



# Certificate Course "Data Steward" at the University of Vienna Online Information Evening

July 19, 2022





# Agenda

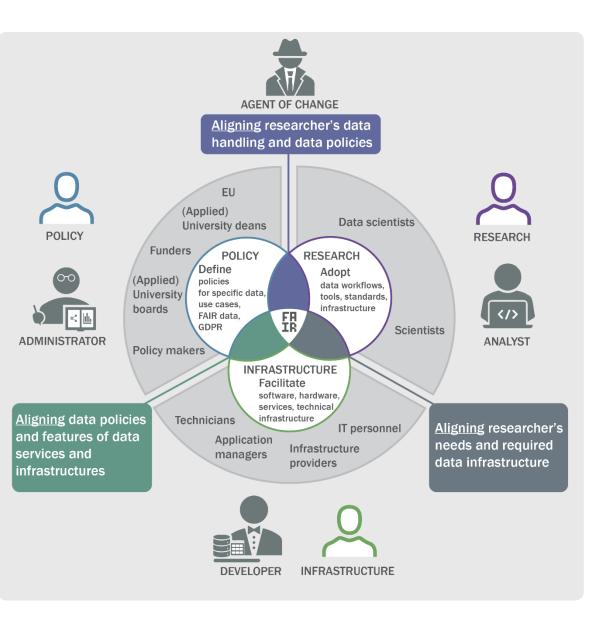
- Data Stewards: Role, Tasks, Competences
- Certificate Course Data Steward
  - Basics
  - Target Groups and Admission
  - Modules and Content
  - Course Dates
- Q & A



#### Who are data stewards and why do research institutions need them?



Data Stewards: Role



Frederike Schmitz. (2020). The roles of data stewards in the data stewardship landscape identified in Denmark and the Netherlands. Zenodo. <u>https://doi.org/10.5281/zenodo.4321265</u>, <u>CC-BY 4.0</u>



#### Data Stewards: Role





#### Why a Course for Data Stewards?

• "We estimated that Europe will have at least 10 million serious data producers among its 70 million science and technology professionals and 1.7 million researchers. So **we will need to educate about 500,000 data stewards** of various kinds to support researchers through experimental design and data capture, curation, storage, analytics, publication and reuse. These tasks are too complex and time-consuming to leave to researchers."

- Barend Mons

Mons, B. (2020). Invest 5% of research funds in ensuring data are reusable. Nature, 578(7796), 491. <u>https://doi.org/10.1038/d41586-020-00505-7</u>

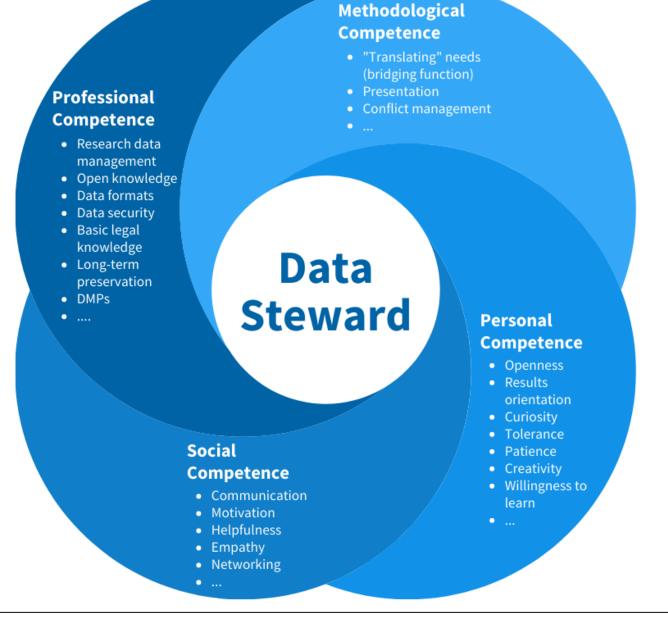




Sources: Gänsdorfer, N. (2020): Gespräche mit Data Stewards: Anforderungen, Kalová, T., Gänsdorfer, N. (2021). Die Rolle von Data Stewards: Analyse aktueller Stellenausschreibungen. DOI: <u>https://doi.org/10.25365/phaidra.241</u> Stellenausschreibungen. DOI: <u>https://doi.org/10.25365/phaidra.286</u>



#### Data Stewards: Competences



Source: Gruber, A. et al. (2021): Kompetenzen für Data Stewards an österreichischen Universitäten. DOI: <u>10.31263/voebm.v74i1.6255</u>



#### **Certificate Course Data Steward**







Competence acquisition Peer-to-peer learning

Community



#### **Certificate Course Data Steward**

- Part-time further education program based on the certificate course "<u>Data Librarian</u>", on the results of the <u>FAIR Data Austria project</u> and similar further courses (such as <u>DataTrain</u> or <u>Zertifikatskurs FDM</u> in Germany)
- Academic degree: Certificate of the University of Vienna
- Language: English
- Duration and scope: 2 semesters/15 ECTS credits
- Costs: 2950 €
- GOAL: To prepare existing and new staff for the challenging new roles of data stewards

Scientific Director: Prof. Claudia Plant



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# **Target Groups and Admission Requirements**

