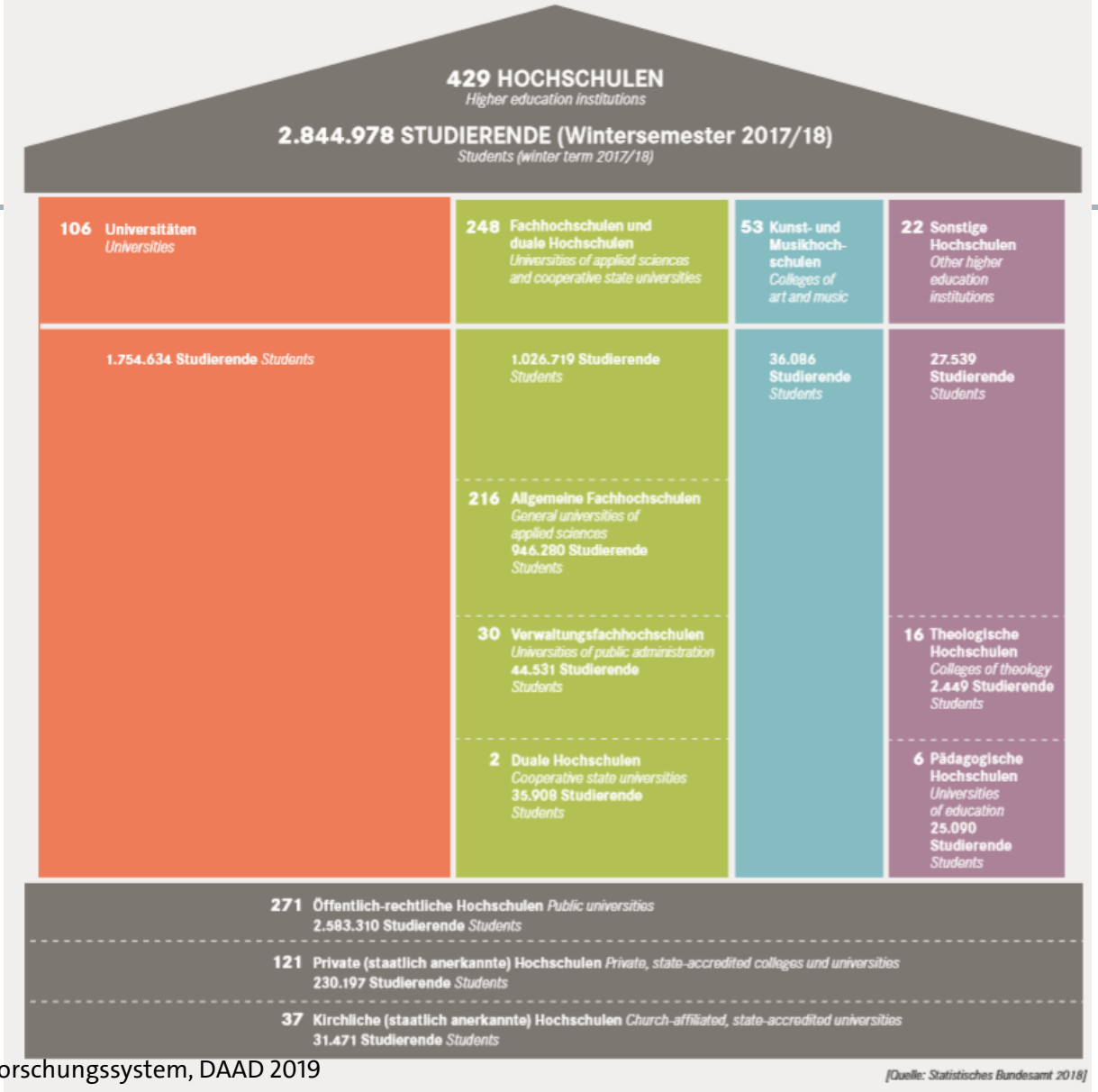
HIGHER EDUCATION IN GERMANY



Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

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UNIVERSITIES IN GERMANY

- Students: 2.95 million (WS 2020/21, 49.9% women)
- First-year students (WS 2019/20): 508.700
  - Proportion of the population of the same age (2018): 56%
- Graduates: 512.300 (2020)
  - Proportion of foreign graduates: 10%
  - Doctorates: 28. 690 (45.4% by women in 2019)
- Habilitations: 1581 (481 by women in 2019)

Quelle: HRK

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UNIVERSITIES IN GERMANY: HUMBOLDT

- 1810: Foundation of the Universität Berlin by **Wilhelm von Humboldt,** Prussian State Minister

- **“Humboldtian Education Ideal”**, based on unbiased knowledge and analysis, combining research and teaching while allowing students to choose their own course of study

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UNIVERSITIES IN GERMANY: HUMBOLDT

- Unity of research and teaching
- Freedom of science in the sense of its independence from direct political or social interests
- Unity of science under the umbrella of the university
- Education through science
- Supervision of the state and its alimentation of the universities supplemented by the right of the universities to regulate their internal and academic affairs themselves

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FREEDOM OF ARTS & SCIENCES: „WISSENSCHAFTSFREIHEIT“

Article 5 of the Basic Law for the Federal Republic of Germany:

Freedom of expression, arts and sciences

(3) Arts and sciences, research and teaching shall be free. The freedom of teaching shall not release any person from allegiance to the constitution.

→ Professors are civil servants but completely independent = „weisungsfrei“

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FREEDOM OF ARTS & SCIENCES: „WISSENSCHAFTSFREIHEIT“

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ARTS AND SCIENCES AND THE FEDERAL STATE

- **Primary responsibility for education and academia lies with the federal states**
- **Principle of self-management**
- Complex system requires a variety of collaborations in various forms of organisations (e.g. German Science and Humanities Council, Joint Conference of Science and Humanities, KMK)
- Since the last federalism reform (2006), the federal government is not allowed to fund universities directly. Limited to foreign cultural policy and development policy, research funding, training funding and joint special programs with the federal states (e.g. Tenure-Track)
- A further amendment to the constitution from 2015 onwards again extends the funding options of the central government ⇨ 2021: more changes planned by Bettina Stark-Watzinger, new Federal Minister of Education and Research, see an interview here: Bettina Stark-Watzinger: "Wir bleiben unter unseren Möglichkeiten" | ZEIT ONLINE

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ARTS AND SCIENCES AND THE FEDERAL STATE: WHO IS WHO

- **Central Government:**
  - BMBF (Ministry of Education and Research)
  - BMWi (Ministry of Economic Affairs and Climate Action)
  - BMF (Federal Ministry of Finance)
  - Bundestag (Parliament)
  - Bundesrat (Federal Council)

- **Federal States:**
  - 16 Ministries for Education and/or Culture
  - KMK (The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder)
  - 16 Federal states‘ ministries of finance
  - 16 Federal states‘ parliaments

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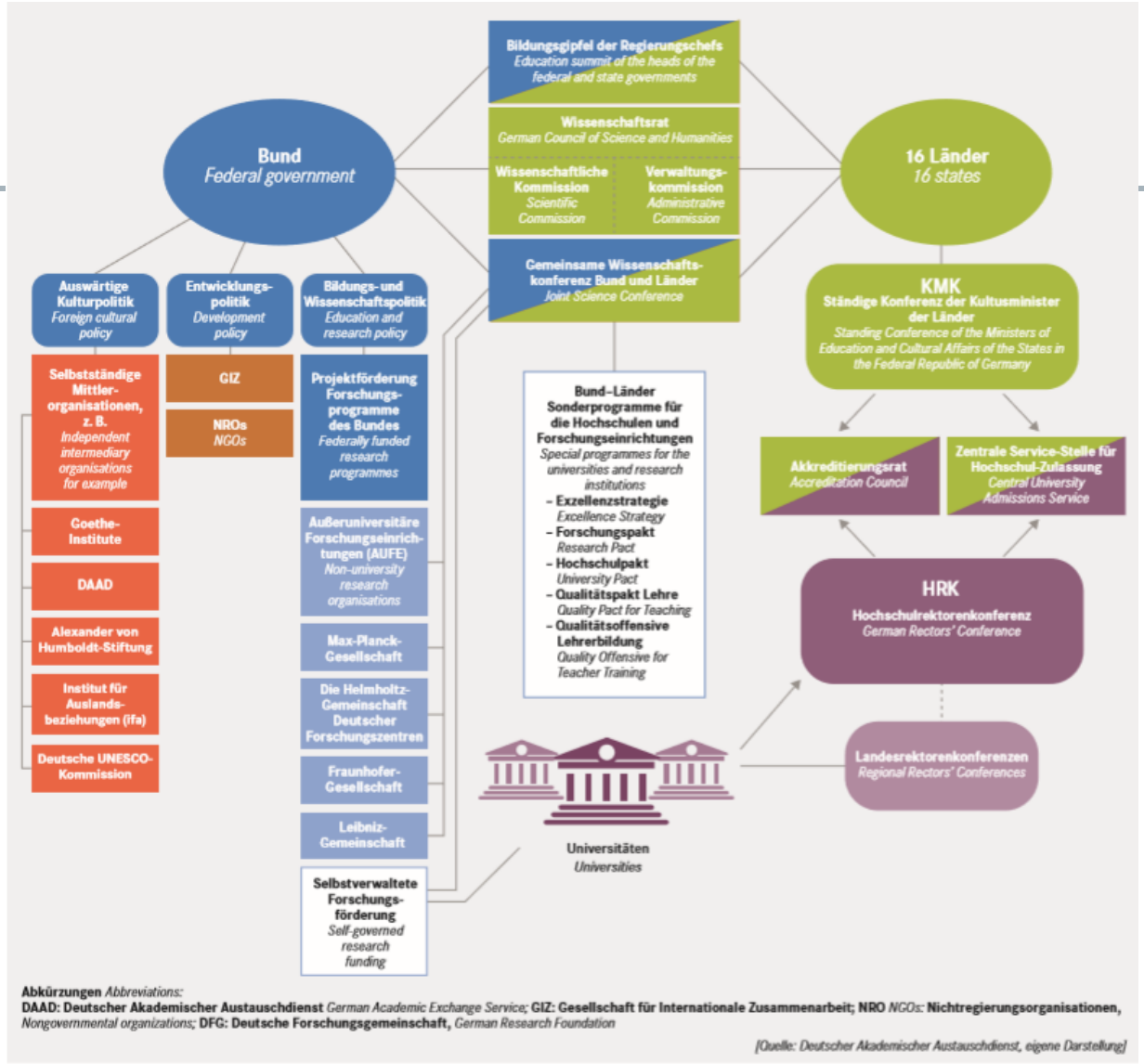
ARTS AND SCIENCES AND THE FEDERAL STATE: WHO IS WHO



Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

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FINANCING OF UNIVERSITIES IN GERMANY

- Universities are funded „dually“: **basic funding** for staff, labs, libraries etc. from the federal state where the university is based at
- Financing of research mainly via **third party** funding: DFG, BMBF, EU. Approx. 26% from industry and foundations.
- Differences in subjects / universities
- **Third party funding rises, basic funding isn‘t rising accordingly**
- DFG-funded projects (since 2007) include an „**overhead**“ for the university (22%).

