

Research Data Management and Central Service Facilities: eResearch Services for researchers at UMG

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eResearch Alliance

Agenda

1. Management of research data
2. The Göttingen eResearch Alliance
 - 2.1. Division Library Medicine (SUB)
 - 2.2. Computing-Services (GWDG)
3. Core facilities at the UMG
4. Ethikkommission at the UMG
5. Data protection officer at the UMG
6. Advisory services at the Department of Medical Informatics
7. Core Facility Medical Biometry and Statistical Bioinformatics
8. Services of the central UMG Biobank

Example: CRC 1002

Electronic laboratory notekeeping



Paper lab notebook

OCTOBER 15 1998

DIGEST:

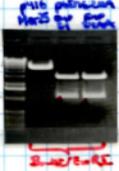
2 μl p116 Met25 2.5 μl pGEN6-2HA Eno24/AA
 4.5 μl UNIVERSAL B 4.5 μl UNIVERSAL B
 22.5 μl H₂O 22.5 μl H₂O
 0.5 μl BstHI 0.5 μl BstHI
 0.5 μl EcoRI 0.5 μl EcoRI
 → D CIP

LIGS:

6 μl p116 Met25
 2 μl Eno24/AA / H₂O
 1 μl H₂O
 3 μl T4-LIG B
 0.5 μl T4-LIGASE

AND TRANSFORM AFTER 4h OF LIGATION

DIGEST TEMPLATE-DNA FOR MAKING RNA:




Electronic lab notebook (ELN)

Close Save as Template Delete Sign

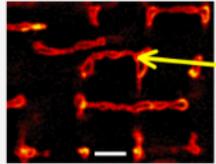
Home / AG Lehnart Demo / Experiments / Experiment 1 based on Template AG Lehnart STED Microscopy Image Acquisition

Name: Experiment 1 based on Template AG Lehnart STED Tags: di-8-ANEPPS, STED, Microscopy, Fluorescence SD381

Microscopy Image Acquisition

Publication Tag Search... AND OR Add Go

Wagner et al. 2012



Signal

Audit: My RSpace Activity
 You can filter this audit by Actions and Date Range
 Get Audit Report

You found 482 hits.

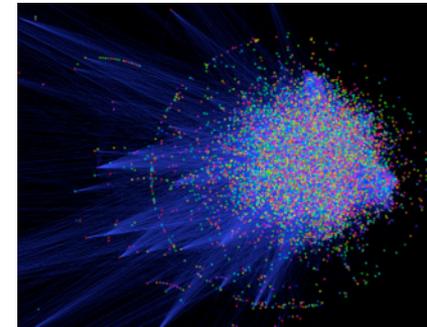
Dye	Time	User	Action	Type	Resource	Name
di-8-ANEPPS	2016-04-21 15:38:12	Dr. Harald Kusch	READ	RECORD	SD381	Experiment 1 based on Template AG Lehnart STED Microscopy Image Acquisition
Excitation in nm	2016-04-21 12:21:12	Dr. Harald Kusch	READ	RECORD	SD366	Experiment 1 based on Template - AG Lehnart - Western Blot - Immuno detection for Western Blotting
490	2016-04-21 11:54:56	Dr. Harald Kusch	DELETE	RECORD	SD499	Untitled document
laser	2016-04-21 11:54:56	Dr. Harald Kusch	DELETE	RECORD	SD505	Untitled document
pulsed diode laser (Pico TA 490, Toptica)	2016-04-21 11:42:08	Dr. Harald Kusch	READ	RECORD	SD353	Template - AG Lehnart - Western Blot - Immuno detection for Western Blotting

