

Strategic benefits of “openness of metadata” across the RIS ecosystem: Connecting upstream metadata and downstream strategic challenges.

Towards responsible metrics on serial ERC grantees

April 11, 2019
DS Dimensions User Group webinar

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Topics for today

1. Framing the case
2. Building the case
3. Openness in grants data

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Framing the case

Core research dimensions and responsible research perspective

Focus of the case: Responsible Strategy Metrics for research

Research is more than publishing: 4 core dimensions

1. Publishing
2. Granting
3. PhD's
4. Profiling/Impact

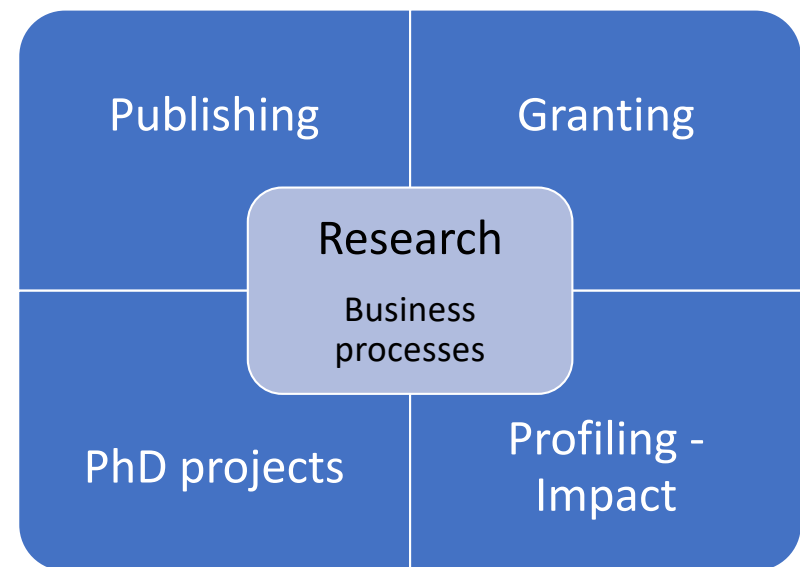
Responsible research metrics 1:

Not focusing in one dimension

Focus on full career portfolio

Responsible research metrics 2:

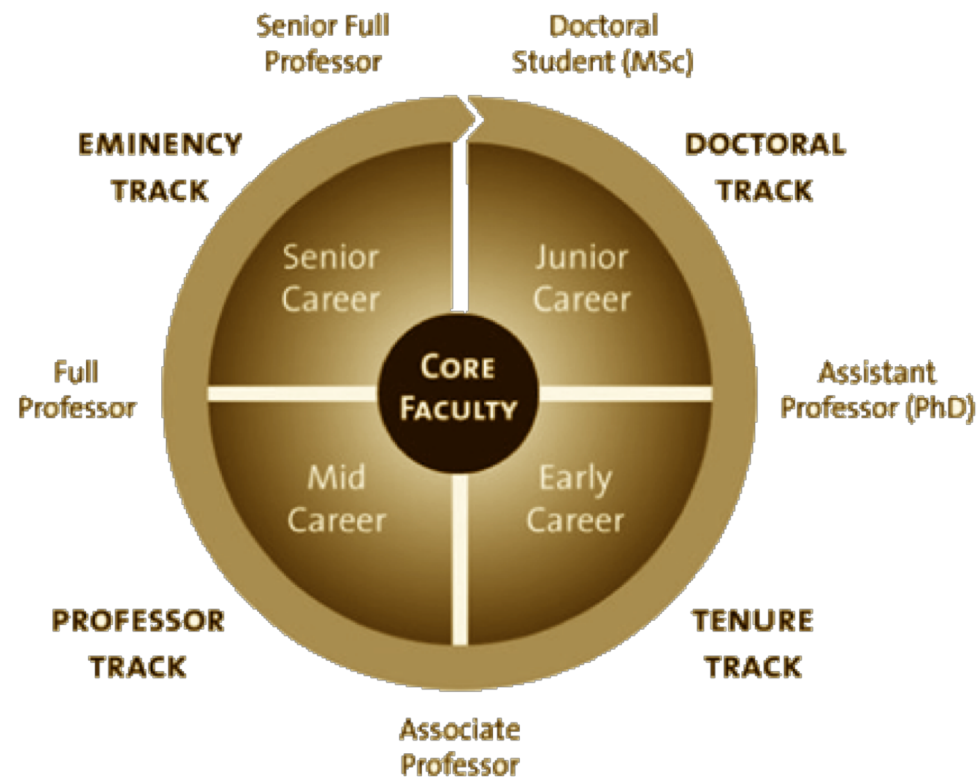
RIS Ecosystem perspective



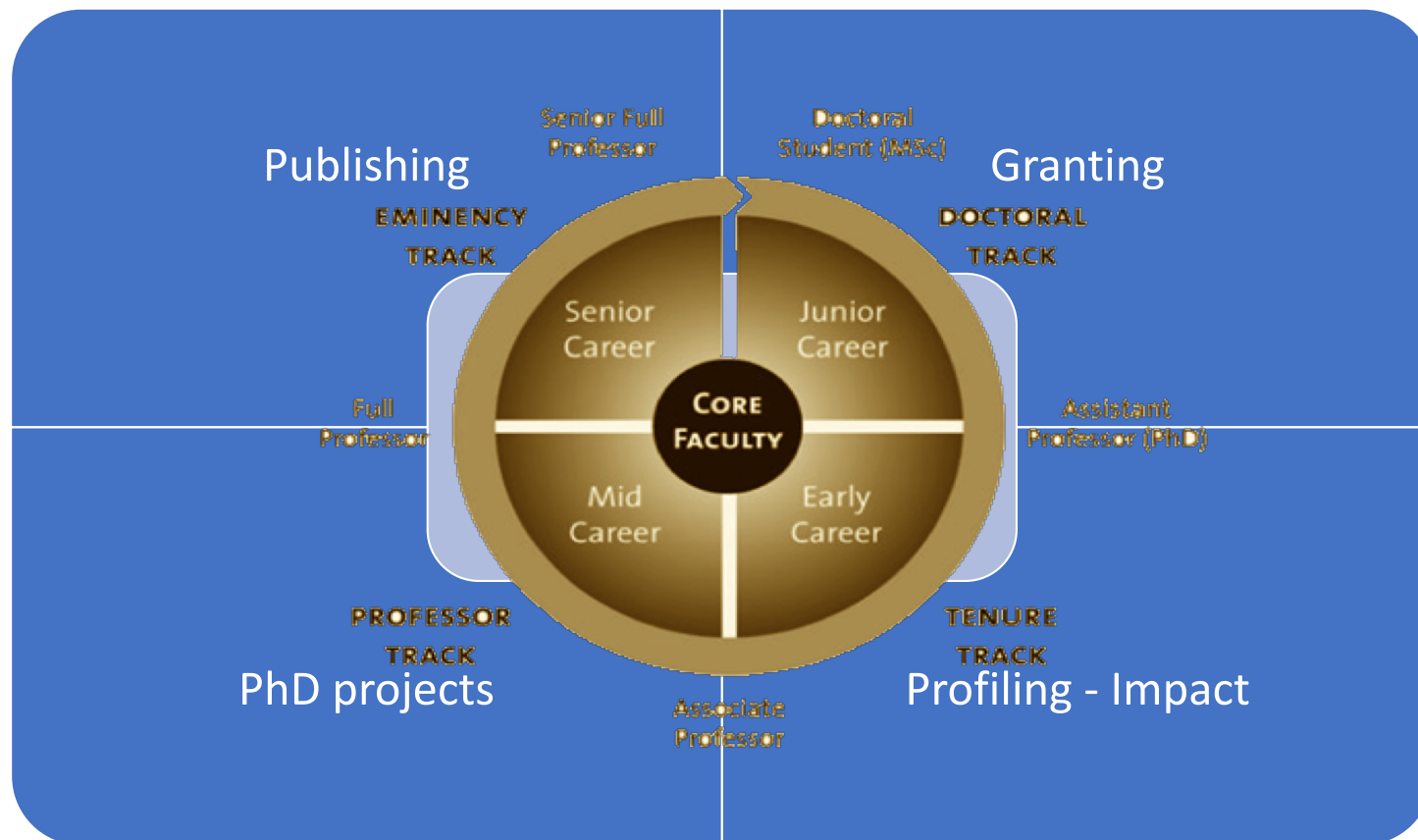
Responsible metrics 1: Career portfolio lens

Academic Career Cycle model: focus on 4 faculty development 'tracks'