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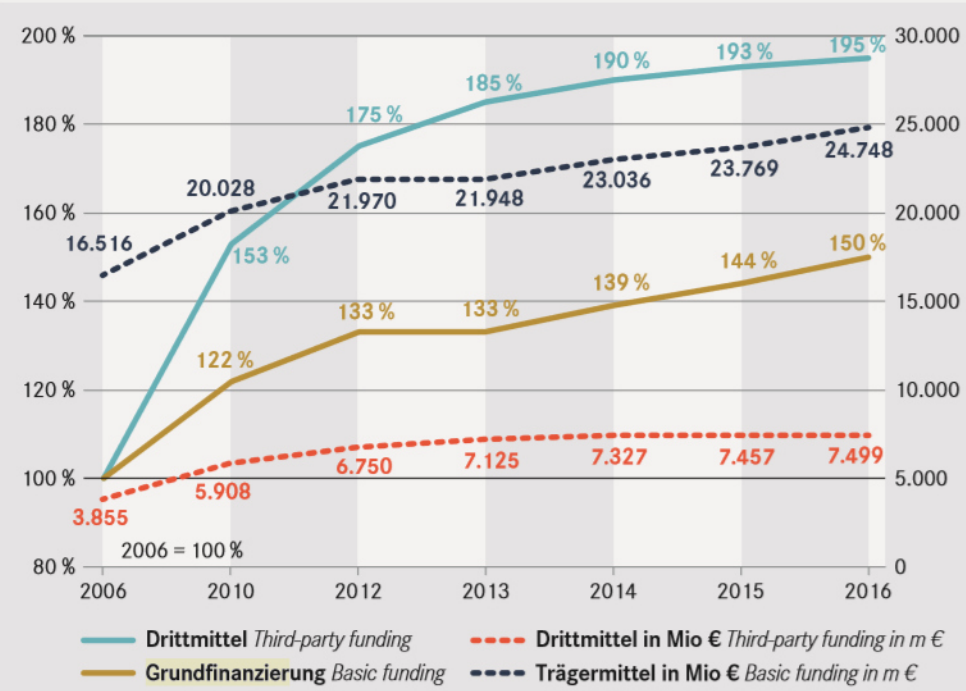
FINANCING OF UNIVERSITIES IN GERMANY

Entwicklung von Grundfinanzierung und Drittmitteln seit 2016
Development of basic funding and third-party funding, since 2006



Trägermittel umfassen die Ausgaben der Hochschulen insgesamt abzüglich der Verwaltungseinnahmen, Drittmittel und anderen Zuweisungen und der Zuschüsse für Studierende.
Basic funding is comprised of the total expenditure of universities less the revenues for administration, third-party funding and subsidies granted for students.

Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

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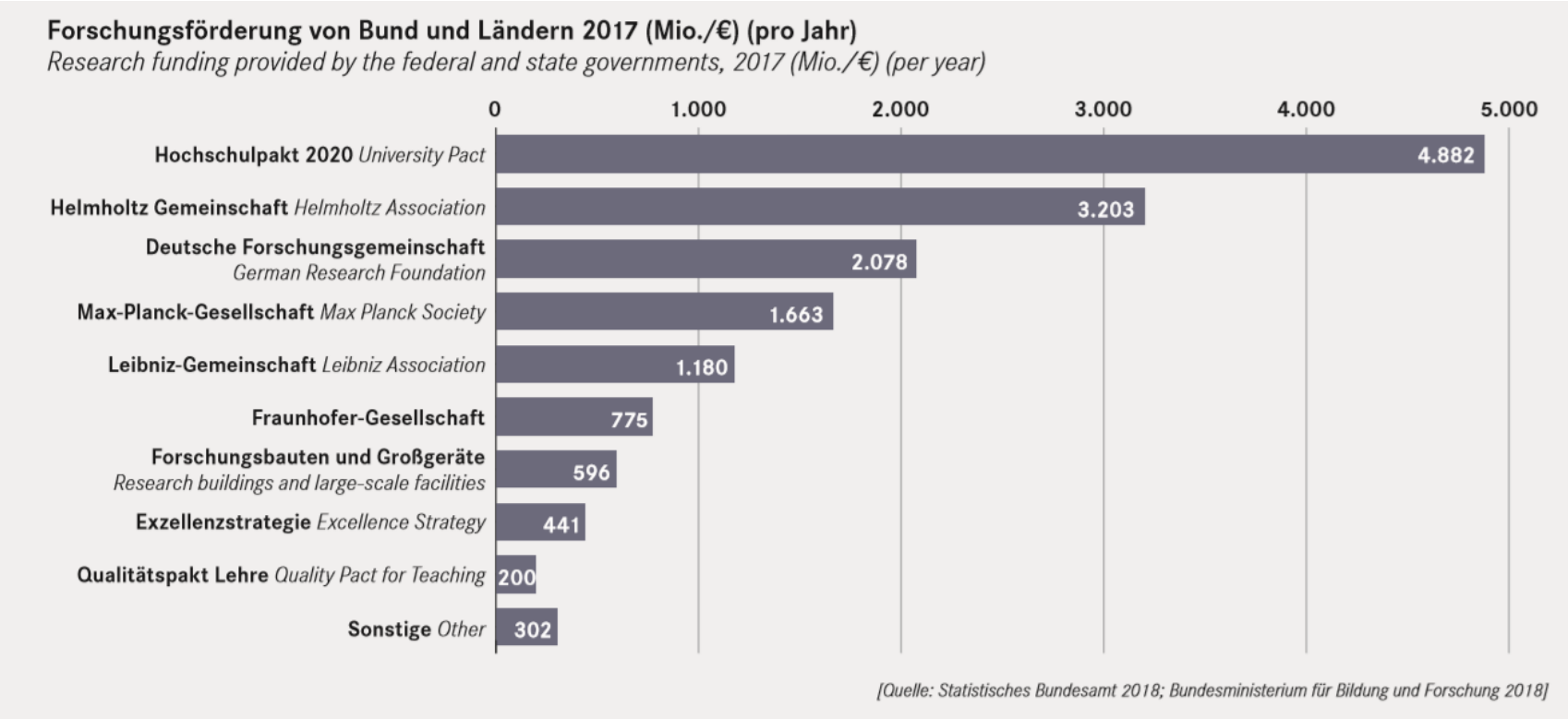
FINANCING OF UNIVERSITIES IN GERMANY



Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

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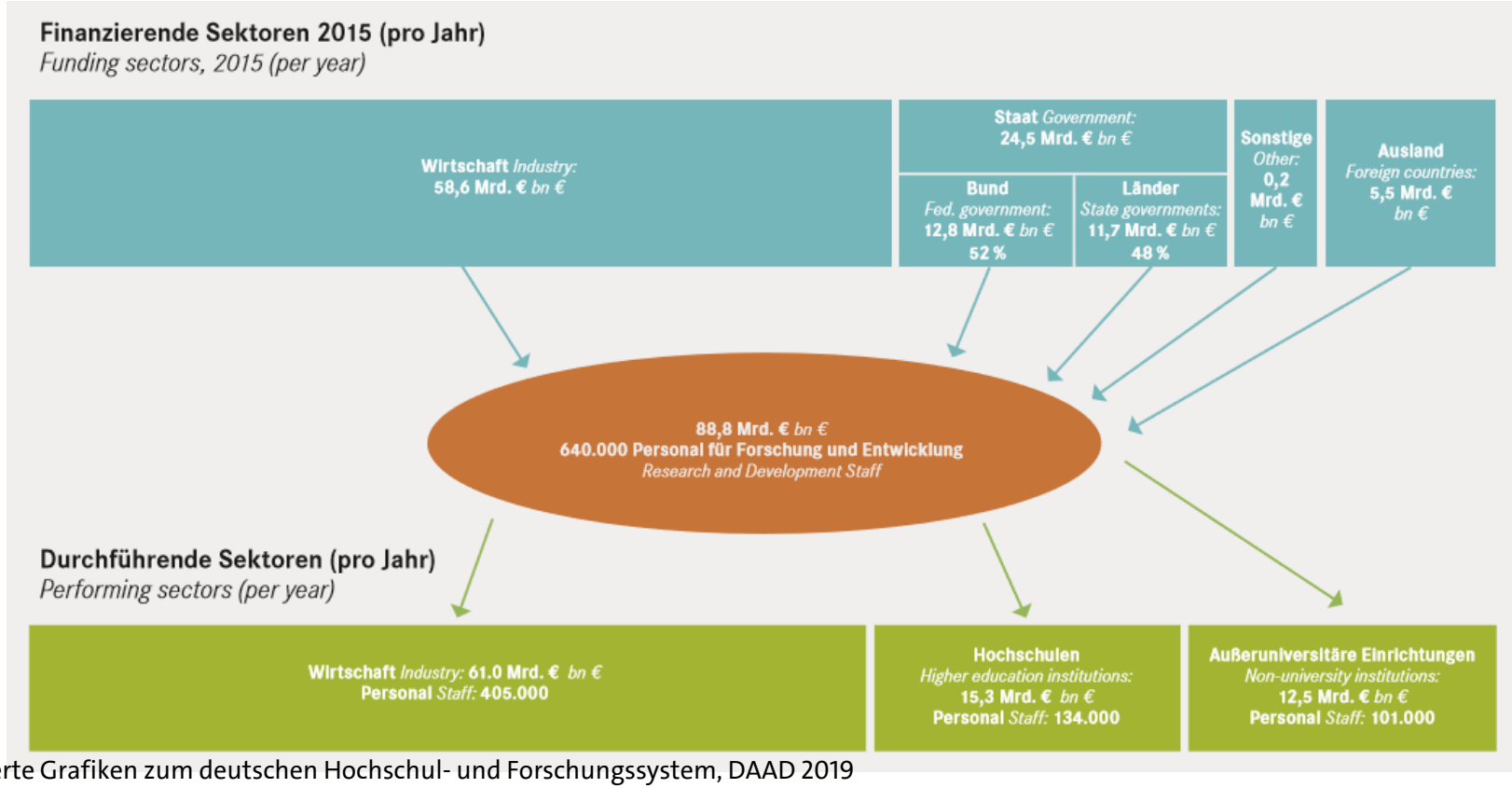
FINANCING OF _RESEARCH_ IN GERMANY



Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

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PART 2: WHO IS WHO IN THE SYSTEM (EXAMPLES)

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DFG Deutsche Forschungsgemeinschaft

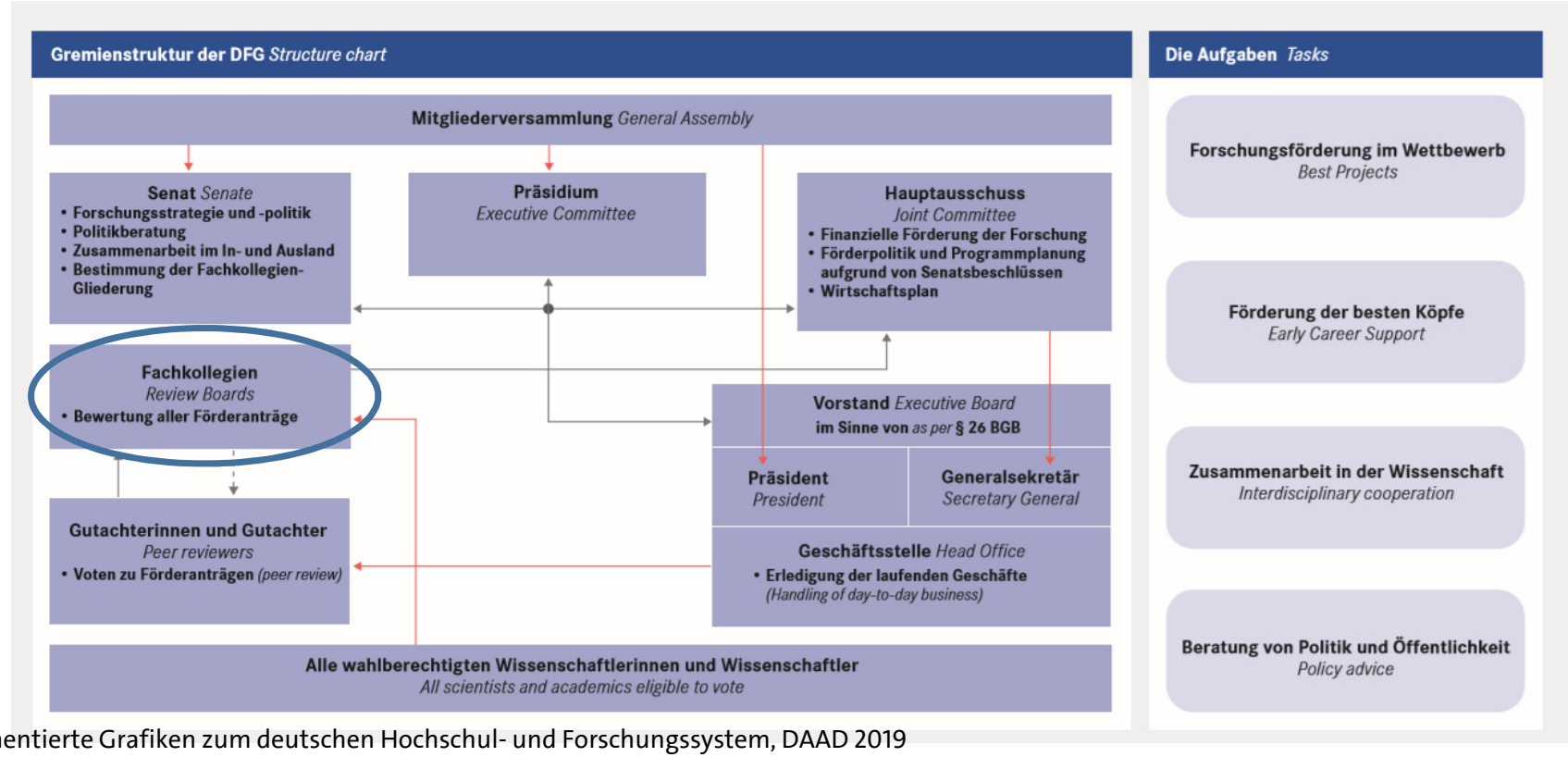
DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)

- **Self-administration** of science and humanities in Germany and the most important third-party funder for basic research at universities, non-university research institutions, scientific associations and academies of science
- 58% of the funds come from the federal government and 42% from the federal states
- Extremely important for the structural development of German higher education by promoting special research areas, graduate schools and the “Excellence Initiative”
- Multi-stage decision-making process for applications for funding

HAMBURG RESEARCH ACADEMY

DFG Deutsche Forschungsgemeinschaft

DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)



Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

HAMBURG RESEARCH ACADEMY

DFG Deutsche Forschungsgemeinschaft

DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)

Einzelförderung

- Sachbeihilfe
- Wissenschaftliche Netzwerke
- Forschungsstipendien
- Emmy Noether-Programm
- Heisenberg-Programm
- Reinhart Koselleck-Projekte
- Klinische Studien
- Nachwuchsakademie
- Projektakademie

Exzellenzstrategie des Bundes und der Länder

- Exzellenzcluster (Exzellenzstrategie)

Koordinierte Programme

- Schwerpunktprogramme
- Sonderforschungsbereiche
- Graduiertenkollegs
- DFG-Forschungszentren
- Forschungsgruppen
- Klinische Forschungsgruppen
- Kolleg-Forschungsgruppen

Wissenschaftliche Infrastruktur

- Wissenschaftliche Geräte und Informationstechnik (WGI)
- Wissenschaftliche Literaturversorgungs- und Informationssysteme (LIS)

Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

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WISSENSCHAFTSRAT

GERMAN SCIENCE AND HUMANITIES COUNCIL

- Founded in 1957 by the federal and state governments
- Prepares evaluations and **recommendations that often change the academic system** in the long term
- Researchers and representatives of public life on an equal footing with representatives from the federal and state governments.
- Two commissions with equal rights: the Scientific Commission (researchers and representatives of public life) and the Administrative Commission (representatives of the federal and state governments)
- All recommendations published and available on their website

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EXCELLENCE (FROM 2006)

- Deutsche Forschungsgemeinschaft (DFG) & Wissenschaftsrat (WR) decided 2016 to continue the „**Exzellenzstrategie“** in two funding ways :
  - ➢ Exzellenzcluster and Exzellenzuniversitäten
- 533 Mio. Euro p.a.: 75% from the federal governement, 25% from the federal state of the respective university
- September 2018: **57 Exzellenzcluster** from 34 universities chosen by an „Exzellenzkommission“
  - 3-10 Millionen Euro p.a. for seven years
- July 2019: **Exzellence Universities** from 17 universities with at least two clusters and two excellence university networks with at least three clusters
  - 10 - 28 Millionen Euro p.a. per university/network

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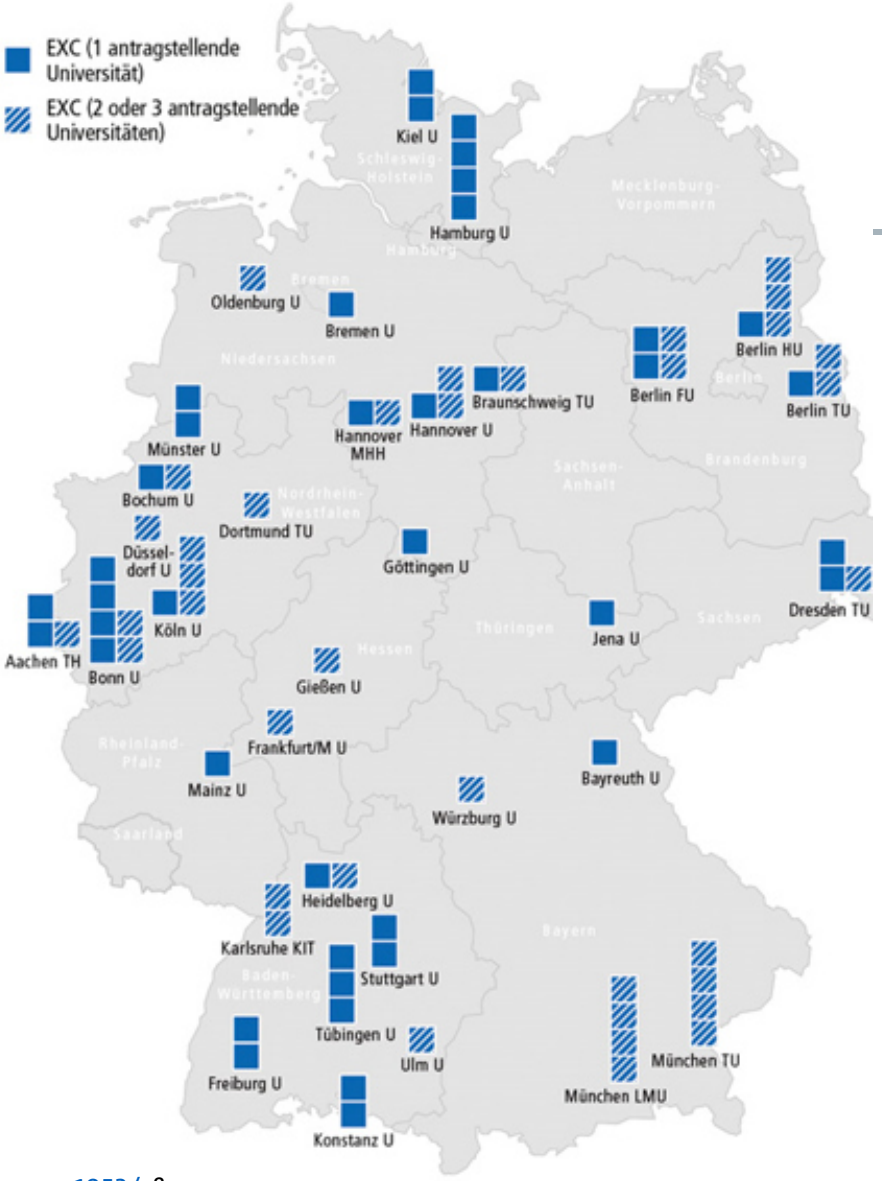
EXZELLENZCLUSTER & -UNIVERSITIES FROM 2019