1. Management of Research Data

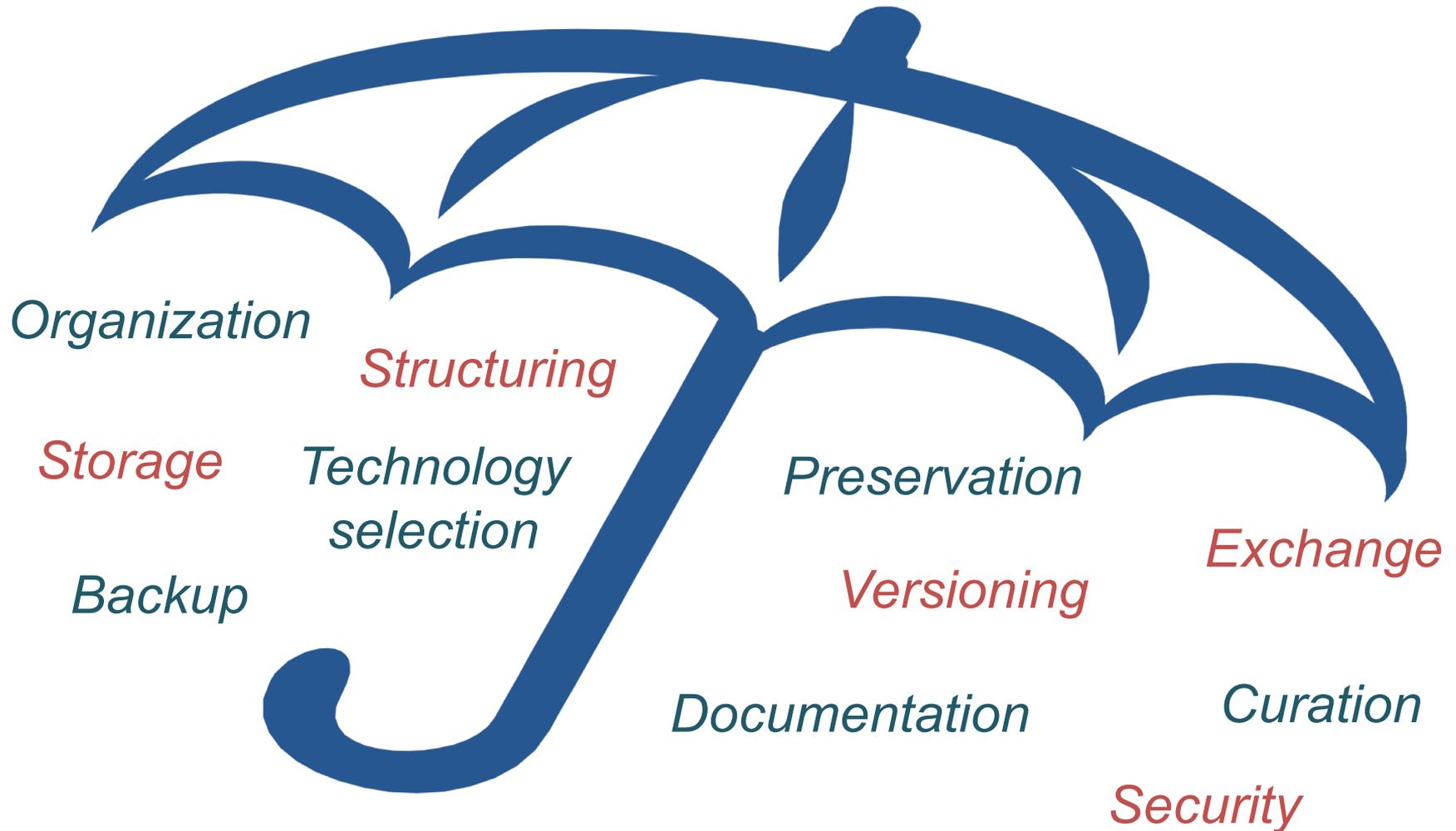


Data are **representations** of observations, objects, or other entities used as **evidence** of phenomena for the purposes of research or scholarship.

(Christine Borgmann 2014)



What is research data management?



Basic questions I

Organization and storage

- Do you find what you need when you need it?
- Are your data stored safely? Have you implemented a backup plan?



Basic questions II

Documentation

- Is the meaning of all the data and processing steps known?
- Is the information still understandable, when you revisit the data at a later time?



Thinking ahead...

Curation and sharing

- Is there a long term plan for the data?
- Can the data be made available for other researchers?
 - Funder's requirements
- Is there a repository or archive where you can store your data?
- What do you need today to support this and ease your daily work?



Research Data Policy of Göttingen University incl. UMG



Göttingen eResearch Alliance

Focus areas

Current page: ▶ Homepage ▶ 28. August 2014: Res...

Aa+ Aa-



Search | Deutsch

28. August 2014: Research data policy of the Georg-August University Goettingen (incl. UMG)

Preamble:

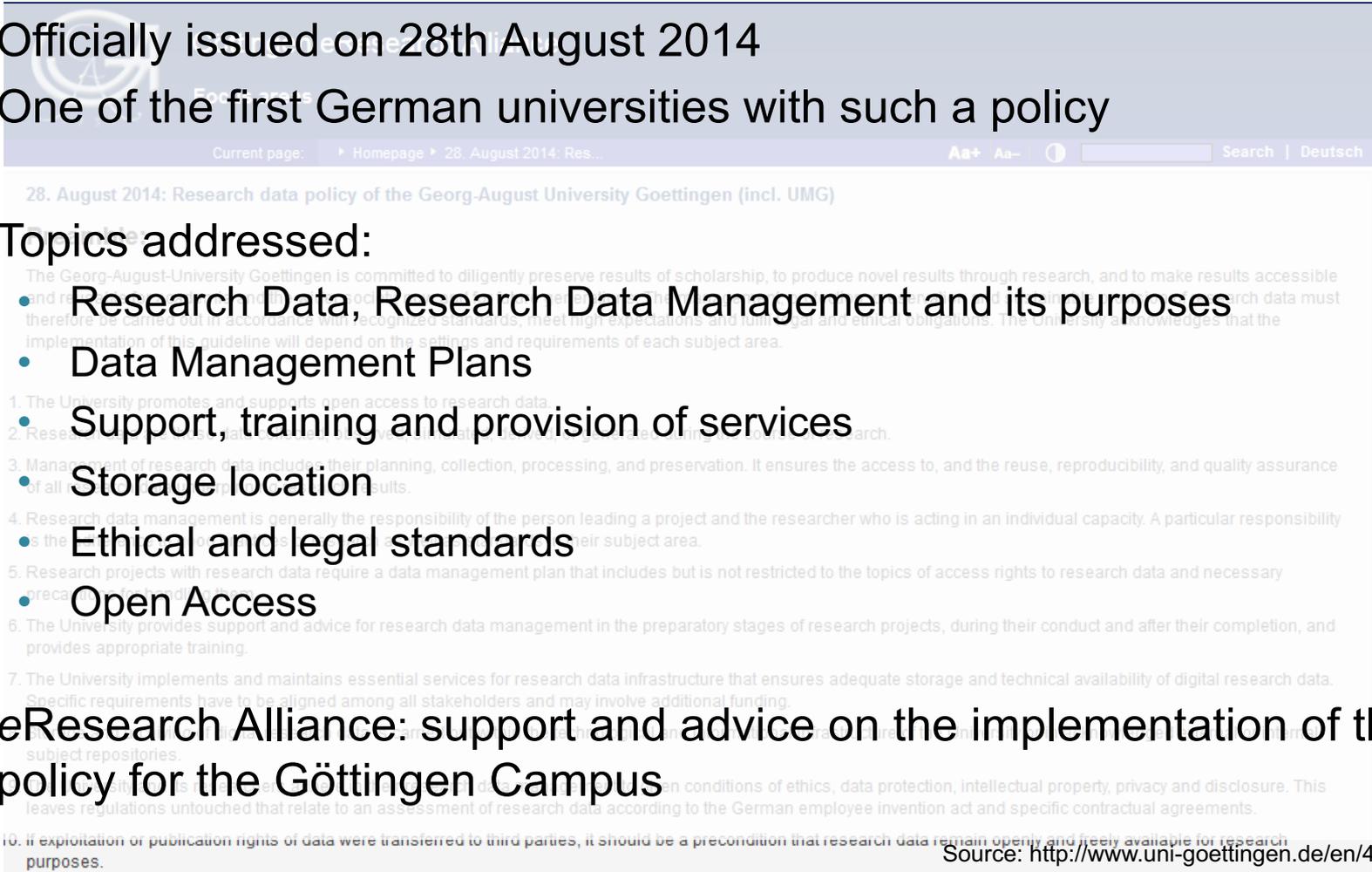
The Georg-August-University Goettingen is committed to diligently preserve results of scholarship, to produce novel results through research, and to make results accessible and reusable for academia and the wider society, now and for future generations. The management, protection, preservation and sustainable provision of research data must therefore be carried out in accordance with recognized standards, meet high expectations and fulfil legal and ethical obligations. The University acknowledges that the implementation of this guideline will depend on the settings and requirements of each subject area.