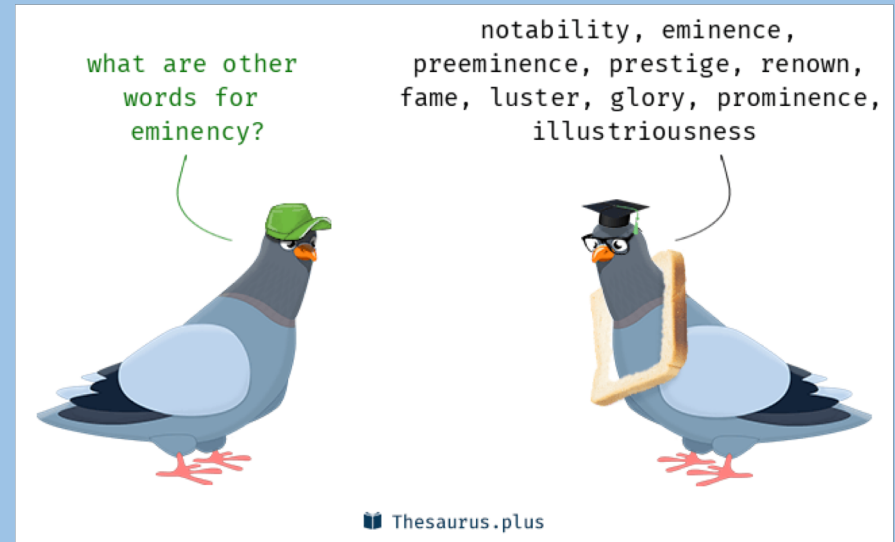
Responsible research metrics: Focus on full career portfolio



Research metrics = career portfolio metrics: 4 key research elements as focus



2



Building the case

Serial ERC grantholders; towards **eminency metrics** using DS Dimension evidence

ERC grants 2007-2018: the selective European league of academic grants


Dimensions



European Research Council (ER...
Funder

×

Save / Export

FILTERS
FAVORITES

> START YEAR
> ACTIVE YEAR
> RESEARCHER
✓ FUNDER
☐ **European Research Council (E** 9,546
> RESEARCH ORGANIZATION