Quelle: https://www.forschung-und-lehre.de/die-meisten-exzellenzcluster-gehen-nach-nrw-1053/ & https://www.bundesregierung.de/breg-de/aktuelles/exzellenzstrategie-1650004 (abgerufen am 07.04.2021)

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NON-UNIVERSITY RESEARCH INSTITUTIONS

- **Max-Planck-Gesellschaft** zu Förderung der Wissenschaften e.V. (MPG)
- **Helmholtz-Gemeinschaft** Deutscher Forschungszentren e.V. (HGF)
- **Fraunhofer-Gesellschaft** zur Förderung der angew. Forschung e.V. (FhG)
- **Wissenschaftsgemeinschaft** Gottfried Wilhelm **Leibniz** e.V. (WGL)
- **Ressortforschungseinrichtungen** von Bund und Ländern

→ all have different legal forms and focus on different research sectors

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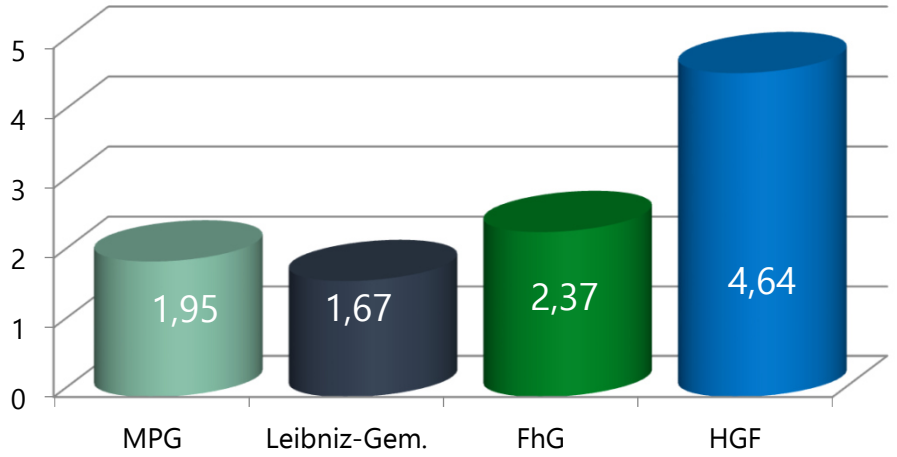
NON-UNIVERSITY RESEARCH INSTITUTIONS

- 429 universities in Germany

- Max-Planck-Gesellschaft: 86 institutes
- Leibniz Gemeinschaft: 95 institutions
- Fraunhofer Gesellschaft: 74 institutes
- Helmholtz Gemeinschaft: 19 centres



budget in 2018

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NON-UNIVERSITY RESEARCH INSTITUTIONS

- Competition for resources with universities relatively weak because of reliable increase in funds, exception: FhG due to dependence on contract research
- Hierarchy at the level of the centers and institutes. MPG and FhG strong influence of the umbrella organisation vs. only weak influence with HGF and WGL. State influence, however, strong
- Self-organization is largely absent in WGL, moderately strong in all others, significantly less than in universities
- Cooperation strengthened through excellence initiative with universities

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PART 3: CAREERS WITHIN THE GERMAN SYSTEM

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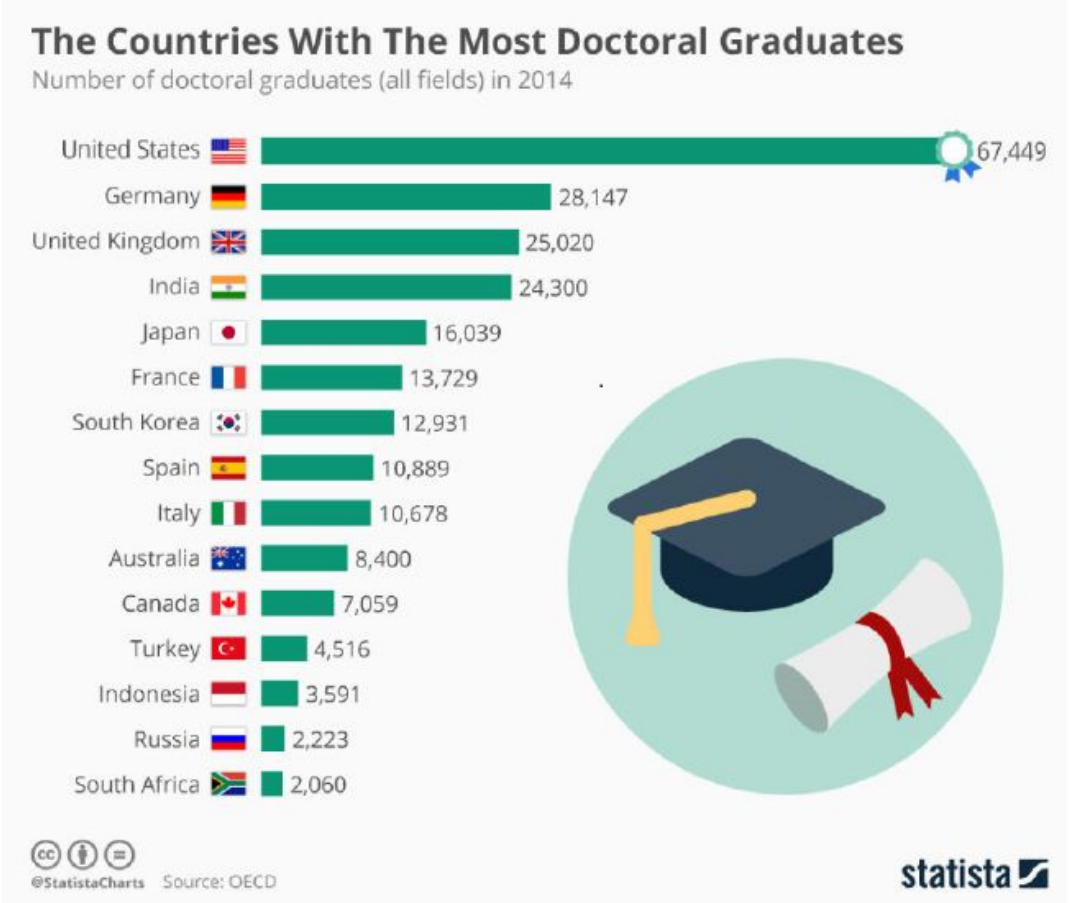
PHDS IN GERMANY



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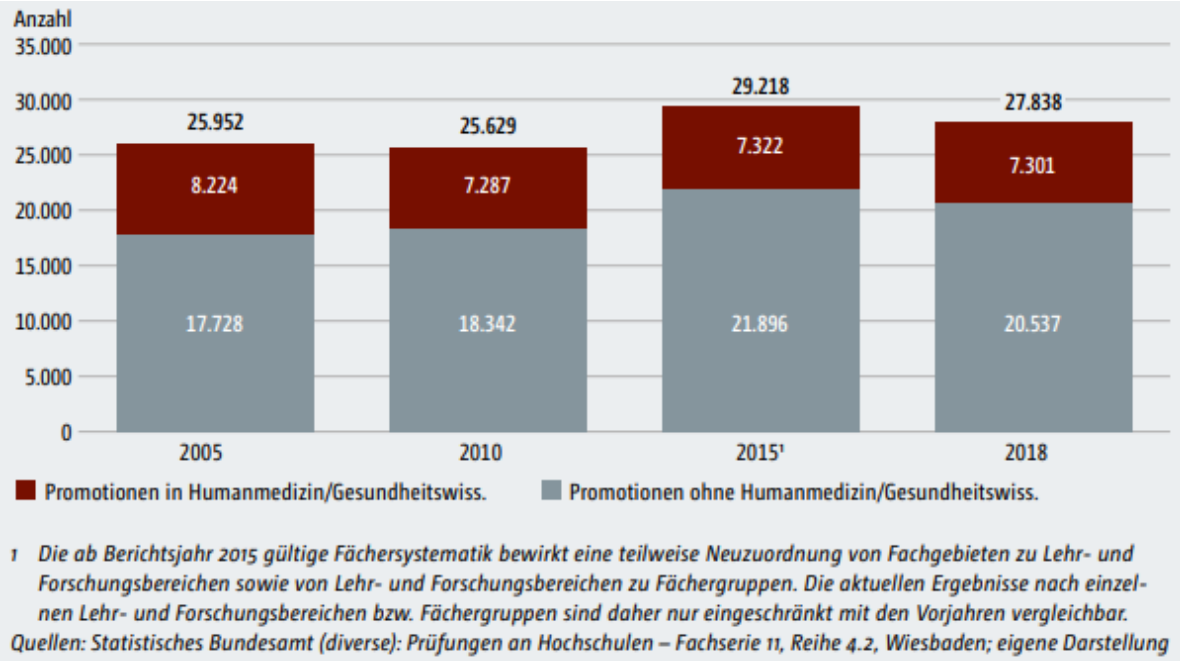
PHDS IN GERMANY 2005 - 2018



1 Die ab Berichtsjahr 2015 gültige Fächersystematik bewirkt eine teilweise Neuzuordnung von Fachgebieten zu Lehr- und Forschungsbereichen sowie von Lehr- und Forschungsbereichen zu Fächergruppen. Die aktuellen Ergebnisse nach einzelnen Lehr- und Forschungsbereichen bzw. Fächergruppen sind daher nur eingeschränkt mit den Vorjahren vergleichbar.