1. The University promotes and supports open access to research data.
2. Research data are those data collected, observed, simulated, derived, or generated during the course of research.
3. Management of research data includes their planning, collection, processing, and preservation. It ensures the access to, and the reuse, reproducibility, and quality assurance of all research data underpinning research results.
4. Research data management is generally the responsibility of the person leading a project and the researcher who is acting in an individual capacity. A particular responsibility is the adherence to good practices of research as well as standards in their subject area.
5. Research projects with research data require a data management plan that includes but is not restricted to the topics of access rights to research data and necessary precautions for handling them.
6. The University provides support and advice for research data management in the preparatory stages of research projects, during their conduct and after their completion, and provides appropriate training.
7. The University implements and maintains essential services for research data infrastructure that ensures adequate storage and technical availability of digital research data. Specific requirements have to be aligned among all stakeholders and may involve additional funding.
8. Storage and archiving of digital research data is carried out within the technological and informational infrastructure of the University or in acknowledged external or internal subject repositories.
9. The University and its researchers adhere in their research data management to given conditions of ethics, data protection, intellectual property, privacy and disclosure. This leaves regulations untouched that relate to an assessment of research data according to the German employee invention act and specific contractual agreements.
10. If exploitation or publication rights of data were transferred to third parties, it should be a precondition that research data remain openly and freely available for research purposes.

Source: <http://www.uni-goettingen.de/en/488918.html>

Research Data Policy of Göttingen University incl. UMG

- Officially issued on 28th August 2014
- One of the first German universities with such a policy



- Topics addressed:
 - Research Data, Research Data Management and its purposes
 - Data Management Plans
 - Support, training and provision of services
 - Storage location
 - Ethical and legal standards
 - Open Access
- eResearch Alliance: support and advice on the implementation of the policy for the Göttingen Campus

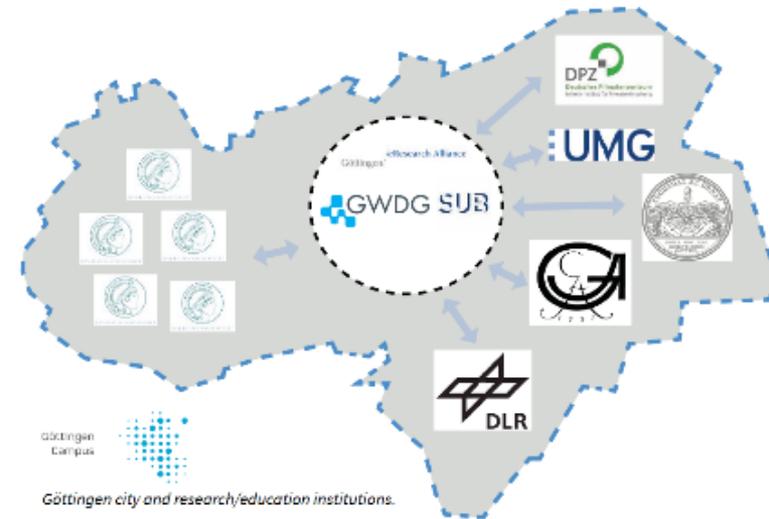
Source: <http://www.uni-goettingen.de/en/488918.html>

eResearch = *enhanced*Research

2. eResearch Alliance

eResearch Alliance

- Run **jointly** by Library and IT
 - GWDG: ~120 people, 30 in eResearch
 - SUB: ~450 people, 40 in eResearch
- Close **cooperation** with
 - Department of Medical Informatics
 - Research Department
- **Brokering-Office** with currently 5 staff members
 - Team from different disciplines w/ eResearch expertise
 - Actual services and projects in individual organisations
 - Network w/ eResearch experts across the campus
 - Translate discipline-specific into information- infrastructure requirements



eRA Services

Consulting

- Data management requirements
- Data integration
- Data policies
- Legal aspects
- Expert network
- Workshops
- ...

Training

- Data management
- eResearch topics
- Digital literacy
- Expert network
- Network on Open Science
- ...

Digital Services

- Storage
- Computing
- Communication
- Cooperation
- Project participation
- Foster reuse of solutions
- Sustain solutions
- Development of new services
- ...

Open Science Göttingen

- Campus wide network on promoting Open Science
- Göttingen Open Science MeetUp

<https://pad.gwdg.de/s/OpenScienceGOE#>

- Open Science principles
 - Teaching
 - Data science
- “HackyHour”: Meet, discuss, experiment together with experts on a given topic

<https://hackyhour.github.io/Goettingen/>



GÖTTINGEN RESEARCH ONLINE

Publications

Publication
data
management

Dspace-CRIS

Data

Research
data
repository

Dataverse

Instruments

Large
equipment
portal

openIRIS

Plan

Data
management
planning

RDMO

...

more
services

We support **Göttingen Campus researchers** with services, training and consulting on research data management and eResearch topics

For Researchers

Find support in [planning your research data management](#), get information on how to [store](#), [share](#) or [publish your data](#), or identify other support or [partners on campus](#).

For Students

Become informed on how to request a [training event for your group](#), use our [training material](#) or learn about eResearch topics in our [Explain! section](#).

For Technical Staff

Check out our eResearch services in our [Service Catalogue](#) or find eResearch offers and solutions from [other organisations](#).

We are here to help you with ...

- > Know-how about storing, sharing, publishing or citing data
- > Organizing training measures on Research Data Management

On our pages you can find...

