

NEUES ENTDECKEN

TALENTE FÖRDERN

IDEEN UMSETZEN

Research Information Data at the Austrian Science Fund (FWF)*

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WIR. FÖRDERN. ZUKUNFT.

Project-Administration Database

Scope covered by the application

The FWF Project-Administration Database is a custom tailored software designed to support all administrative tasks associated with:

- the application process
- the peer-review process
- the decision making process
- support processes during the funding period
- the financial and scientific evaluation of projects
- collateral tasks (e.g. public relations, financial reporting, etc.)

Project-Administration Database

Design

The FWF Project-Administration Database consists of SQL databases and a web-based user interface. Interfaces allow for data export tasks to a wide variety of other systems like accounting software, websites etc.

Key figures:

- Java based front-end, highly parameterized
- SQL database (approx. 40 GB, 200 tables with up to 15 mio. records)
- automated generation of communication objects (letters and emails)
- interface to Sharepoint-based document management system

Project-Administration Database

Application Data

Data related to applications:

- Type of application
- Persons with different roles: applicant, cooperation partner, reporter, administrators, ...
- Institutions
- Financial planning data: sums applied for personnel, equipment, consumables, ...
- Scientific disciplines (according to Statistik Austria), keywords, title and abstract
- Data of the peer reviewers: name, affiliation, age group, gender, position, rating

Project-Administration Database

Project Data

Data related to projects:

- Accounting and financial data (transaction data, available/spent and reserved amount of money per project)
- Contracts of employment (person, type of employment, salary, duration of employment)
- Equipment data (type of equipment, installation site, part funded by FWF, registration number ...)
- Auditing data (annual and final)
- Scientific evaluation data (final reports)
- Applications




Final Report Data

- Summary for public relations work
- Report on research work (~ 6 pages)
- Publications: peer-reviewed / non peer-reviewed, published / planned, Open Access status ⇒ ca. 90,000 items since 1990
- Academic awards, commercial applications (e.g. patents, licenses), publications for the general public
- Collaborations: nationality, gender, intensity, disciplinary / interdisciplinary / transdisciplinary
- Human Resources: position, status (in progress / completed), gender
- Applications for follow-up projects (status, funder, title, type, amount)
- Rating on the cooperation with the FWF (ratings to 14 questions)
- Data of peer reviewers: name, affiliation, age group, gender, position, rating

Published Project Data

The Strength of Very Large Cardinals

project number **P 27815 Einzelprojekte**
project lead [Vincenzo DIMONTE](#)
decision board **2014/11/24**

project details		Hide ▲
university / research place	Universität Wien	
institute	Kurt Gödel Research Center for Mathematical Logic	
Link	web project lead	
lifetime	2015/04/01-2016/06/30	
grants awarded	222,568.50 €	← since 11/2011
status	finished	
abstract	 Abstract downloaden (pdf, 3.58 KB)	
final report 	 Abstract downloaden (pdf, 80.4 KB)	
science discipline	100% 101 Mathematics	
keywords	Set Theory, Large Cardinals, Descriptive Set Theory, Free Algebra, Forcing, Combinatorics	

Currently 13,669 projects since 1994 available via the [Project Finder](#)

Analysis

Legitimation by Procedures, Impact, Acceptance, Transparency and Openness

1. Reducing Bias in Decision Making
2. Ensuring Quality of Research Output
3. Achievement of Programme Aims
4. Acceptance of Procedures and Programmes
5. Output Transparency

FWF Zenodo Community Collection

<https://zenodo.org/collection/user-fwf>

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Austrian Science Fund FWF

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19 January 2016 Presentation Open access

Economics and Policies of Open Access

Reckling, Falk

Presentation at the event "Potentiale von Open Access in den Geisteswissenschaften", Vienna 19/1/2016: <http://www.fwf.ac.at/de/service/kalender/veranstaltung/kid/20160119-389/>

Uploaded by Austrian Science Fund (FWF) on 19 January 2016.

View

6

Community collection

FWF Der Wissenschaftsfonds.

Austrian Science Fund FWF

The purpose of the FWF <https://www.fwf.ac.at/en/> is to support the ongoing development of Austrian science and basic research at a high international level. In this way, the FWF makes a significant contribution to cultural development, to the advancement of our knowledge-based society, and