Quellen: Statistisches Bundesamt (diverse): Prüfungen an Hochschulen – Fachserie 11, Reihe 4.2, Wiesbaden; eigene Darstellung

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 86

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PHDS IN GERMANY

- Status was unclear: „Doktorvater/-mutter“- Modell (individual PhD)
- Changes through the Bologna-Process:
  - More structure
  - Aim for durcation of 3 years
  - Status as PhD more clear
  - Establishment of graduate schools
- Still: Supervision and Assessment together
- Still: More individual PhDs than PhDs in structured PhD programms

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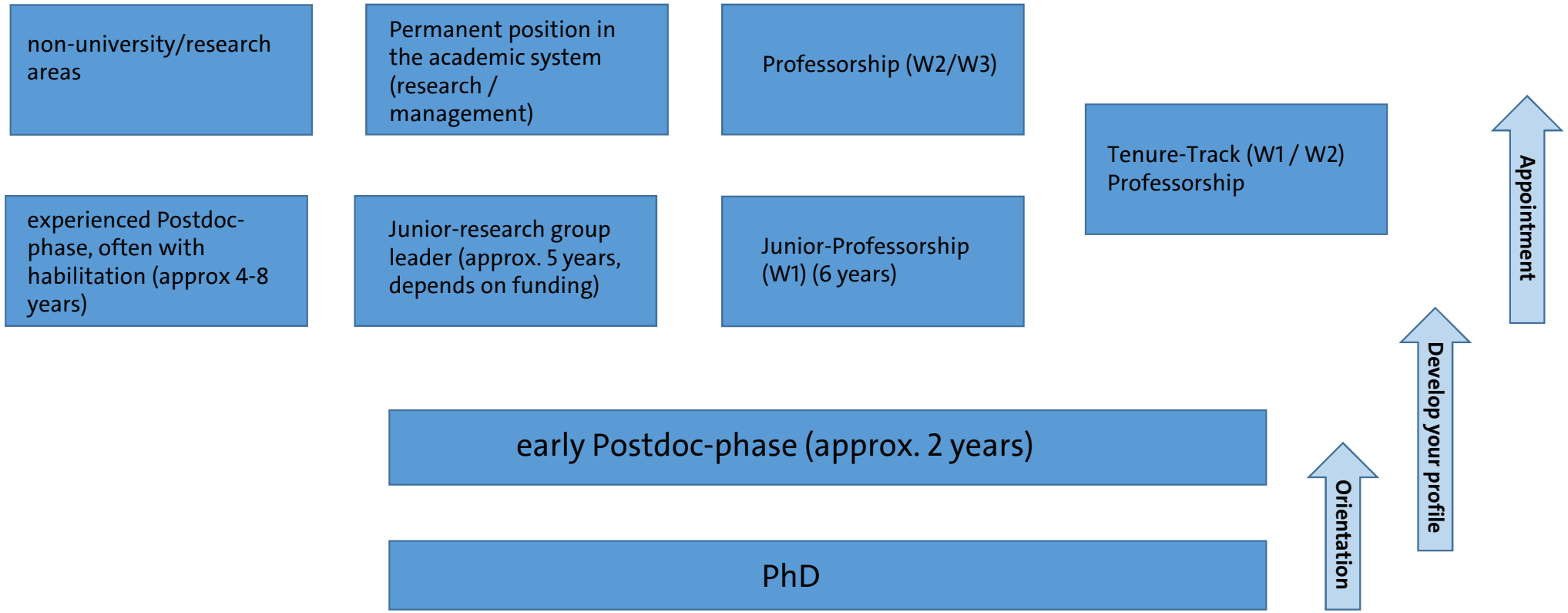
POSTDOC-PHASES UND CAREER PATHS IN GERMANY



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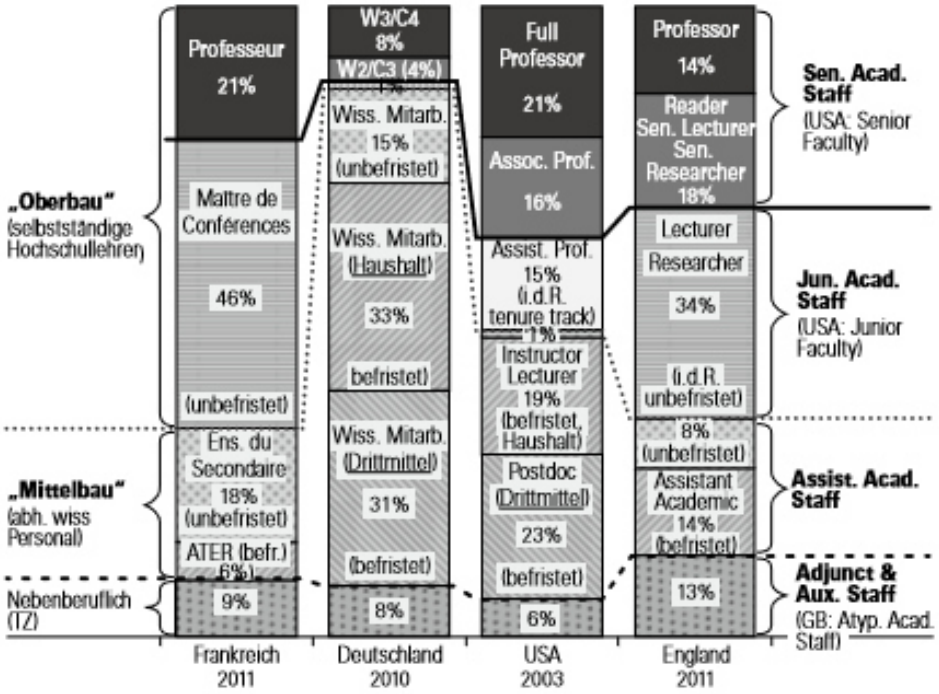
POSITIONS FOR RESEARCHERS

Abbildung 2: Wissenschaftliches Personal an (Forschungs-)Universitäten: Frankreich, USA und England im Vergleich mit Deutschland (VZÄ)[14]



Quelle:
Reinhard Kreckel:
„Zur Lage des wissenschaftlichen Nachwuchses an Universitäten: Deutschland im Vergleich mit Frankreich, England, den USA und Österreich"
Beiträge zur Hochschulforschung, 38. Jahrgang, 1-2/2016

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POSITIONS FOR RESEARCHERS

Temporary employment contracts for academic staff

- **92% of the full-time academic and artistic staff at universities (under 45 years of age, excluding professors) are employed on a temporary basis. The fixed-term employment rate is higher for people under 35 years of age (98%) than for people between 35 and 45 years of age (77%).**
- **At non-university research insitutions, the proportion of temporary academic staff is slightly lower than at universities: For those under 35 years of age without a doctorate, the fixed-term rate is 90%, for those under 45 years of age it is 72%.**
- **The fixed-term employment rates have hardly changed since 2010.**

Contract terms

The average contract term for doctoral candidates is 22 months based on the current employment contract. The average contract term for postdocs is 28 months.

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 108

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POSITIONS AS POSTDOC

EARLY POSTDOC-PHASE	LATER POSTDOC-PHASE
Postdoc-Fellowship	
Postdoc-Stipendium	
	Habilitationsstipendium
Eigene Stelle	
	Nachwuchsgruppenleitung
	Juniorprofessur / Tenure-Track Professur
Akademische/r Rat/Rät*in	
	Vertretungsprofessur
Lehrkraft für besondere Aufgaben	

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WISSENSCHAFTSZEITVERTRAGSGESETZ

- The "Wissenschaftszeitvertragsgesetz" (WissZeitVG) is a federal law that was passed in 2007, creating the legal framework for fixed-term employment in Higher Education
- This law sets a maximum limit on the number of years that academic staff can employed for under fixed-term conditions at German universities.
- **12years-rule**: every level of qualification („Qualifizierungsstufe") may not take more than six years (**6 years = PhD + 6 years = PostDoc**)
- After these 12 years „wissenschaftliche Mitarbeiter:innen" may only be employed permantenly (if paid from university funds) or made professor.

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WISSENSCHAFTSZEITVERTRAGSGESETZ: #ICHBINHANNAH

The whole debate in English explained: https://docs.google.com/presentation/d/1gAvOdXV4b5Ucl_kB6SdkCGqd8aRRSeCRfiAPaLYg7fo/edit#slide=id.ge34dac6efd_0_254

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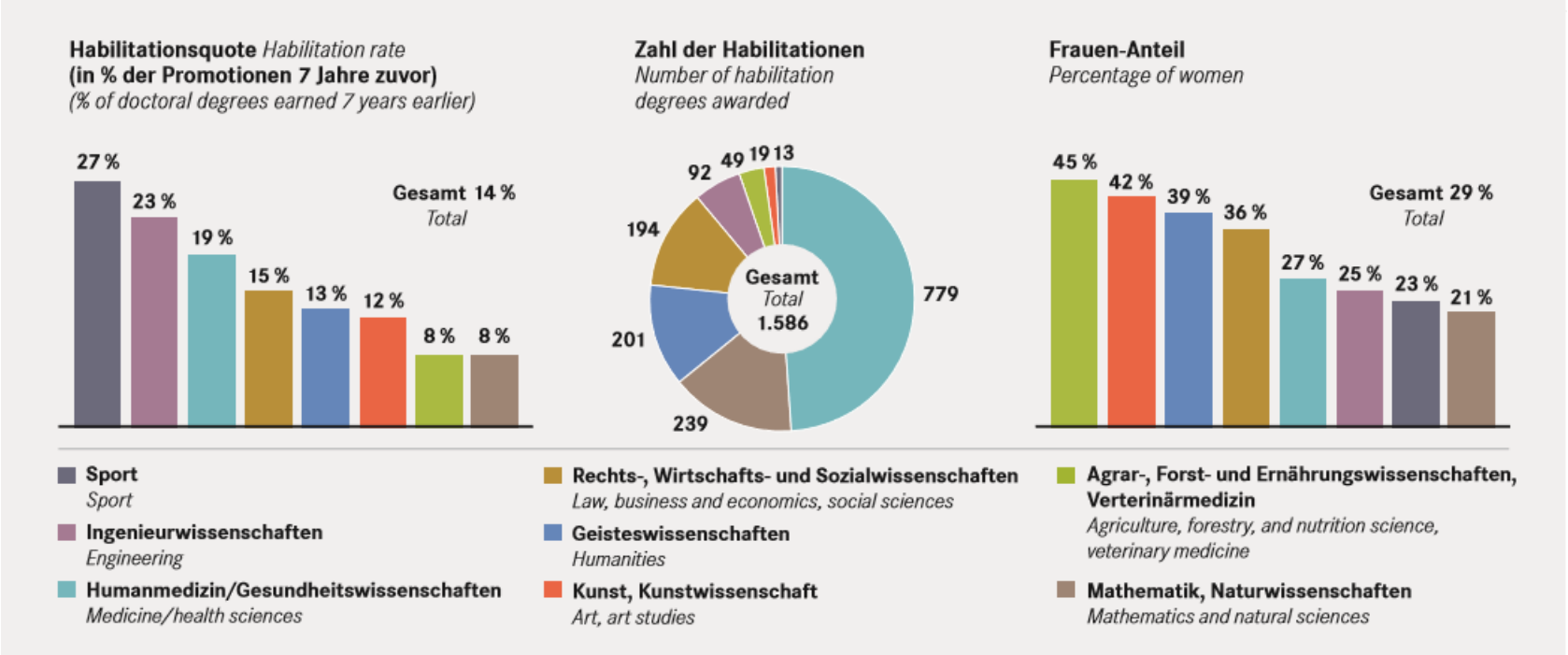
HABILITATION



Quelle: Kommentierte Grafiken zum deutschen Hochschul- und Forschungssystem, DAAD 2019

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HABILITATION

- The habilitation as a standard requirement for the appointment to a university professorship
- The habilitation rates are very different in the subjects
- The habilitation should not last longer than 6 years (ideally!)

