



# Bibliometric practices and activities at the University of Vienna

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## Schedule:

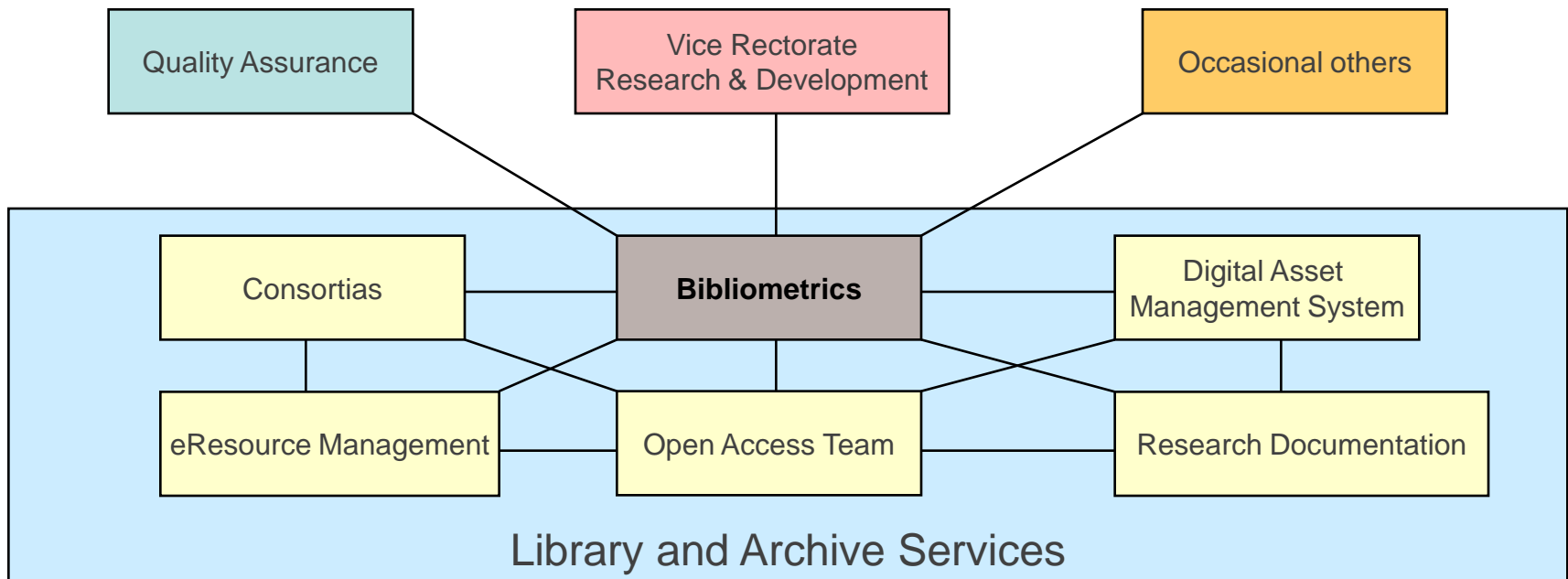
- I. Historical overview and organizational embedding
- II. Tasks of the Bibliometrics Department
- III. esss – European Summer School for Scientometrics



## I. Bibliometrics at University of Vienna: organizational embedding

In 2006 → formation of working group „Scientometrics“

Since 2008 → Bibliometrics Department implemented as part of Library and Archive Services





## I. Rationale for embedding of bibliometrics in (scientific) libraries

- Librarians are information specialists
- Librarians are used to work with metadata, search engines and databases
- Libraries do already collect necessary content (publications) and license required tools (databases)
- Libraries are independent and interdisciplinary institutions
- Libraries are free of scientific bias



## II. Tasks of the Bibliometrics Department

- a) Consultation of rectorate, departments and staff
- b) Collection and enrichment of quality (bibliometric) (meta)data
- c) Regular bibliometric analyses and problem-specific expertises
- d) Development partnerships ("early adopters") & product analyses
- e) National and international cooperations



## II. a) Consultation

- Basic trainings in bibliometric and other scientific data bases (WoS, Scopus, Google Scholar, etc.) and in bibliometric analysis tools (JCR, ESI, SciMago, etc.)
- Bibliometric consulting for optimizing and personalizing publication output („Distinct Author“ in WoS & „Author Feedback“ in Scopus, „ResearcherID“ in WoS)
- Training faculty staff in analysing publication lists
- Providing statements in response to new developments (e.g. new indicators, new products)
- Training faculty staff in analysing publication lists
- Launch of bibliometrics service and information website in January 2010: <http://bibliometrie.univie.ac.at>



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[Sources](#)

[Indikatoren](#)

[Rankings](#)

[Visualisierung](#)

[Services](#)

[Team](#)

[Glossar](#)

[Literatur](#)

[News](#)

[Archiv](#)

## Bibliometrischer Service der Universität Wien

Das "Team Bibliometrie" wurde an der Dienstleistungseinrichtung Bibliotheks- und Archivwesen neu eingerichtet, um WissenschaftlerInnen, Institute, Fakultäten und andere EntscheidungsträgerInnen mit bibliometrischen Daten zu versorgen und bei deren Interpretation zu unterstützen.