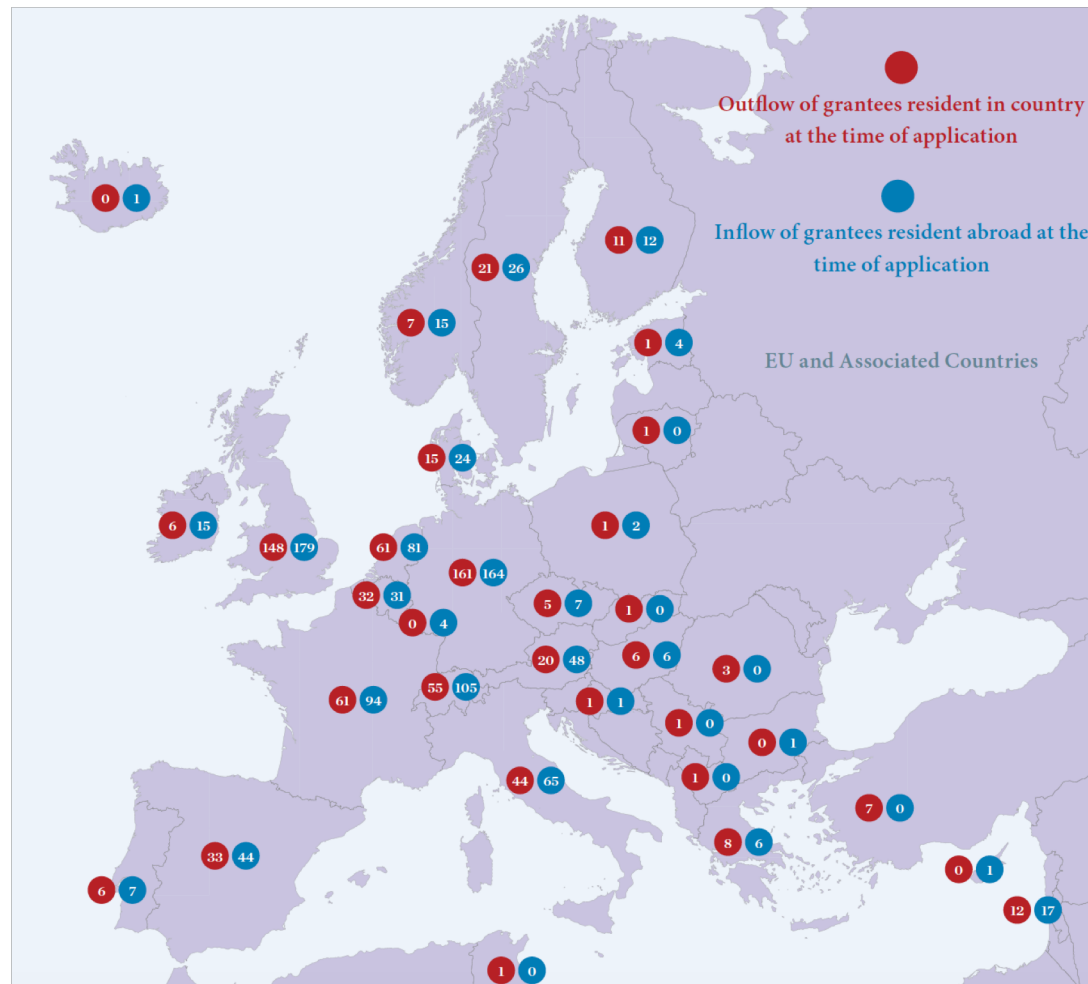


European Research Council (ERC)
Brussels, Belgium

Publications (resulting) 116,718	Grants 9,546 Funding amount USD 18.7 B	Patents (resulting) 0	Clinical trials (linked) 33
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PUBLICATIONS 116,731	GRANTS 9,546	PATENTS 0	CLINICAL TRIALS 33	POLICY DOCUMENTS selected filter not applicable
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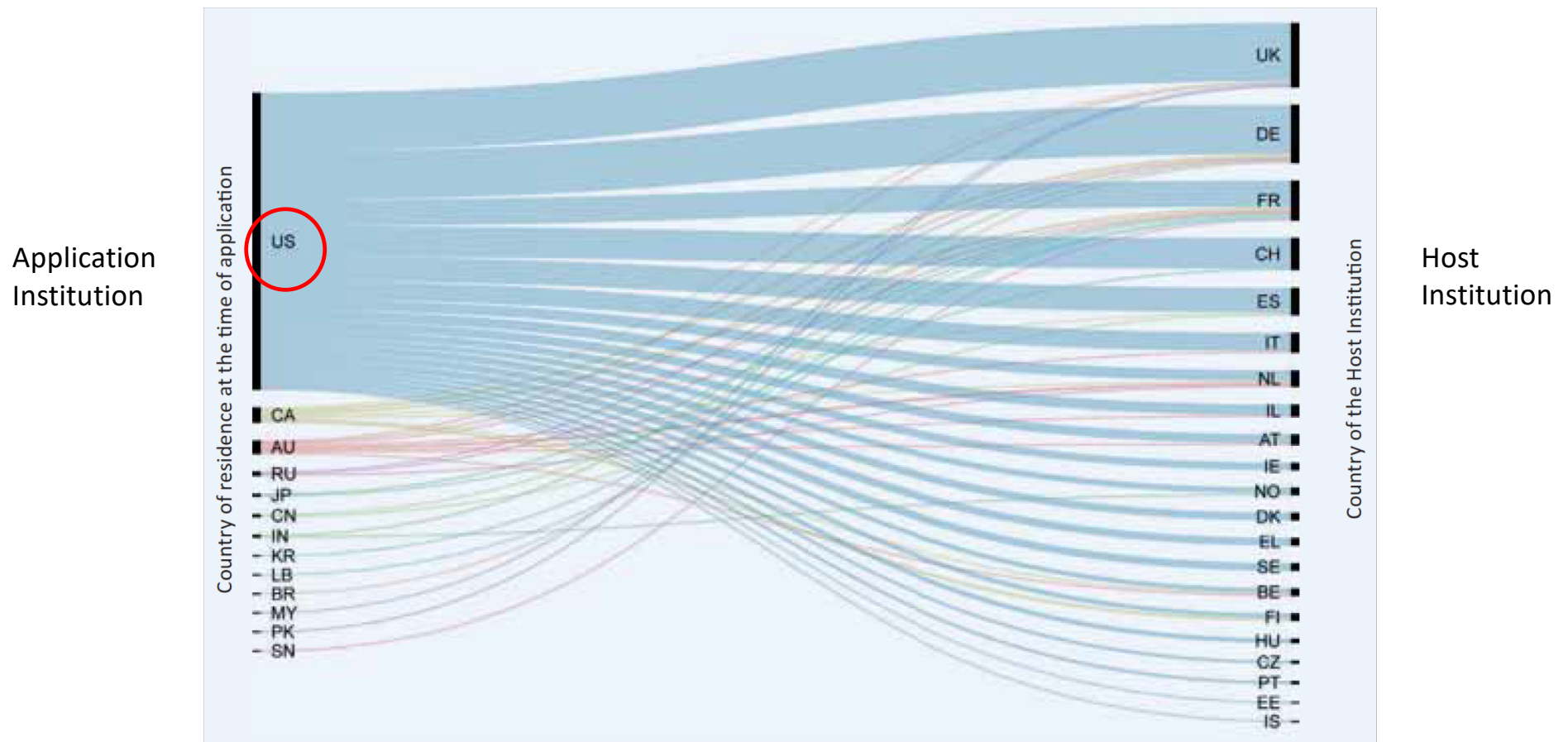
ERC grants 2007-2018: Inflow and outflow of grantees talent in Europe