- > Information on available services in our service catalog
- > Policies and funders' requirements regarding research data management

GET IN TOUCH

www.eresearch.uni-goettingen.de

2.1 Division Library Medicine (SUB)

Dagmar Härter



NIEDERSÄCHSISCHE STAATS- UND
UNIVERSITÄTSBIBLIOTHEK GÖTTINGEN

Research, Data, Management: Data management basics and services for your daily research routine at the UMG

Angebote der Bereichsbibliothek Medizin
Support and Services at the Medical Library



GEORG-AUGUST-UNIVERSITÄT
GÖTTINGEN

BBM / SUB Göttingen



News

Service monitor & FAQ



First-time visitor?



Contact



Locations & facilities



Borrowing & renewing



SUB news

Scan & Deliver orders soon possible directly in the Göttingen University Catalogue (GUK)

To further simplify orders for the Scan & Deliver service, from tomorrow, Wednesday 29 April, you can order the desired scans simply via the [Göttingen University Catalogue \(GUK\)](#) with your user account. [Read more >](#)

Gradual opening of our locations

Good news everyone!
We are planning a gradual opening of our locations - of course in compliance with



Quick links

[Access e-journals & e-books](#)

[Additional and test offers](#)

At www.sub.uni-goettingen.de you can find all information regarding the SUB, including all service offers online and offline

Accessing electronic resources from home?

Elektronische Zeitschriftenbibliothek
Niedersächsische Staats- und Universitätsbibliothek Göttingen

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Zeitschrift **suchen** Erweiterte Suche

Zeitschriftenliste nach Fachgebiet

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Allgemeines, Fachübergreifendes	7533
Anglistik, Amerikanistik	1404
Archäologie	1217
Architektur, Bauingenieur- und Vermessungswesen	2319
Bildungsgeschichte	412
Biologie	5597
Chemie und Pharmazie	2926
Elektrotechnik, Mess- und Regelungstechnik	1581
Energie, Umweltschutz, Kerntechnik	2345
Ethnologie (Volks- und Völkerkunde)	1556
Geographie	1283
Geowissenschaften	2240
Germanistik, Niederländische Philologie, Skandinavistik	439
Geschichte	4817
Informatik	4041
Informations-, Buch- und Bibliothekswesen, Schrift- und Handschriftenkunde	1575
Klassische Philologie, Byzantinistik, Mittellateinische und neugriechische Philologie, Neulaten	518
Kunstgeschichte	2039
Land- und Forstwirtschaft, Gartenbau, Fischereiwirtschaft, Hauswirtschaft, Ernährung	4037
Maschinenwesen, Werkstoffwissenschaften, Fertigungstechnik, Bergbau u. Hüttenwesen, Verkehrstechnik, Feinwerktechnik	2350
Mathematik	2419
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Medizin	14989

Die Volltexte der Zeitschriften sind

- frei zugänglich
- für Angehörige der Uni Göttingen freigeschaltet
- nur für einen Teil der erschienenen Jahrgänge zugänglich
- nicht zugänglich, nur Inhaltsverz./Abstracts

[Nutzungsbedingungen](#)

You need to register once as user of the library system with your UMG staff card and receive a password

On the SUB homepage you can then access all electronic resources via the search bar, if you are logged in with your credentials (user number and password)

Receiving resources by email during lockdown

Scan & Deliver Service

The scan & deliver service for students, teachers and researchers at a glance:

- Electronic delivery of essays and sections of book as a scan to your university e-mail address
- Please enter all data requested in the form - only completely filled out forms can be processed
- You can place up to five orders per day
- Orders that will be used for teaching, e. g. via Stud.IP as well as orders essential for exams and theses will be prioritized over individual orders
- Articles and sections of book can only be scanned and sent to the extent specified by copyright law - one article per journal or 10% of an item

Participating libraries:

- Central Library
- Historical Library
- Forestry Divisional Library
- Cultural Studies Divisional Library
- Medical Library
- Physics Divisional Library
- Economics & Social Sciences Divisional Library

In the current situation, the SUB offers a Scan- and Delivery service for essays and book sections.

Please refer to the SUB page for ordering scans to your email-address!

<https://www.sub.uni-goettingen.de/en/copying-digitising/scan-deliver-dienst/#c15631>

Directly in the medical library: Courses in small groups on literature research and management

Lernunterstützende Kursangebote



Zotero Einsteigerkurs:
Literatur sammeln, verwalten, zitieren



PubMed Kurs:
Suche nach medizinischer Fachliteratur



Literaturrecherche und Suchstrategien:
Wo und Wie finde ich Was?



Endnote für Einsteiger:
Literaturverwaltung für den
wissenschaftlichen Arbeitsprozess

- At various dates and times of day
- Personal and individual consultation
- Provision of extensive course material
- All courses also available for self-learning as document downloads on the SUB homepage

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- [Bibliotheksralyie für Studierende der Politik-, Sozial- und Wirtschaftswissenschaften](#)
- [Kursunterlagen zum Herunterladen \(PDF 514 KB\): Einführung in die Literaturrecherche für Studierende der Sportwissenschaften](#)
- [Von der Literaturliste zum Buch: Information für Studienanfängerinnen und Studienanfänger der Wirtschaftswissenschaften \(PDF 1,5 MB\)](#)
- [Zotero-Kursunterlagen zum Herunterladen: Einführung in Zotero mit sozialwissenschaftlichen Beispielen](#)

Medizin

- [Bibliotheksralyie für die Bereichsbibliothek Medizin \(PDF 376 KB\)](#)
- [Endnote-Selbstlernkurs für Medizin-Studierende zum Herunterladen](#)
- [Endnote Self-Study Material for Medical Students \(PDF 648 KB\)](#)
- [Literaturrecherche für Medizin-Studierende: Wo Sie finden, was Sie suchen! \(PDF 1,3 MB\)](#)
- [PubMed for medical students \(PDF 2,5 MB\)](#)
- [PubMed für Medizin-Studierende \(PDF 3,2 MB\)](#)
- [Zotero-Kursunterlagen zum Herunterladen: Zotero-Selbstlernkurs für Medizinstudierende](#)
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Then scroll down to
„Medicine“

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- GWDG

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Letzte Änderung 25.10.2018

Open Access consultation

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SUB A - Z

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

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Open Access an der Universität Göttingen