Auf dieser Website werden all jene bibliometrischen Begriffe, die in so wichtigen Entscheidungen wie budgetären Verteilungen oder Stellen- bzw. Preisvergaben herangezogen werden, klar und prägnant dargestellt.

Zusätzlich zu den empfohlenen Strategien zur Erhöhung der Sichtbarkeit eigener Veröffentlichungen wird auch in Kooperation mit der Besonderen Einrichtung für Qualitätssicherung ein permanenter Service zur bibliometrischen Beratung aller wissenschaftlichen MitarbeiterInnen unserer Universität angeboten.



Schrift:

### Quicklinks

[European Summer School for Scientometrics \(esss\)](#) >

[Web of Science](#) >

[SCOPUS](#) >

[JCR](#) >

[SCImago](#) >

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## II. b) Data collection & enrichment

- Formulating reproduceable & adjustable search strings
- Data harvesting in two steps (institution and author based)
- Manual disambiguation of authors and affiliations
- Controlling / ensuring data completeness in local systems
- Enrichment of local data with external data (e.g. ISSN, IF)





## II. c) (Meta)Data analysis

Publication specific (meta)data are analyzed following different ways of interpretation:

- **Activity** (Productivity):
  - # P, DT, LA, SU, # co-authors/affiliations
- **Visibility**
  - # peer-rev. P, IF (field average, RIF)
- **Impact** (Citation)
  - # C, CPP, origin, characteristics of most cited and non-cited P, h-Index, g-Index, Crown-Indicator, RCR, distribution of highly cited P using Baselines & Percentiles



## II. c) Regular bibliometric analyses

### 1. Bibliometric reports for faculties:

- Periodic and cyclic evaluation of publication output of the 15 faculties and 3 centres (approx. 4 year cycle)
- Quality Assurance Department prepares „Performance Agreements“ between rectorate and faculty.
- Discussion if and to what degree a bibliometric analysis makes sense.
- *Reports are NOT results of evaluation, but a discussion paper presented to the dean in advance, to the selected peer in revised form, and to the rectorate in revised and annotated form.*



## II. c) Regular bibliometric analyses

### 2. Procedures for faculty positions

- Service offer to the faculty administration to analyze applications for vacant chairs (service formerly provided in part by Quality Assurance)
- Critical discussion about standards and criteria deemed as important by faculty
- Applying agreed standards and criteria to analyses of either all faculty publications or given publication lists



## II. c) Other analyses - Problem specific expertises

- Identification of collaboration patterns
- Landscape of disciplines / interdisciplinarity
- Co-citation analysis  
(common sources of a research field, citing traditions, relations, et al.)
- Answers to institution specific questions regarding strategies, general conditions and structures



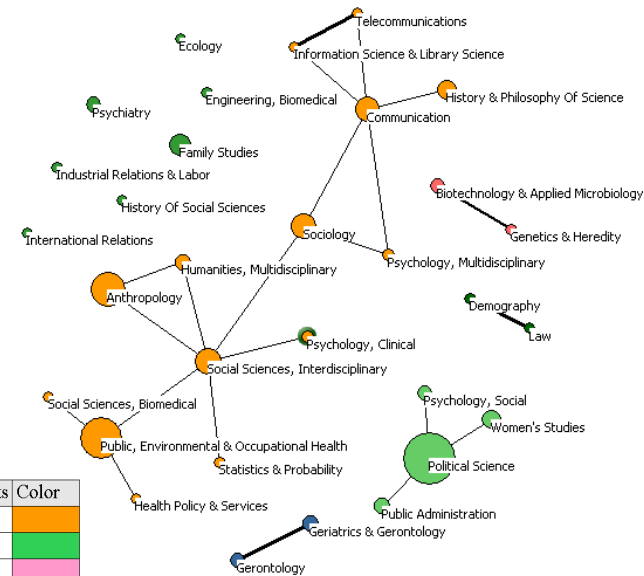
## II. c) Example: Research Maps - Comparison of Social Science Faculties