Source: ERC Annual report 2018

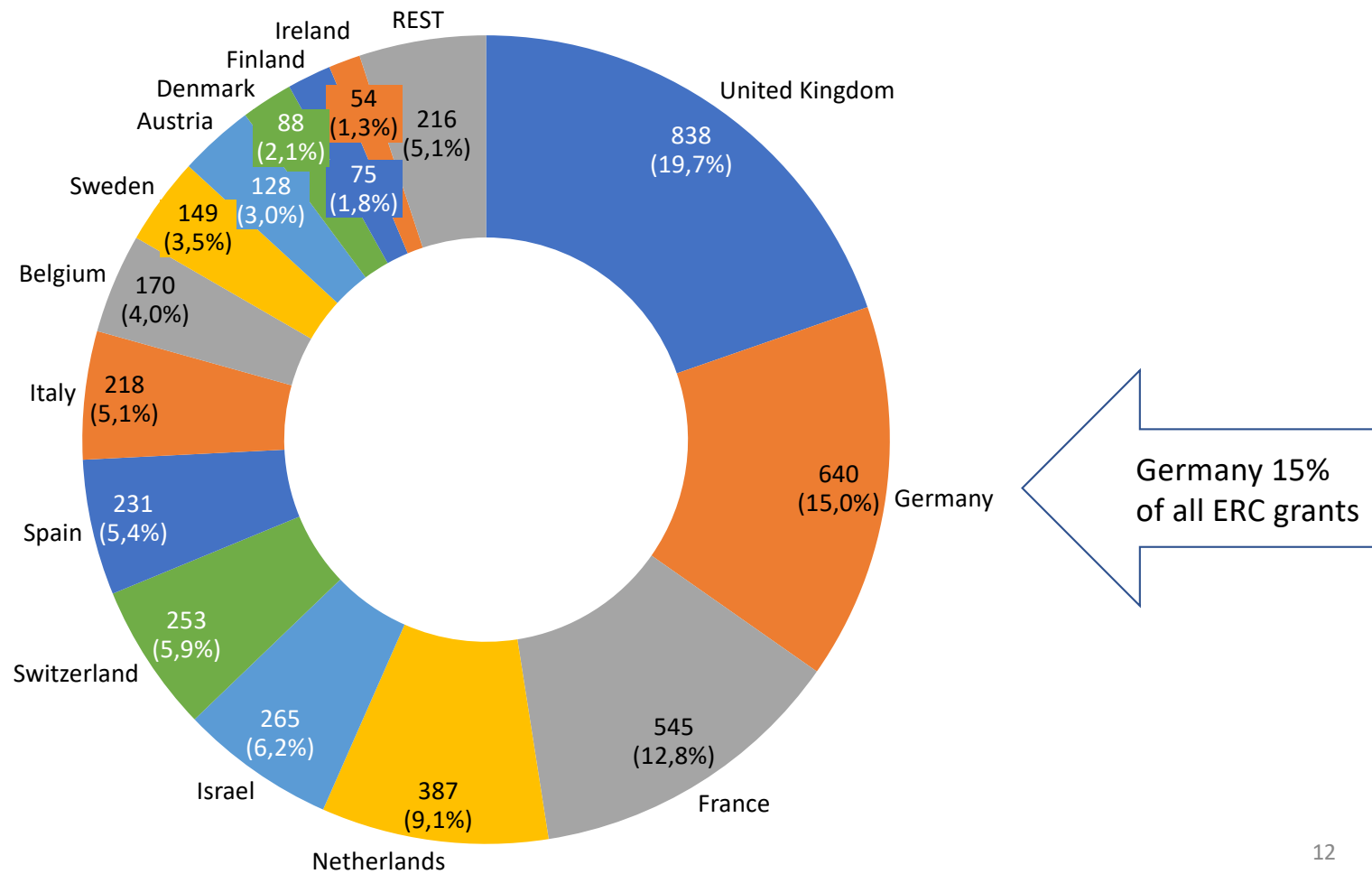
Career mobility to Europe influenced by ERC grants 2007-2018