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HABILITATION

- Alternative: Juniorprofessur / „Habilitationsäquivalenz“
- Arguments vs habilitation:
  - ➢ Ability for independent research already achieved with the doctorate
  - ➢ Delays the start of a career for highly qualified people

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JUNIORPROFESSORSHIP (FROM 2002)

- Postdoc position
- Temporary civil service, W1 salary
- Preparation for a subsequent (lifetime) professorship
- Independent teaching and research
- May supervise doctorates (!!!)
- Involved in the faculty including self-administration
- Sometimes with, sometimes without staff/equipment
- Sometimes with, sometimes without tenure track (approx. 75% were without)

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JUNIORPROFESSORSHIP (FROM 2002)

Tab. B4: Juniorprofessorinnen und -professoren sowie Professorinnen und Professoren nach Geschlecht im Zeitverlauf (2005 bis 2018)

	2005	2010	2015	2018	Steigerungsrate
	Anzahl				
Juniorprofessorinnen und Juniorprofessoren					
Männlich	438	769	942	843	92,5
Weiblich	179	467	673	737	311,7
Insgesamt	617	1.236	1.615	1.580	156,1
Professorinnen und Professoren					
Männlich	32.453	33.517	35.809	36.209	11,6
Weiblich	5.412	7.945	10.535	11.902	120
Insgesamt	37.865	41.462	46.344	48.111	27,1

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 89

In the years between 2005 and 2018, the group of junior professors recorded an increase of 156%, while in the same period the total number of permanent professors only increased by 27%.

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TENURE-TRACK (FROM 2017)

Tenure-track program of the federal government

- Funding of 1,000 tenure-track professorships
- To increase attractiveness and competitiveness of the German academic system
- Structural establishment of the tenure-track professorship as an additional career path to the professorship
- More predictable and transparent career paths
- Enabling an earlier decision to remain in the system on a permanent basis

Kurz erklärt: Wie funktioniert "Tenure-Track"?

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JUNIOR RESEARCH GROUP LEADERS

Tab. B6: Nachwuchsgruppenleiterinnen und -leiter nach Förderprogramm im Zeitverlauf (2008 bis 2018)

Einrichtung	Nachwuchsgruppe	2008	2010	2015	2018
DFG	Emmy Noether	336	357	329	353
	darunter Frauen (in %)	22	25	31	31
FhG	Attract	21	23	22	22
	darunter Frauen (in %)	–	–	27	41
HGF		116	156	207	213
	darunter Frauen (in %)	–	–	39	36
MPG	Forschungsgruppen	98	122	121	145
	darunter Frauen (in %)	–	–	35	43
	Otto-Hahn-Gruppen	10	8	10	9
	darunter Frauen (in %)	–	–	30	33
	Minerva-Gruppen			26	16
	darunter Frauen (in %)			100	100
WGL		57	97	190	176
	darunter Frauen (in %)	–	–	44	43

Quellen: GWK (2019): Pakt für Forschung und Innovation. Monitoring-Bericht 2019. Materialien der GWK, S. 71 und 114; für Emmy Noether: DFG (2020): Emmy Noether-Geförderte für den Bundesbericht Wissenschaftlicher Nachwuchs (BuWiN) 2021, Sonderauswertung, Bonn; eigene Darstellung

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 96

DFG = Deutsche Forschungsgemeinschaft
FhG = Fraunhofer-Gesellschaft
HGF = Helmholtz-Gemeinschaft Deutscher Forschungszentren
MPG = Max-Planck-Gesellschaft
WGL = Leibniz-Gemeinschaft

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MORE AND MORE EARLY CAREER RESEARCHERS

Tab. B9: Hauptberufliche wissenschaftliche und künstlerische Mitarbeiterinnen und Mitarbeiter an Hochschulen nach Finanzierungsart und Beschäftigungsdauer im Zeitverlauf (2005 bis 2018; in %)

Dauer der Beschäftigung nach Finanzierungsart	2005		2010		2015		2018	
	Anzahl	%	Anzahl	%	Anzahl	%	Anzahl	%
Grundmittel								
Insgesamt	70.559	100	90.917	100	106.454	100	114.591	100
darunter auf Dauer	22.745	32	22.339	25	26.692	25	30.916	27
darunter auf Zeit	47.814	68	68.578	75	79.762	75	83.675	73
Drittmittel								
Insgesamt	36.368	100	61.414	100	70.445	100	77.396	100
darunter auf Dauer	3.609	9,9	1.491	2,4	1.058	1,5	1.403	1,8
darunter auf Zeit	32.759	90	59.923	98	69.387	98	75.993	98
Zusammen								
Insgesamt	106.927		152.331		176.899		191.987	

Quellen: Statistisches Bundesamt (diverse): Sonderauswertung aus der Hochschulpersonalstatistik, Wiesbaden; eigene Darstellung

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 101

HAMBURG RESEARCH ACADEMY

...BUT NOT MORE PROFESSORSHIPS

Tab. B8: Hauptberufliches wissenschaftliches und künstlerisches Personal an Hochschulen nach verschiedenen Gruppen im Zeitverlauf (2005 bis 2018)

	2005	2010	2015	2018	Steigerung (2005–2018)
	Anzahl				in %
Hauptberufliches wissenschaftliches und künstlerisches Personal (ohne Professor/inn/en) unter 45 Jahren	101.318	138.948	156.627	167.777	66
darunter unter 35	65.474	100.438	111.104	116.380	78
darunter 35 bis unter 45	35.844	38.510	45.523	51.397	43
Im Vergleich: hauptberufliches wissenschaftliches und künstlerisches Personal (ohne Professor/inn/en) insgesamt	127.872	169.087	192.856	207.431	62
Im Vergleich: Professor/inn/en	37.865	41.462	46.344	48.111	27
darunter an Universitäten und gleichgestellten Hochschulen	23.475	24.934	26.927	27.557	17
darunter an Fachhochschulen und Verwaltungsfachhochschulen	14.390	16.528	19.417	20.554	43

Quellen: Statistisches Bundesamt (2020): Personal an Hochschulen, Sonderauswertung, Wiesbaden; für Professorinnen und Professoren: Statistisches Bundesamt (diverse): Sonderauswertung aus der Hochschulpersonalstatistik, Wiesbaden; eigene Darstellung

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 100

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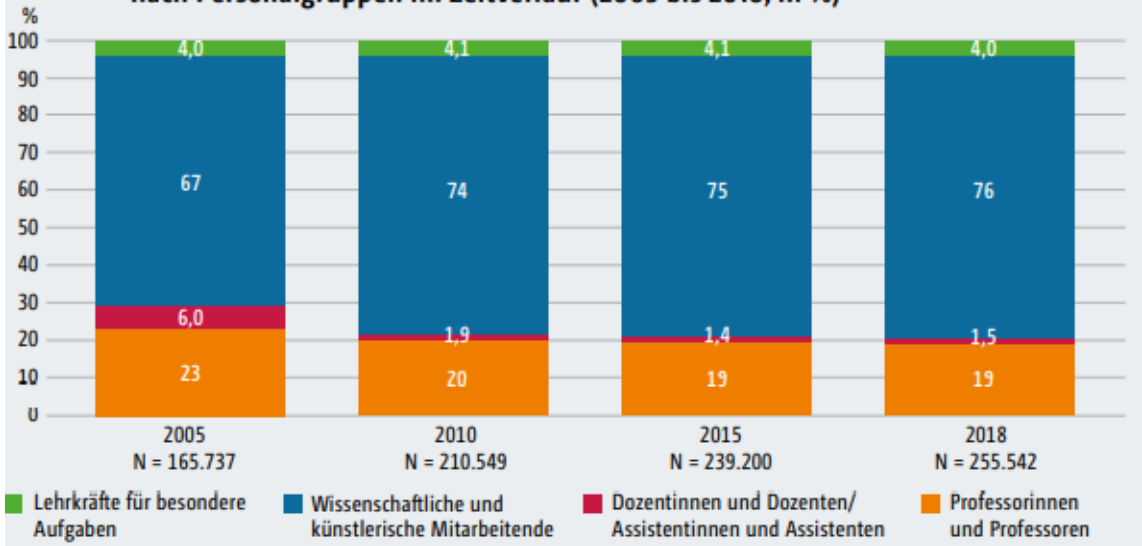
...BUT NOT MORE PROFESSORSHIPS

Abb. B25: Hauptberufliches wissenschaftliches und künstlerisches Personal an Hochschulen nach Personalgruppen im Zeitverlauf (2005 bis 2018; in %)



Quellen: Statistisches Bundesamt (diverse): Sonderauswertung aus der Hochschulpersonalstatistik, Wiesbaden; eigene Darstellung

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 99

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...BUT NOT MORE PROFESSORSHIPS: AVAILABLE PROFESSORSHIPS 2019-2028

Tab. B32: Anteil altersbedingt ausscheidender Professorinnen und Professoren zwischen 2019 und 2028 nach Fächergruppen (in Personen und in %)

Fächergruppen	Professor/inn/en auf Dauer angestellt an Universitäten[1] und Kunsthochschulen in 2018	Altersbedingt ausscheidende Professor/inn/en 2019–2028	Anteil altersbedingt ausscheidende Professor/inn/en 2019–2028 an Professor/inn/en insgesamt 2018
	in Personen		in %
Geisteswissenschaften	4.329	1.581	37
Sport	250	88	35
Rechts-, Wirtschafts- und Sozialwissenschaften	6.125	1.536	25
Mathematik, Naturwissenschaften	5.637	1.838	33
Humanmedizin/Gesundheitswissenschaften[2]	3.634	1.293	36
Agrar-, Forst- und Ernährungswissenschaften, Veterinärmedizin	636	255	40
Ingenieurwissenschaften	3.677	1.309	36
Kunst, Kunstwissenschaft	2.858	1.083	38
Zentrale Einrichtungen (ohne klinikspezifische Einrichtungen)	411	102	25
Insgesamt	27.557	9.085	33

1 *Einschließlich Pädagogischer und Theologischer Hochschulen.*
2 *Einschließlich zentraler Einrichtungen der Hochschulkliniken (nur Humanmedizin).*

Quelle: Statistisches Bundesamt (2019): Personal an Hochschulen 2018 – Fachserie 11, Reihe 4.4, Tabelle 9 und Tabelle 15, Wiesbaden; eigene Darstellung

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 150

Check the situation / interesting professorships for your research area

But:
Partly already filled with tenure-track professorships!