Die Georg-August-Universität Göttingen (einschließlich der Universitätsmedizin) hat 2016 eine neue [Open-Access-Leitlinie](#) (PDF 1,9 MB), Seite 1895 - 1896, beschlossen und „verfolgt das Ziel, die wissenschaftlichen Ergebnisse ihrer Wissenschaftler und Wissenschaftlerinnen möglichst breit öffentlich zugänglich und nutzbar zu machen. Open Access bereitgestellte Publikationen lassen sich ohne Zugriffsbeschränkungen nutzen. Dies befördert unmittelbar und nachhaltig Forschungs- und Innovationsprozesse in Wissenschaft, Wirtschaft und Gesellschaft. ... Mandate wie das der Europäischen Kommission und des Europäischen Forschungsrates machen die Umsetzung von Open Access für alle geforderten Projekte verbindlich. Diese Leitlinie setzt einen allgemeinen Empfehlungsrahmen für Open Access an der Universität und ergänzt die von der Universität Göttingen verabschiedete Leitlinie zu Forschungsdaten.“
Die Leitlinie aus dem Jahr 2016 ersetzt die [Open-Access-Resolution](#) (PDF 248 KB) der Universität Göttingen von Dezember 2005.

Weitere Unterstützung bietet das Angebot der Göttingen eResearch Alliance. Sie berät Themen wie z. B. Forschungsdatenmanagement, Entwicklung von Datenstrategien für Forschungsprojekte u. ä. Darüberhinaus betreibt die SUB Göttingen ein Open-Access-Referat sowie einen Publikationsfonds. Sie engagiert sich in nationalen und internationalen Projekten wie [Confederation of Open Access Repositories \(COAR\)](#) und [OpenAIRE](#).

Das EU-Hochschulbüro der Universität Göttingen informiert auf seiner Internetseite detailliert über den [Open-Access-Pilot der Europäischen Union](#).

Auf unseren Webseiten finden Sie Informationen zu Fragestellungen wie

- [Open Access in den Disziplinen: Präsentation zu Open Access in der Universitätsmedizin Göttingen](#) (PDF 4,5 MB)
- Gibt es für das Publizieren in Open-Access-Journalen oder bei Verlagen Verlagsvereinbarungen oder Publikationsbeihilfen?
- Ich hatte der SUB Göttingen für meine Publikationen eine Rechteübertragung vor 2007 übertragen und möchte hierzu nochmals die Infos nachlesen?
- [Wo finde ich was](#) zum Thema Verlagspolicies?

Sabine Witt



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37073 Göttingen
Germany
+49 551 39-5290 (Tel.)
witt@sub.uni-goettingen.de

On the SUB homepage, click on „Electronic Publishing“ -> „Open Access“

Here you can find all our service and offers on the topic of publishing Open Access

Also to use for free: The library's makerspace



3D printer for testing purposes

3D anatomy table for virtual dissection



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- **By phone: 39-8395**
- **By email: bbmed@sub.uni-goettingen.de**



2.2. Computing Services (GWDG)

Prof. Dr. Philipp Wieder



Erhalten Sie dynamische Rechenleistung, Anwendungen oder IT-Dienste, die mit Ihren Anforderungen wachsen.

GWDG CLOUD SERVER

Philipp Wieder

Gesellschaft für wissenschaftliche Datenverarbeitung mbH

- **Founded 1970 – Public authority: Göttingen University & Max Planck Society**
- **Operation of Computing Center, parallel computers, networks, Campus-WLAN**
- **125 Employees, > 20.000 WLAN devices online per day, certified acc. to ISO 9001**
- **IT-research institution**
 - Leadership and Participation in national and international research projects
 - Research Leitung- und Mitarbeit in nationalen und internationalen Forschungsprojekten
 - Research foci:
 - Data management & electronic research infrastructure
 - Virtual research environment & innovative digital tools
 - Data analysis, visualisation and big data technologies
 - Cloud Computing
 - Next-Generation Networking



SERVICES

Storage Services

- Data Archiving
- Backup
- File Service
- GWGDG ownCloud
- Cryptshare

E-Mail Collaboration

- E-Mail-Service (MS Exchange 2016)
- Spam and Virus Filtering
- Mailing Lists
- MS Sharepoint
- Managed Services
- Project Management Service
- GWGDG Pad
- ShareLaTeX
- Rocket.Chat
- GWGDG Web-Office
- GitLab

Server Services

- Virtual Server
- Housing of Servers
- Web Hosting
- GWGDG Cloud Server
- FTP-Server

Network Services

- IP Address Management System
- System Monitoring
- Setting up eduroam
- Integration into the Active Directory
- User Management with OpenLDAP
- Client Management for Windows
- Client Management for macOS and iOS

Application Services

- Persistent Identifier (PID)
- High Performance Computing
- Library Service Aleph
- Library Service Koha
- Databases
- Application and Registration Services
- Plagiarism Prevention
- Online Surveys
- Bioinformatics Programs
- Statistics Programs
- Jupyter
- Pseudonymisation and Data Trusteeship

IT Security Services

- Vulnerability Scans on Network-attached Equipment
- Public-Key-Infrastructure (PKI)
- Virus Protection (Sophos Update Service)

General Services

- Videoconferencing
- Identity and Access Management [MPG]
- Identity and Access Management [Uni]
- Single Sign-on (SSO) /Authentication and Authorization Infrastructure (AAI)
- Software and Licence Management
- Computer Lending Pool
- General Services - Print & Scan Services

IT Consulting

- Scientific Data Management
- IT Security
- Hardware Purchase
- Apple Support Centre
- Establishing Directory Services (AD, LDAP)
- Planning of Data Transmission Networks

Example Infrastructure GWDG Cloud Server



„Virtual“ Computer for researchers, working groups and projects

- **Computer per self-service**
- **Suited for arbitrary applications**
- **Allocatable in different sizes**
- **Complete control over virtual computer**
- **Own IP address**
- **Operated in Göttingen**

Our Private Cloud for your dynamic, safe and scalable computing power

Server	Processor	Memory	IP Address
 1 / 3	 2 / 12	 8.0 / 24.0 GB	 1 / 3
Create your own virtual machines and use up to 3 servers for your applications	Choose the computing strength of your machine and assign up to 12	Assign up to 24.0 GB of memory to your virtual machine to match your	Grant world wide access to your virtual machine by assigning a public ip