Lot of *US2EU* dynamics



Source: ERC Annual report 2018

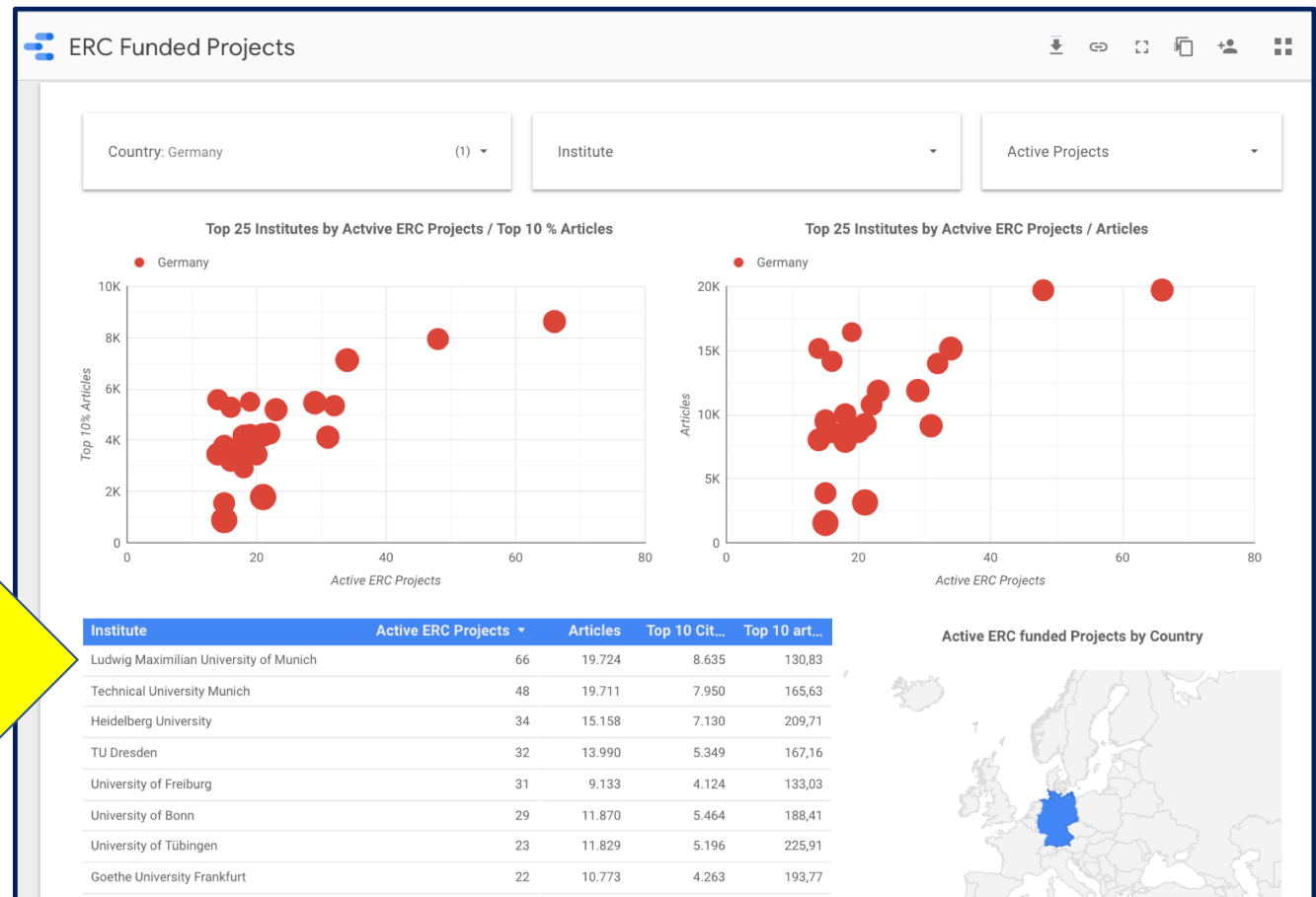
ERC 2007-2018 Market share of European Countries > 50 grants (only)