- Oslo: strong interdisciplinary network; focal points in many subject areas
- Zurich: strong focus on disciplines; emphasis on political science
- Vienna: tighter network than Zurich; more but less distinctive focal points

### Vienna

Disciplines: 31  
Relations: two: 22 / three: 3

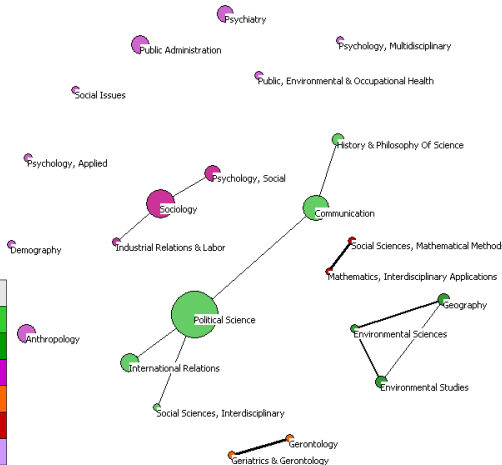
Name	Elements	Color
Public, Environmental Health	14	Orange
Political Science	4	Green
Biotechnology	2	Pink
Demography and Law	2	Dark Green
Gerontology	2	Blue
Others (7)	1	Dark Green



### Zurich

Disciplines: 23  
Relations: two: 11 / three: 1

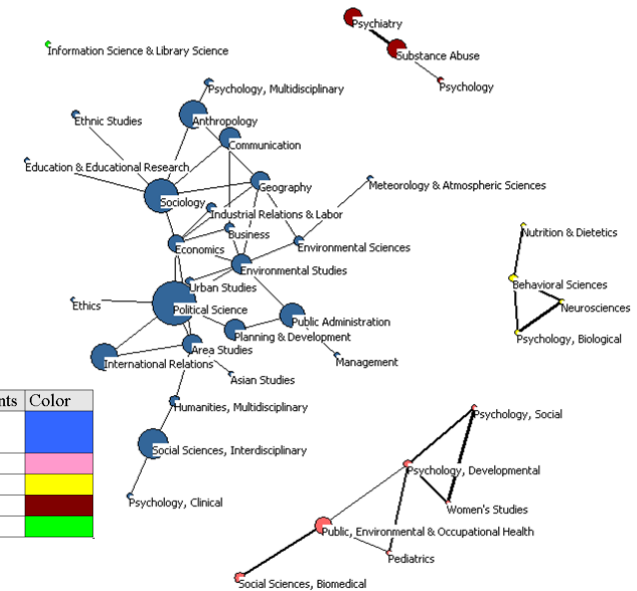
Name	Elements	Color
Political Science	5	Green
Geography	3	Light Green
Sociology	3	Purple
Geriatrics and Gerontology	2	Orange
Mathematics, Social Sciences	2	Red
Others (8)	1	Purple



### Oslo

Disciplines: 39  
Relations: two: 48 / three: 11

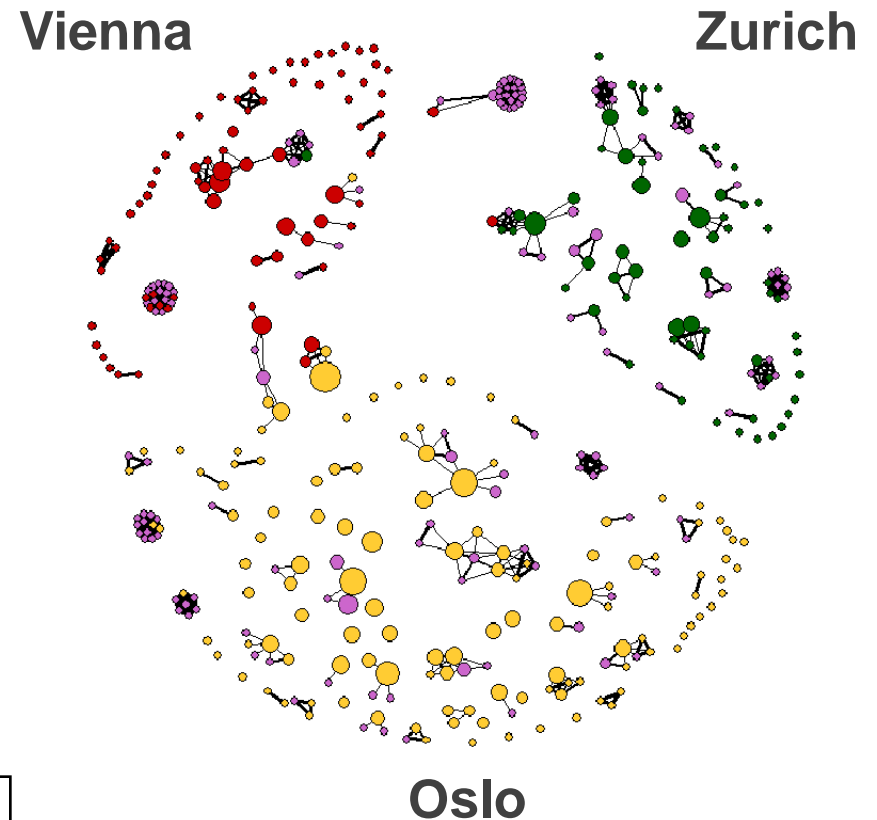
Name	Elements	Color
Political Science, Sociology, Social Sciences	25	Blue
Public, Environmental Health	6	Pink
Behavioral Science	4	Yellow
Substance Abuse	3	Dark Red
Others (1)	1	Light Green