The orientation / focus of professorships may change!

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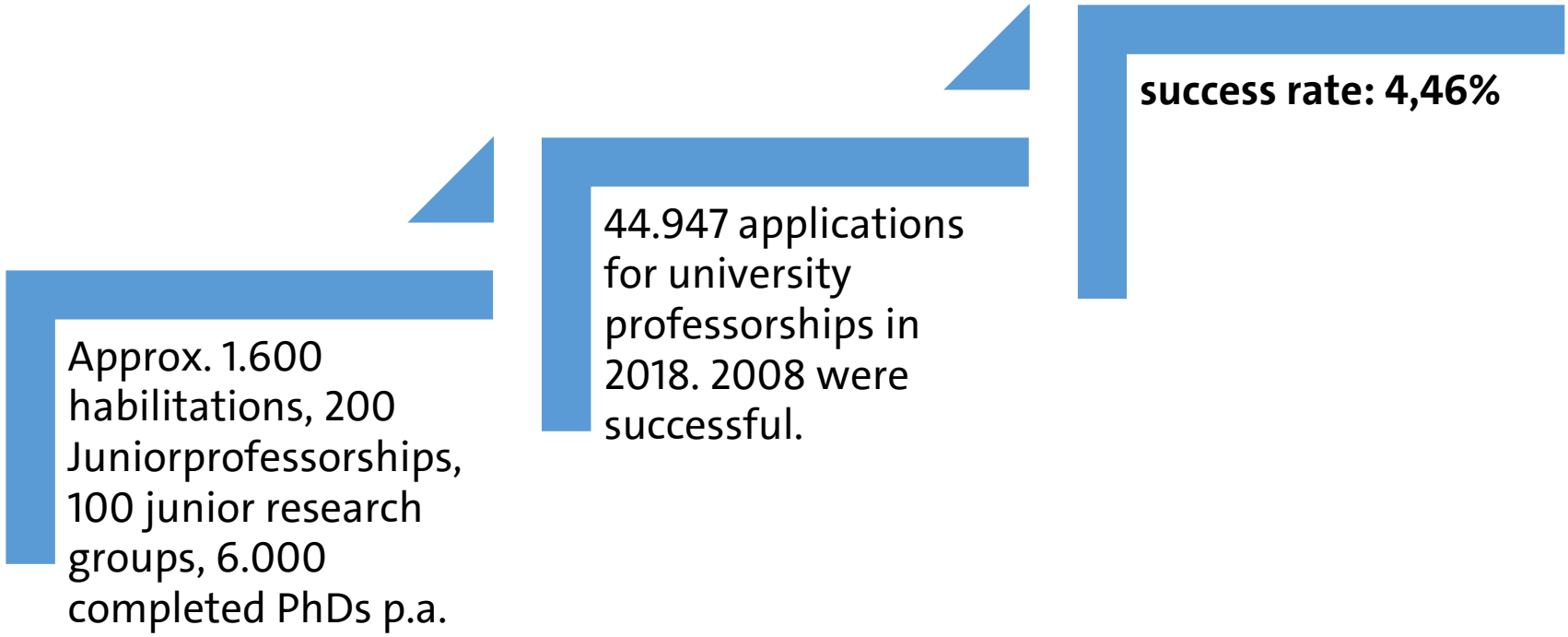
COMPETITION ON THE WAY TO PROFESSORSHIP



Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 148

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IT TAKES TIME (AND RESOURCES) TO REACH PROFESSORSHIP

Tab. B5: Durchschnittsalter (arithmetisches Mittel) bei Erstberufung[1] auf eine Professur an Universitäten und gleichgestellten Hochschulen[2] 2018 nach Geschlecht und Besoldungsgruppe

	Juniorprofessur	W2-Professur	W3-Professur
Weiblich	35,8	42,0	43,2
Männlich	34,7	41,5	43,2
Insgesamt	35,2	41,7	43,2
N =	180	393	405

1 Die Hochschulpersonalstatistik erfasst das Jahr der 1. Berufung zum Professor/zur Professorin auf Zeit sowie das Jahr der 1. Berufung zum Professor/zur Professorin auf Lebenszeit. Das Durchschnittsalter bei der Berufung zum Professor/zur Professorin wird insofern auf der Basis des Jahres der 1. Berufung zum Professor/zur Professorin auf Zeit bzw. Lebenszeit berechnet.

2 An Universitäten, Theologischen und Pädagogischen Hochschulen. In diesem Fall ohne Kunst- und Musikhochschulen.

Quelle: Statistisches Bundesamt (2020): Personal an Hochschulen, Sonderauswertung, Wiesbaden; eigene Darstellung

Quelle: Bundesbericht wissenschaftlicher Nachwuchs 2021 (BuWiN), S. 91

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BE AWARE: „HAUSBERUFUNG“ / INTERNAL APPOINTMENT

- Often: When appointing a professorship, junior professors from the same university can only be taken into account if they have changed university after completing their doctorate or if they have worked for at least two years outside the appointing university. In addition, academic employees of the own university will only be taken in exceptional cases.

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ADVICE: READ THE FEDERAL UNIVERSITY LAW OF „YOUR“ STATE

- Landeshochschulgesetz (LHG) = One law for all universities in a federal state
  - **Be aware: all 16 federal laws are slightly different!**
- Contain regulations on the personnel structure and internal organization of the university, and the organization of research, teaching and studies including university admission and degrees
- Coordination of the federal states among themselves in the KMK (conference of ministers of education)

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PART 4: YOUR CAREER PATHS

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THE ACADEMIC CAREER PORTFOLIO

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ACADEMIC PORTFOLIO: FINAL PHASE OF PHD

Qualification	What exactly?
Orientation and Career Planning	Individual analysis of your potential
	Think about academic AND non-academic career options
Project Management	Basic knowledge of project management should already have been acquired during the doctorate
	Management of extensive or multiple projects (the doctorate is a project!)
Aquisition of 3rd Party Funding	Knowledge of the national and international research funding landscape
Leadership-/Teamworking skills	E.g. worked with/supervised students
Teaching and Supervision	Initial teaching experiences

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ACADEMIC PORTFOLIO: EARLY POSTDOC PHASE

Qualification	What exactly?
Orientation and Career Planning	Individual analysis of your potential
	Think about academic AND non-academic career options
	Develop your own competencies and research profile
	Start developing own research projects
	Present your research, publish, network, network, network: Visibility!
	Enhance your mangement etc skills for non-academic career paths

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ACADEMIC PORTFOLIO : EARLY POSTDOC PHASE

Qualification	What exactly?
Aquire 3rd Party Funding	Plan and write applications
Leadership Skills	Change of roles and take on management responsibility for student and academic assistants, doctoral candidates, further staff
Teaching and Supervision	Develop and implement seminars etc
	Supervise Bachelor and Master students
Work as Reviewer	Write reports/marks for term papers and bachelor theses, possibly also start peer reviewing
Committee Work	Actively participate in committees to understand university structures and customs better

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ACADEMIC PORTFOLIO : LATER POSTDOC PHASE

Qualification	What exactly?
Strategical Career Planing	Where am I, where do I want to be, what could be a way?
	(alternative) ways to professorship, e.g. Heisenberg-Programm DFG, Lichtenberg-Stiftungsprofessuren (VolkswagenFoundation), FH/HAW-Professuren etc
	Use your networks strategically
	Participate in the workshops offered by university institutions e.g. application workshops to prepare for the „Vorsingen“ for professorships. Check our the offers by the Hochschulverbands (www.hochschulverband.de) for a university/professoral career
More Career Planing	What other options do you (still) have outside of academia?

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EXTERNAL FUNDING

VolkswagenStiftung

Bundesministerium für Bildung und Forschung

CLAUSSEN SIMON | STIFTUNG

Fritz Thyssen Stiftung für Wissenschaftsförderung

DFG Deutsche Forschungsgemeinschaft

DAAD Deutscher Akademischer Austauschdienst German Academic Exchange Service

GERDA HENKEL STIFTUNG

AKADEMIE DER WISSENSCHAFTEN IN HAMBURG

Robert Bosch Stiftung

Alexander von Humboldt Stiftung/Foundation

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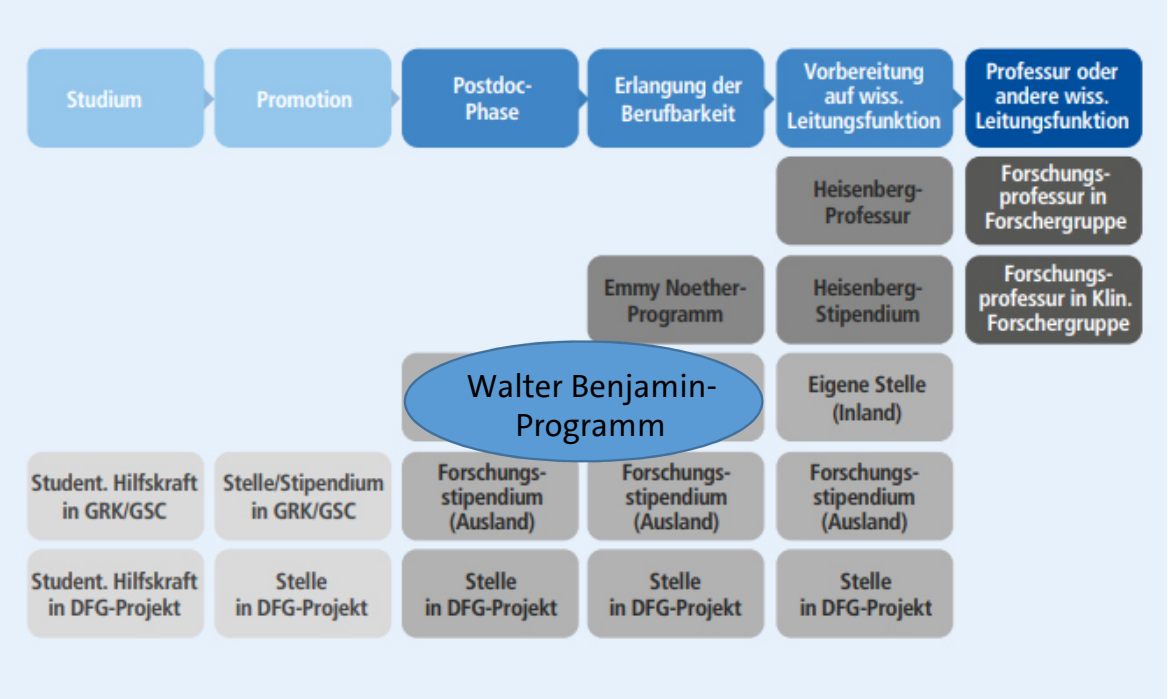
EXTERNAL FUNDING, E.G. DFG