Institutional strategic perspective: competitiveness of insitutions
National eminent institutions: Germany: ERC grants vs top10% publication

Institute	Active ERC Projects	Articles	Top 10 Cited Articles	Top 10 articles per project
Ludwig Maximilian University of Munich	66	19.724	8.635	131

National winner



Source: https://datastudio.google.com/reporting/1QdUGCu9kem7LKvcRa1IWcpps0N_e4Fsp/page/To5I

Who are they ERC champions?

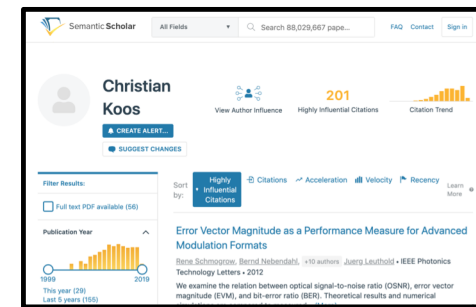
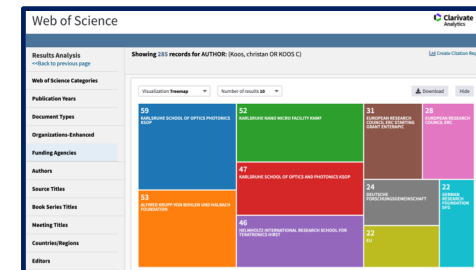
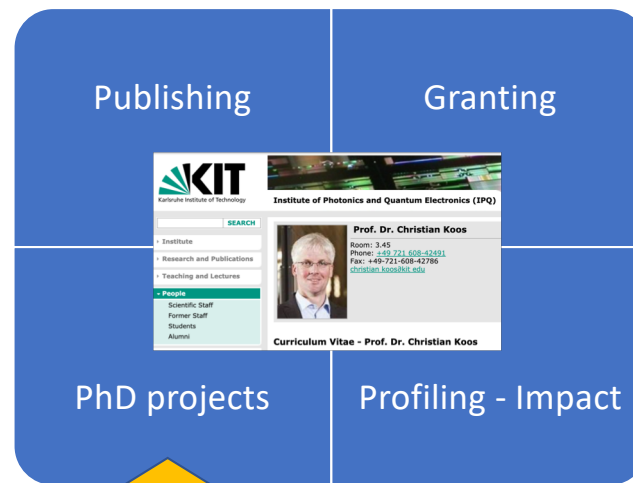
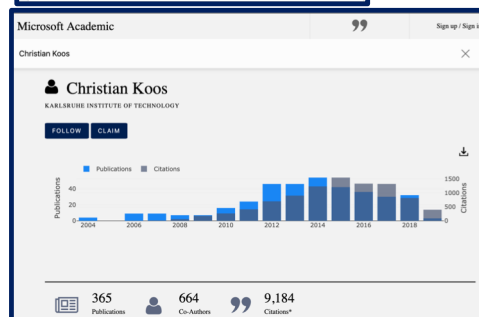
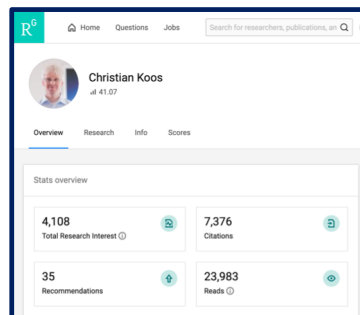
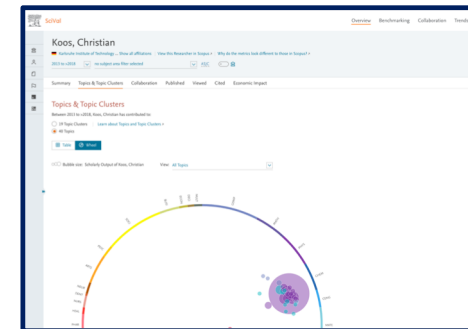
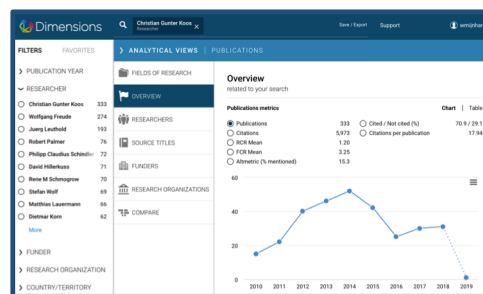
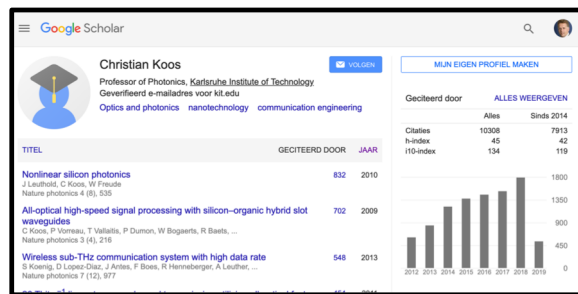
Serial ERC grantees, 3 / 4 ERC grants, minimal 5 Meuro total grant value