## II. c) Example: Visualization of co-authorship

Name	Elements	Color
international	143	purple
Oslo	125	yellow
Wien	76	red
Zürich	62	green





## II. c) Questions related to university specific strategies, general conditions and structures

1. Do interdisciplinarity and international cooperation influence the publication output?
2. Do age pattern and internal structure influence productivity and visibility?
3. Do specific publication strategies and incentive systems show effect?
4. Are radical breaks or reforms identifiable (changes in internal structure, change of staff, et al.)?
5. Are changes of publication behaviour specific to university?  
Are there parallels to global changes?
6. Loss of visibility due to insufficient / false given affiliation?  
Influence on rankings?



## II. c) Bibliometric analyses: lessons learned

- highly subject-specific
- multidimensional complexity
- useful to formulate the „right questions“
- trigger and point the way for qualitative analyses
- allow comparison of results of earlier (publication) strategies
- used to implement best practices
- used to find international benchmark institutions or top researchers for new professorships





## II. d) Development Partnerships

- Negotiating development / „early adopter“ status, especially in case of sophisticated (and cost-intensive) products (currently for SciVal and Incites)
- Trimming product to match institutional interests (correcting / enhancing data, improving functionalities, ...)
- Creating reports for the university and the industry partner(s)
- Normalization of Vienna University affiliations and scientists in their products (ResearcherID)



## II. e) National and international cooperation

- aiming for a country-wide platform for the different departments dealing with bibliometrics, research evaluation, quality assurance...
- inviting (inter)national specialists (providers & renowned scientists) to discussions and workshops
- organizing international conferences (S&TI 2009, ISSI 2013)
- ongoing cooperations with other institutions



### III. **esss – European Summer School for Scientometrics**

- scientometric procedures increasingly used to analyse developments and trends in science and technology
- competent expert knowledge required
- lacking training opportunities
- increasing demand for scientometric education
- as a response esss launched cooperatively by
  - University of Vienna (A)
  - iFQ (D)
  - HU Berlin (D)
  - K.U. Leuven (B)



### III. **esss** – overview

- international orientation with English as language of instruction
- held in annual rotation in Europe and beyond
  - 2010 Berlin: inauguration and premium foretaste
  - 2011 Vienna: extended coursework
- not only continuing education but also discussion forum and international meeting point of scientometric experts
- 4-5 modules tailored to the needs of a predefined audience (science policy makers, research quality managers, information specialists and librarians)
- combining state-of-the-art scientometric methods with annually selected hot topics



### III. **esss – website** <http://www.scientometrics-school.eu>

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#### news

The esss statutory meeting was held at the University of Vienna on February 15th, 2010. The inauguration of esss will take place in Berlin on June 16th, 2010. The first esss course will take place in conjunction with this year's [IFQ annual conference: Evaluation: New Balance of Power?, which will be held from June 14th-15th at the Wissenschaftszentrum Berlin \(WZB\)](#). In 2010 a three-day programme (16–18 June) will be offered covering two thematic modules.

In the following years the coursework will be extended to cover five modules. Thus, in 2010 a small but premium foretaste of what attendees can expect from 2011 (in Vienna) onwards will be given.

**The modules for 2010 are fully booked! Still free seats for opening day available!**





**Thank you very much for your attention  
&  
Welcome to esss 2010 in Berlin and  
esss 2011 in Vienna!**

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