Aim ⇒ Bias analysis in decision making: e.g. gender, age, disciplines

-  [Funding decision-making systems: An empirical comparison of continuous and dichotomous approaches based on psychometric theory](#)
Mutz R, Bornmann L, Daniel H-D (2016); Research Evaluation; doi: 10.1093/reseval/rvw002, pdf. 562 KB
-  [Cross-disciplinary research: What configurations of fields of science are found in grant proposals today?](#)
Mutz R, Bornmann L, Daniel H-D (2014); Research Evaluation; doi:10.1093/reseval/rvu023, pdf. 185 KB
-  [Does Gender Matter in Grant Peer Review? An Empirical Investigation Using the Example of the Austrian Science Fund](#)
Mutz R, Bornmann L, Daniel H-D. (2012); Zeitschrift für Psychologie; 220(2):121-129; doi:10.1027/2151-2604/a000103, pdf. 266 KB
-  [Heterogeneity of Inter-Rater Reliabilities of Grant Peer Reviews and Its Determinants: A General Estimating Equations Approach](#)
Mutz R, Bornmann L, Daniel H-D (2012); PLoS ONE 7(10): e48509; doi: 10.1371/journal.pone.0048509, pdf. 322 KB
-  [Factors Influencing Approval Probability in Austrian Science Fund \(FWF\) Decision-Making Procedures - FWF Stand-Alone Projects Programme, 1999 to 2008](#)
Reckling F, Fischer C (2010); Zenodo; doi: 10.2139/ssrn.1725985, pdf. 1.3 MB

Aim ⇒ quantitative and qualitative analysis of the impact of FWF funded projects

Ex-Post Peer Review ⇒ international evaluation of the final reports

Internal & external studies ⇒ quantitative analysis and benchmarks of project results

[A contest between nations; or how far is Austrian research behind that of the world leaders?](#), F. Reckling, **FWF Policy Paper**, 2007

[Types of research output profiles. A multilevel latent class analysis of the Austrian Science Fund's final project report data](#), R. Mutz, L. Bornmann, H.-D. Daniel (2012) in: **Research Evaluation**, pp. 1-16, 2012

[Endberichtsanalyse FWF-Einzelprojekte](#), C. Fischer, M. Kenzian, R. Novak, F. Reckling, **FWF Policy Paper**, 2013

[Bibliometric Study of FWF Austrian Science Fund 2001-2010/11](#), E. v. Wijk, R. Costas-Comesaña, **Report** 2013

[Sind Altmetrics eine nützliche Informationsquelle für Forschungsförderorganisationen?](#), S. Würth, R. Reimann, **Zenodo**, 2015

Programme Monitoring

Aim ⇒ Review of achievements of programme objectives

Current State ⇒ [10 Programmes](#) are evaluated since 2004,
International Programmes will be finalised soon, SFB follows next year

Standards

Standards of the [fteval](#) + [FWF standards](#) ⇒

- openly accessible
- technical requirements

Metadata of Evaluation Standards

For every published report the following metadata template has to be used

Title

Authors

Author Afiliations

DOI

Publishing Date

Publication Type

Publication Venue

Pages

Peer Review


Subject Areas

Keywords (*max. 6*)

Copyright

Metadata of Evaluation Standards

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Cite as

Data Availability

Competing Interests

Funding

Author Contributions

Acknowledgements

Acceptance Monitoring

Aims ⇒ Review of „customer satisfaction“ on a regular basis

Status Quo ⇒ 2 surveys in 2002 and 2013 with > 3.000 researchers on FWF's funding procedures and general research policy

FWF WissenschaftlerInnenbefragung 2013 – Teilnahme nach Position und Einrichtungstyp

	Univ.- Prof./ FH Prof.	Ass. Prof. (inkl. ao. Prof., Univ.- Doz.)	Postdoc	Wiss. MA (nicht promoviert)	Sonstige	keine Angabe (Item- Nonresponse)	Total
Universität (inkl. medizinische), öffentlich	467	598	786	551	23	24	2.449
Fachhochschule	43	10	46	86	1	0	186
Außeruniversitäre Forschungseinrichtung	17	43	217	85	12	8	382
Privatuniversität (inkl. medizinische)	21	17	12	18	1	1	70
Total	548	668	1.061	740	37	33	3.087

Outcome Monitoring

Aims ⇒ Transparency of publications, publication costs and Open Access compliance

Status Quo

- a) All publications coming out of FWF funded project since 2015 are available
- b) Publication costs since 2013 available
- c) Open Access compliance rate
- d) ORCID obligatory
- e) Altmetrics experiment (to be published soon)

30. Mai 2017

Ausschreibung eines Forschungsdokumentationssystems

Der FWF schreibt ein Forschungsdokumentationssystem (Research Documentation System) aus.

Potentielle Interessenten können die Details der Ausschreibung dem tenders electronic daily (TED) der Europäischen Union (EU) entnehmen, siehe:

[↪ http://ted.europa.eu/udl?uri=TED:NOTICE:201358-2017:TEXT:DE:HTML&src=0](http://ted.europa.eu/udl?uri=TED:NOTICE:201358-2017:TEXT:DE:HTML&src=0)

Challenges

- Data exchange with research institutions, e.g. data from RIS periodically transferred to funders
- Common (national) standards for research information systems management incl. a national research information system
- Tracking data after research projects are finished
- Design of a Career Tracking System (see [SNF](#))

Big Data in Research Information

- Big scientific information providers collect information about the entire academic workflow (funding information, review process, research data, publications and outreach to evaluation results).
- Now, they have started to analyse these big data by learning algorithms and other AI tools.
- This could lead to a situation where tools are offered to provide better evidence not only about the past performance but also of the potential future performance of a researcher or a research institution.
- Do information systems of research institutions, funders and evaluators become obsolete?

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