Only 21 of 9500 grantees reached this level

Researcher	Institute	Country	Nr of ERC grants	Amount in Meuro	Period
Christian Gunter Koos	Karlsruhe Institute of Technology	Germany	4	5.1	2006 - 2023
Yardena Rachel Samuels	Weizmann Institute of Science	Israel	4	4.4	2007 - 2023
Christiaan Innocentius De Zeeuw	Erasmus University Medical Center	Netherlands	4	3.6	2012 - 2018
Graham John Hutchings	Cardiff University	United Kingdom	4	3.3	1999 - 2023
Andreas Reinhold Hierlemann	Swiss Federal Institute of Technology in Zurich	Switzerland	3	7.3	2011 - 2021
Juergen Arthur Knoblich	Institute of Molecular Biotechnology	Austria	3	6.7	2010 - 2021
Johannes Carolus Clevers	Royal Netherlands Academy of Arts and Sciences	Netherlands	3	6.5	2009 - 2020
Adriano A Aguzzi	University of Zurich	Switzerland	3	6.3	1993 - 2022
Didier Trono	Swiss Federal Institute of Technology in Lausanne	Switzerland	3	6.2	1992 - 2021
Bradley James Nelson	Swiss Federal Institute of Technology in Zurich	Switzerland	3	6.2	1996 - 2022
Uri Banin	Hebrew University of Jerusalem	Israel	2	6.2	2004 - 2022
Detlef Lohse	University of Twente	Netherlands	2	6.1	2005 - 2022
Ulf Thomas Edvard Helleday	Karolinska Institute	Sweden	3	6.0	2011 - 2021
Nektarios Tavernarakis	Foundation for Research and Technology Hellas	Greece	3	5.9	2003 - 2021
Carol Vivien Robinson	University of Oxford	United Kingdom	3	5.7	2002 - 2021
Erin Margaret Schuman	Max Planck Institute for Brain Research	Germany	2	5.7	1990 - 2022
Elly Margaret Tanaka	Research Institute of Molecular Pathology	Austria	2	5.6	2010 - 2022
Jonathan Mark Harrington	Ludwig Maximilian University of Munich	Germany	3	5.4	2003 - 2022
Alfio Maria Quarteroni	Polytechnic University of Milan	Italy	3	5.3	1991 - 2022
Victor Armand Malka	Weizmann Institute of Science	Israel	3	5.2	2009 - 2020
Frank Uhlmann	The Francis Crick Institute	United Kingdom	2	5.2	2003 - 2021

Source: DS Dimension/analytical views/researchers

Eminency metrics of ERC champion in RIS ecosystem perspective? Need for openness & standardization



Source: GS, SCIVAL, DSDimensions, SemanticScholar, WOS, Microsoft Academic

<https://www.semanticscholar.org/author/Christian-Kooos/2521468>

3

Openness in grants data?

Noblesse oblige: open output, open input, open process?

Towards agreements between stakeholders in the RIS ecosystem?

Stakeholders, entities & data governance in the grants value chain