#### • Target Groups

- Researchers, PhD students
- Research support staff (such as library, IT ...)
- Admission Requirements
  - University entrance qualification examination or a completed apprenticeship + several years of relevant work experience
  - OR a completed Master's degree / diploma degree program
    - + English language skills (min. B2)

In English or German

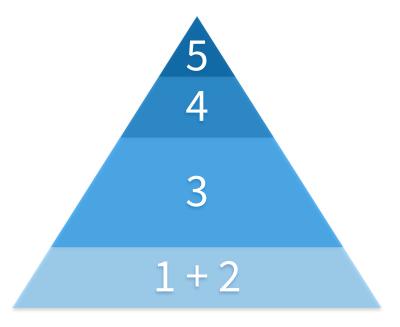
#### For the application:

- Application form
- Motivation letter
- Resume
- School/University certificates and diplomas
- Optional: Recommendation letter from employer



## Modules

- Module 1 (2 ECTS): Introduction to Research Data Management and Open Science
- Module 2 (3 ECTS): Basics of IT und Data Science
- Module 3 (6 ECTS): FAIR Data in the Research Data Lifecycle
- Module 4 (2 ECTS): Research Data Management Support
- Module 5 (2 ECTS): Data Stewardship in Practice: Project





#### Module 1: Introduction to Research Data Management and Open Science

Introduction to:

- Research data management
- Good scientific practice
- Open Access, Open Science, Open Data
- Cost estimation and financing models
- Legal and ethical aspects



#### Module 2: IT and Data Science Basics

Introduction to:

- Data science and data-driven research
- Machine learning
- Database systems

Basics of coding (based on the <u>Carpentries</u> curriculum):

- Unix Shell
- Git and GitHub
- Working with Python



#### Module 3: FAIR Data in the Research Data Lifecycle/1

Research data life cycle:

- Project management and funding landscape
- Data management plans (DMPs)
- Data organization
- Data visualization
- Metadata and research data documentation (incl. persistent identifiers, ontologies, etc.)
- Data security and storage
- Repository management and long-term preservation
- Interoperability and data migration
- Data reuse (incl. legal requirements)



## Module 3: FAIR Data in the Research Data Lifecycle/2

Discipline-specific approaches to data stewardship in the:

- Natural and life sciences
- Humanities
- Social sciences
- Technical sciences



#### Module 4: Research Data Management Support

- Developing research data management support services
- Designing and delivering training
- Conducting needs-assessments and requirements engineering



## Module 5: Data Stewardship in Practice: Project

Individual or group project applying the acquired skills and knowledge to data stewardship practice, such as:

- Advising strategy
- Training course
- Educast (educational video)
- Needs-assessment for a specific target group

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**Course Dates** 

In Vienna

- 4-8 lessons per day
- 1 lesson = 45 minutes
- Start: Monday 10 am
- End: Friday 12.15 pm

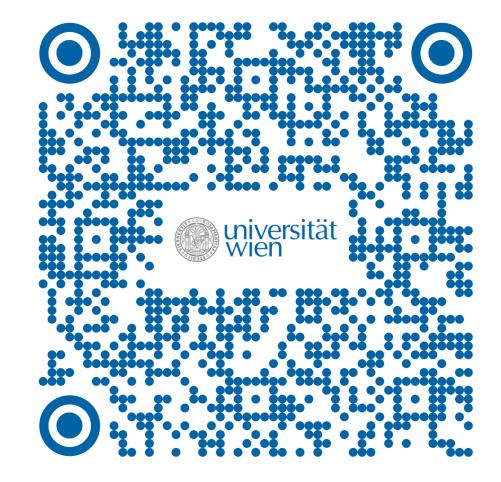
#### Online

- 6-8 lessons per day
- 1 lesson = 45 minutes

Date	Module	Location
1721.10.2022	Module 1: Introduction to Research Data Management and Open Science	tentatively in Vienna
1718.11.2022 1516.12.2022	Module 2: IT and Data Science Basics	online
1920.01.2023 1617.02.2023 1617.03.2023 1314.04.2023	Module 3: FAIR Data in the Research Data Lifecycle	online
0405.05.2023	Module 4: Research Data Management Support	online
May-June 2023	Module 5: Data Stewardship in Practice: Project	online

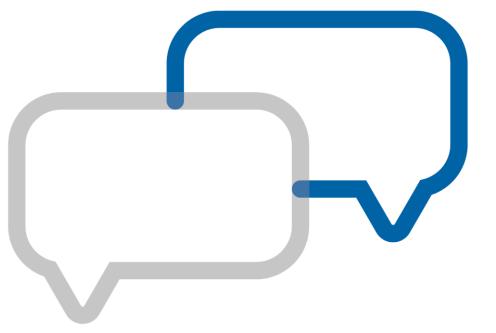


# Want to become a certified data steward?



https://postgraduate.univie.ac.at/datasteward/





## We look forward to your application!

Prof. Claudia Plant, Scientific Director
Faculty of Computer Science, University of Vienna
Tereza Kalová, Scientific Coordinator
Vienna University Library, University of Vienna
Karin Faktor, Program Management
Vienna University Library, University of Vienna

#### Contact: <a href="mailto:datasteward@univie.ac.at">datasteward@univie.ac.at</a>