Compute optimized

c1.small	c1.medium	c1.large	c1.xlarge	c1.xlarge
 2 Cores 2 GB RAM 20 GB Disk	 4 Cores 4 GB RAM 40 GB Disk	 8 Cores 8 GB RAM 80 GB Disk	 16 Cores 16 GB RAM 160 GB Disk	 16 Cores 16 GB RAM 160 GB Disk

Images

 CentOS CentOS 6.6 Server x86_64	 CentOS CentOS 7.1 Server x86_64	 Debian Debian 7.8 Server x86_64
 Fedora Fedora 20 Desktop GNOME x86_64	 Fedora Fedora 20 Desktop KDE x86_64	 Fedora Fedora 20 Server x86_64
 openSUSE openSUSE 13.1 Desktop GNOME x86_64	 openSUSE openSUSE 13.1 Desktop KDE x86_64	 openSUSE openSUSE 13.1 Server x86_64
 Scientific Linux Scientific Linux 6.8 Server x86_64	 Scientific Linux Scientific Linux 7.1 Server x86_64	 Ubuntu Ubuntu 12.04.5 LTS Server x86_64

Example collaborative work A selection



Kollaboration

- Hosted, private wiki (*eMail to support@gwdg.de*)
- Own Mailinglists: www.gwdg.de
- Cooperative work on texts: pad.gwdg.de
- Sharing documents: owncloud.gwdg.de / cryptshare
- Online work on Office documents: owncloud.gwdg.de
- Live cooperative work on LaTeX-Documents: sharelatex.gwdg.de
- Internetchats (like ICQ): jabber.gwdg.de
- Web- / Team-Chats (like Slack): chat.gwdg.de
- Software development / Project management: gitlab.gwdg.de

Administration of projects and software development

- Web-based project management with large choice of functionalities for supporting the project life cycle
- Features
 - Wiki
 - Management of tasks
 - Time management
 - Document repository
 - User management
- Integrated Git- and SVN-Repository for software development
- Integration into own development environment possible
- Project areas, in which you can create or manage projects by yourself
- projects.gwdg.de

Example collaborative work

Video conferencing



Diverse solutions and platforms

VIDEOCONFERENCING

The general GWGD offer for videoconferencing is the DFNconf service. It is operated by the DFN-Verein, of which the GWGD, MPG, and the University of Göttingen are members.

Currently, however, there are performance bottlenecks due to the strongly increased usage, so that the DFNconf service is not available in the usual stable manner. More information, also regarding the utilization of the service due to the current COVID-19 situation, can be found on web pages of the the DFN-Verein: <https://www.conf.dfn.de>.

The GWGD has therefore decided to include alternative offers in its portfolio in order to bridge this phase for customers and provide suitable solutions. These are commercial, payed cloud offers where the information leaves our own jurisdiction. We can therefore not guarantee data protection and these services are not permitted for sensitive and/or personal data. We ask you to take this into account when using them.

Community solutions operated by the GWGD

- **BigBlueButton** (operated by the GWGD): After a successful test operation at the GWGD, a new production operation has been setup under <https://meet.gwdg.de/>; Suitable for groups of up to 100 participants. Currently, telephone dial-in under first test. Higher stability than Jitsi.
- **DFNconf** (operated by DFN-Verein): Currently only limited use.
- **Jitsi** (operated by GWGD): Open source solution, suitable for videoconferencing with smaller numbers of participants. With more than 10 participants the quality fluctuates. A GWGD hosted version of Jitsi might come back in the future. We currently offer **BigBlueButton** instead.

Commercial, external platforms

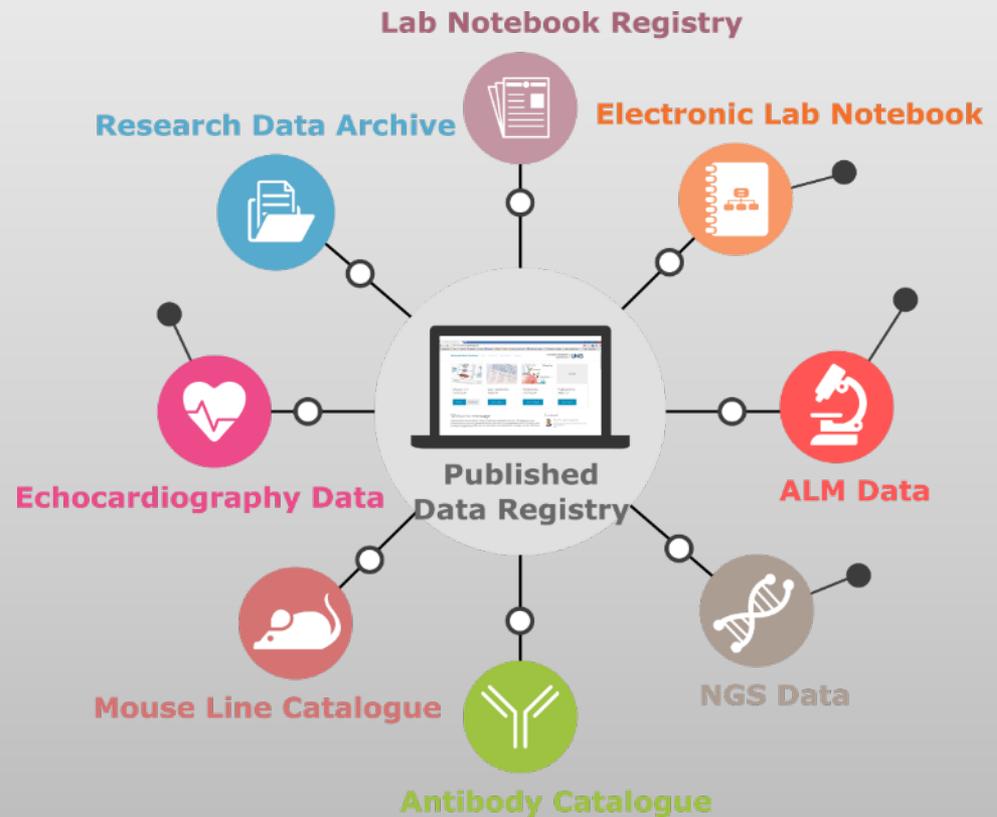
- **Zoom**
 - Cloud-based, critical in terms of data protection, scales well for larger subscriber numbers.