Quelle: Forschungsförderung und Karrierewege. Vergleichende Studie zu den DFG-Programmen zur Förderung der wissenschaftlichen Karriere (2017), S. 18

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EXTERNAL FUNDING, E.G. DFG

PhDs	Personal funding during Postdoc	More DFG Possibilities ⇨ make sure you check these out, all external funding counts for your academic CV!
• Work in a DFG-funded project • Participate in a „Nachwuchsakademie“	• Walter Benjamin-Programm • Nachwuchsgruppe Emmy Noether-Programm • Heisenberg-Programm	• Sachbeihilfe • Wissenschaftliche Netzwerke • Aufbau internationaler Kooperationen

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CAREER AS A PROFESSOR AT A UNIVERSITY OF APPLIED SCIENCES

- **Teaching!** The teaching obligation of professors is usually 18 SWS, twice as high as at universities
- Research with application relevance (more and more important!)
- Theory and practice combined
- Safe job with civil servant status (W2!)
- It is possible to change from industry/business or the like to the FH professorship and back
- Increasing number professorships advertised
- The right to award doctorates more and more widespread

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CAREER AS A PROFESSOR AT A UNIVERSITY OF APPLIED SCIENCES

Formal requirements:

- Completed university degree
- Special aptitude for research (usually proven through a doctorate)
- At least five years of professional experience after graduation (including at least three years outside a university)
- Didactical knowledge (proven e.g. through teaching experience)

Further appointment requirements:

- e.g. social skills, research activities, publications, project experience, management experience

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Some figures

- In Germany, **85%** of PhDs work in other fields than academic research.
  Quelle: Bundesbericht Wissenschaftlicher Nachwuchs 2017, S. 186

- About **97%** of PhDs will not become professors.
  Quelle: Hochrechnung auf Grundlage der Daten des Bundesberichts Wissenschaftlicher Nachwuchs 2013

- Only **1 - 2%** of all PhD holders in Germany are unemployed.
  Quelle: Bundesbericht wissenschaftlicher Nachwuchs, 2021, S. 202

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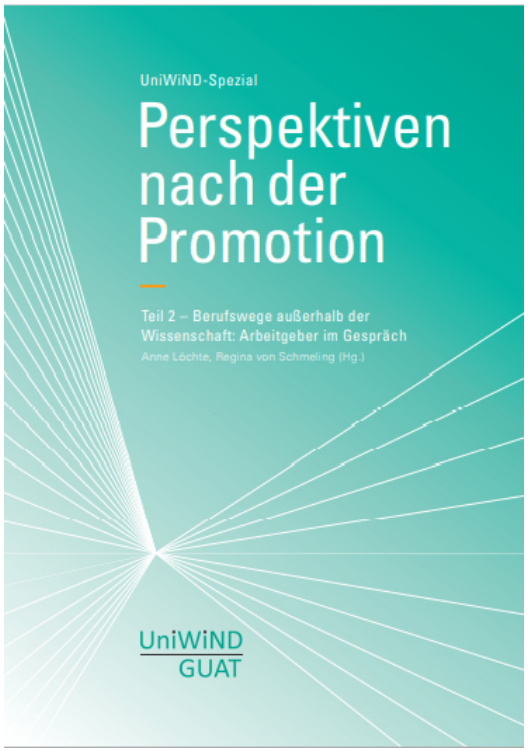
READ AT HOME: EMPLOYER‘S VIEW ON PHD APPLICANTS



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What did we do?

- 40 structured interviews with HR officials

- Employers from:
  - Public Service
  - Research Organizations
  - Banking / Insurance
  - Mobility
  - Consultancy
  - Life Sciences & Biotech

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How did we do it?

- anonymized evaluation
- exploratory & “pragmatic” study
- insights & exemplary results

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Attributions & stereotypes by employers

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Attributions & stereotypes

Advantages of a doctorate:

- "[...] that someone with a doctorate can convince with the fact, that there are a lot of abstract thinking skills, analytical skills, skills to concentrate, to deal intensively with a topic, to dive very deeply into a topic“

Insurance company

Research skills: structured, analytical

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Attributions & stereotypes

Stereotype of a doctorate:

- “A doctorate and research also means dealing with a topic very intensively and in depth and turning every stone around. And sometimes we just need the 70% solution [...]. And if you can't stand it - and then some people have this experience that they think: but it's not finished yet. Yes, then it's just not finished. “

Automotive supplier

Lack of pragmatism & flexibility

Attributions & stereotypes

Advantages of a doctorate:

- "What we do notice, however, is that it sometimes helps in certain industries [...], so we also use the title [...] when we want to show that a person is very 'senior' and has a lot of experience.“

IT-Consultancy

Respectability, experience

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Attributions & stereotypes

Stereotype of a doctorate:

- "So if someone has really only seen a university from the inside, then it might be difficult, because after some years there, it might be more difficult to integrate someone into a very practice-oriented environment.“

Transport company

Difficult to integrate, lack of pragmatism

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Advice for PhD holders for a career outside of academia

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Advice for PhD holders

Sharpen your profile!

“Of course you can't somehow plan a career and then implement it, that's nonsense. But it is important to deal with your own strengths, passions and abilities as early as possible. “

Consultancy

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Advice for PhD holders

Get to know the world outside of university and research!

"But if you want to fit into our company or into similar companies, you definitely need some practical experience in the field."

IT Consultancy

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Advice for PhD holders

Enhance your transferable skills!

“Better to be diverse in your skills and experiences, better to look around a lot, maybe even experience a few defeats, but that only trains you for life."

Life science company

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Advice for PhD holders

Network, network, network!

“Think about it, what else is out there? What are my options? What are industries that might fit well? What are potential employers?”

Consultancy

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Advice for PhD holders

Finish your doctorate on time!

"If someone then says that it took them six years to complete a doctorate, then I ask myself, can they bring projects to success under time pressure?“

Biotech company

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Advice for PhD holders

Present yourself successfully!

“My recommendation is to always put yourself in the other person's shoes. And the other is the HR manager. As an HR manager, I have to get the point of an application quickly and the application should be short and concise, without five thousand attachments.”

Life science company

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Advice for PhD holders

Demonstrate the benefits of your doctorate!

“Be proud of your doctorate, but don't see it as the most important thing in life. Orientate yourself to your new environment, the new tasks and try to meet the requirements of the new job with the qualifications that you have brought with you through the doctorate. “

Federal Ministry

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Advice for PhD holders

Be honest with yourself and ask your supervisor for an honest assessment!

“He just needed someone to say to him at the end of his doctorate:“ So look, you've been doing your doctorate here for five years, you have a 'cell' paper, but as the sixth of 20 authors and so on ... but you are now at an age when an American is already an assistant professor, now let it be. And nobody gets this honest advice. Maybe when you have a doctoral supervisor who is a little honest and courageous.”

Biotech company

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Advice for PhD holders

Actively make a career decision, don't wait too long!

“The longer someone with a doctorate has not been able to achieve professional work experience, [...] the more difficult the leap from university into a company may be.”
Consultancy

“If you wait too long and then turn 40 and then even have a habilitation, that's the worst of all. Someone who then has completed his/her habilitation. [...] (S)he's actually in a dead end, for whom we [...] can't really offer a suitable position.”
Research foundation

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MORE INFORMATION: USEFUL LINKS FOR A CAREER IN ACADEMIA

- How to apply for academic positions in Germany (both in German)
  - https://www.academics.de/ratgeber/akademiker-lebenslauf-richtig-schreiben
  - https://www.hochschulverband.de/leistungen/wiss-nachwuchs/faq-karriere/richtig-bewerben

- Universität Hamburg uses a template for CVs when applying for professorship. It is interesting to look at it and it provides you with a good general structure for your CV:
  - https://www.fid.uni-hamburg.de/bewerbungsformular-professur-rw.pdf (German)
  - https://www.fid.uni-hamburg.de/bewerbungsformular-professur-gw-en.pdf (English)

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MORE INFORMATION: USEFUL LINKS FOR A CAREER IN ACADEMIA

- A very useful general resource is the www.academics.com website. They are part of DIE ZEIT newspaper (*the* place for academic jobs in Germany) and they offer really a lot of information on the academic system, the application process etc. Check it out (and scroll down, below the job adverts to reach the information section

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...AND EVEN MORE INFORMATION:

- Bolles, Richard N. 2017: What color is your parachute? Ten Speed Press, Berkeley
- Müller, Mirjam 2017: Karriere nach der Wissenschaft. Alternative Berufswege für Promovierte. Campus, Frankfurt am Main.
- Müller, Mirjam 2014: Promotion, Postdoc, Professur. Karriereplanung in der Wissenschaft. Campus, Frankfurt am Main.
- UniWind „ Perspektiven nach der Promotion“, free here: https://www.uniwind.org/publikationen/publikationsreihe (two publications from 2018, part of your „read at home“ slides)

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