– Table of Contents

- Videoconferencing
 - Community solutions operated by the GWGD
 - Commercial, external platforms
 - Evaluation and recommendations especially for the University of Göttingen
 - Assessment for courses
 - Alternatives
 - Microsoft Teams
 - Limitations and challenges
 - Media server of the GWGD

Support of researchers from different disciplines

- **Goals**
 - Traceability
 - Transmission of data to community repositories
- **Collection & Documentation of**
 - Publications
 - ALM data
 - NGS data
 - Supersonic data
- **Connection of**
 - Publications
 - Antibodies
 - Lab notebooks
 - Mouse-Genome-Lines



Your personal contact with us



+49 551 201 1523

Contact our hotline



support@gwdg.de

Send us an email and we will contact you soon



support.gwdg.de

Check your tickets
(Account required)



www.gwdg.de/docs

www.gwdg.de/faq

Docs & FAQ



New here?

A brief overview of frequently asked questions

[Request account](#)

[Change password](#)

[Check email](#)

[Wi-Fi \(eduroam\)](#)

[Download Antivirus Software](#)

[Print](#)

[Buy Software](#)

[Courses](#)

3. Ethikkommission at the UMG

Judith Friedrich

Information event „Research Data Management and Central Service Facilities at the UMG“

- ▶ Office of the “Ethik-Kommission”
(ethics committee)
- ▶ Where? → Von Siebold-Str. 3
- ▶ When? → Monday-Friday
→ 9:30-12:00



Info-Veranstaltung
"Datenmangement und Service-
Einheiten an der UMG"

„Ethik-Kommission“

- ▶ Purpose of the Ethik-Kommission (What does the Ethik-Kommission do?)

→ The Ethik-Kommission is an independent body whose purpose is to evaluate the ethical and legal aspects of biomedical research involving human subjects. As laid down in the Declaration of Helsinki, also research projects **involving patient data** have to be approved by an research ethic committee.

- ▶ Responsibility of the Ethik-Kommission of the UMG

→ The Ethik-Kommission of UMG is responsible for members and dependants of the Medical Faculty of Göttingen and its teaching hospitals.

Ethik-Kommission

- ▶ Method of operation (How does the Ethik-Kommission work?)
 - The Ethik-Kommission only reacts to applications by giving an evaluative statement.
 - Holds a non-public meeting once a month
 - Gives a written notice to the applicant of its decision

The Ethik-Kommission consists of:

- ▶ 9 members and some deputies
- ▶ medical doctors, paramedical staff, experts in statistics and ethics, lawyers
- ▶ all members act on a voluntary basis

Persons of contact

- ▶ Chairman: Prof. Dr. Brockmüller
- ▶ Manager: Mrs. Wettschereck

- ▶ Contact persons

for “other” studies and studies involving medical devices

Mrs. Dr. Friedrich
Mr. Langer

- ▶ Secretary: Mrs. Gödicke

Studies (1)

- ▶ **AMG**–Studies (studies involving pharmaceuticals)
Studies regulated by “Arzneimittelgesetz”

- ▶ **MPG**–Studies (studies involving medical devices)
Studies regulated by “Medizinproduktegesetz”

Studies (2)

▶ “other Studies”

- Research projects with “Beratungspflicht” by MBO (Operating researchers are obliged to consult the Ethik-Kommission’s advice)
- Possibility of accepting the vote of another Ethik-Kommission (Übernahmevotum)
- Retrospective data analysis studies: possibility of a shortened approval process

Comprehensive consultation:

- ▶ Make an appointment 😊
- ▶ For further information, please refer to our website:

www.ethikkommission.med.uni-goettingen.de

4. Datenschutzbeauftragter der UMG

Dr. Thomas Langbein

Research and Data Protection

Germany's constitution (GG):

- 1. Derived from Art 1 and 2 → Right of informational self-determination**
- 2. Freedom of Research and Teaching, Art 5(3) GG**



Personal data are subjected to the national Laws of data protection and – since 25th of May 2018 – also European legislation

Research and Data Protection

Laws:

- **German Data Protection Act (BDSG)**
- **Federal Data Protection Laws (e.g. NDSG)**
- **European General Data Protection Regulation (GDPR/ EU-DSGVO)**



On principle: Processing of personal data is prohibited ... except it is allowed by other laws or regulations OR by permission of the person concerned. („Prohibition with Reservation of authorisation“)

Research and Data Protection

But: There are special facilities for research projects!

DSGVO: Article 89 *Safeguards and derogations relating to processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes* (Link: <https://gdpr-info.eu/art-89-gdpr/>)

Lower Saxony Law of Data Protection (NDSG): § 13
Processing of personal data in research projects

(Link: http://www.voris.niedersachsen.de/jportal/portal/t/124p/page/bsvorisprod.psm1/action/portlets.jw.MainAction?p1=j&eventSubmit_doNavigate=searchInSubtreeTOC&showdoccase=1&doc.hl=0&doc.id=jlr-DSGND2018pP13&doc.part=S&toc.poskey=#focuspoint)

German Law of Data Protection (BDSG neu): § 27 – Data processing for scientific or historical or statistical purposes

(Link: <https://dejure.org/gesetze/BDSG/27.html>)

Research and Data Protection

Declaration of confidentiality *(see page 6)*

Data access agreement *(see page 7)*

TMF-Working Groups to data
protection in research projects

(Link: http://www.tmf-ev.de/Arbeitsgruppen_Foren/AGDS.aspx)

Research and Data Protection

Declaration of confidentiality

VERPFLICHTUNG AUF DIE VERTRAULICHKEIT

Im Rahmen der Dokumentations- und Nachweispflichten des Art. 5 Abs. 2 DS-GVO (Accountability) ist die Verpflichtung der zur Verarbeitung befugten Personen auch weiterhin als probates Mittel anzusehen, um die Einhaltung datenschutzrechtlicher Vorschriften von vornherein zu gewährleisten. Dies zeigt sich unter anderem am Regime der Auftragsverarbeitung (AV), welches in Art. 28 Abs. 3 lit. b DS-GVO die Verpflichtung auf die Vertraulichkeit zumindest beim Dienstleister ausdrücklich als Pflichtinhalt des AV-Vertrages vorsieht.

Darüber hinaus legt Art. 32 Abs. 4 DS-GVO fest, dass sowohl Verantwortliche als auch Auftragsverarbeiter Schritte zu unternehmen haben, um sicherzustellen, dass die unterstellten Personen mit Zugang zu personenbezogenen Daten nur auf Anweisung des Verantwortlichen tätig werden. Art. 29 DS-GVO bezieht sich ebenfalls auf diese eindeutig weisungsabhängige Verarbeitung. Hierzu gehört es, unmissverständlich auf die Bedeutung und den Umfang datenschutzrechtlicher Regeln hinzuweisen und Mitarbeitern etwaige Risiken von Gesetzesverstößen vor Augen zu führen.

Der Bundesgesetzgeber hat im Rahmen der Umsetzung der Richtlinie 2016/680/EU für den Datenschutz in Polizei und Justiz an der förmlichen Verpflichtung festgehalten. § 53 BDSG n.F. verwendet insoweit sogar den hergebrachten Begriff des Datengeheimnisses. Was im öffentlichen Bereich recht ist, kann daher im nicht-öffentlichen Bereich nur billig sein.

Bei berufs- und standesrechtlicher Verschwiegenheitspflicht ist das Weglassen einer Verpflichtung für mitwirkende Personen gem. § 203 Abs. 4 Satz 2 Nr. 1 StGB ggf. sogar strafbewehrt, falls die mitwirkende Person unbefugt fremde Geheimnisse offenbart.

Research and Data Protection

Data access agreement

Datenzugriffsvereinbarung/2017

Bitte ausgefüllt (Seite 1-2) an den Datenschutzbeauftragten senden. Falls keine Rückfragen sind, erhält der Antragstellende Seite 1 zurück und kann damit im Zentralarchiv die benötigten Patientenakten anfordern bzw. bei elektronischem Zugriff einen Ixserv-Account im G3-7 Informationstechnologie (Sachgebiet Klinische Systeme) beantragen.

An den
Datenschutzbeauftragten der Universitätsmedizin Göttingen

Telelift 142

Per Fax: 39 - 12726 Als gescanntes Dokument (PDF) an: datenschutz@med.uni-goettingen.de

1. Persönliche Daten des/der Antragstellenden

Name		
Privatanschrift		
Telefon/E-Mail		
Abteilung/Klinik		

2. Thema des Forschungsvorhabens:

3. Zweck: Promotion Habilitation Sonstiges Forschungsvorhaben

4. Folgende Patientendaten werden benötigt (z.B. Patienten der Klinik...Zeitraum...Diagnose ...):

→ weiter mit Nr.5

Unterschrift des Datenschutzbeauftragten

Unterschrift der Archivleitung bzw. der Leitung der speichernden Stelle

Research and Data Protection

Keep in contact



Dr. Thomas Langbein

David A. Hunt

Tel.: 39-22762

E-Mail: datenschutz@med.uni-goettingen.de

5. Core facilities at UMG

Dr. Marie Hedderich

3. Core Facilities at the UMG



Research, Data, Management: Data management basics and services for your daily research routine at the UMG

Central and Scientific Core Facilities

Central Core Facilities

Central Animal Facility (*Dr. Riedesel, sekretariat.zte@med.uni-goettingen.de, 39-63902*)

Biobank (*PD Dr. Nußbeck, sara.nussbeck@med.uni-goettingen.de, 39-65701*)

Scientific Workshop (*Mr. Lott, clott@gwdg.de, 39-4119*)

Scientific Core Facilities

NGS-Serviceeinrichtung für Integrative Genomik (NIG)

(*Dr. Salinas, gsalina@gwdg.de, 39-60778*)

Proteomics (*Dr. Lenz, proteomics.ms@med.uni-goettingen.de, 39-65192*)

MR-Research (*PD Dr. Dechent, mrserviceeinheit.sekretariat@med.uni-goettingen.de, 39-13141*)

Medical Biometry and Statistical Bioinformatics

(*Dr. Leha, andreas.leha@med.uni-goettingen.de, 39-4987*)

Cell Sorting (*Prof. Wulf, cellsorting@med.uni-goettingen.de, 39-12772*)

Central and Scientific Core Facilities

Two new Scientific Core Facilities

- ▷ **UMG Medical Data Integration Center (MeDIC) - research data**
- ▷ **Research-MR for cardiovascular imaging**

Information event for researchers at the UMG



***Come and get to know the contact persons
and services!***

Expected: *November 2019*

Where to find information?

<https://www.umg.eu/forschung/science-support/wissenschaftliche-infrastruktur/serviceeinrichtungen/>

The screenshot shows the UMG website's 'Serviceeinrichtungen' page. At the top, there is a navigation bar with 'UMG' and various menu items. Below the navigation bar, the page title 'Serviceeinrichtungen' is displayed. The main content is organized into two sections: 'Zentrale Serviceeinrichtungen' and 'Wissenschaftliche Serviceeinrichtungen'. Each section contains several cards, each with a representative image and a brief description of the service. For example, the 'UMG Biobank' card features an image of test tubes and describes the bank's role in providing high-quality biomaterials. The 'Wissenschaftliche Werkstätten' card shows laboratory equipment and mentions services for research and teaching. The 'Zentrale Tierexperimentelle Einrichtung (ZTE)' card includes an image of laboratory animals and provides information on further details and contacts. The 'Wissenschaftliche Serviceeinrichtungen' section includes cards for 'Transkriptomanalyselabor – Deep-Sequencing Core Facility', 'Proteomanalyse', 'MR-Forschung in der Neurologie und Psychiatrie', 'Medizinische Biometrie und Statistische Bioinformatik', 'Cell Sorting', and 'Medizinisches Forschungs-Daten-Integrations-Centrum'. Each card has a 'Mehr lesen' button.

- Contact details
- User regulations
- User fees
- Catalogue of services
- Application form

Please contact the facilities in advance to plan and calculate the costs of the experiment!

Application for flat-rate user fees and costs for keeping laboratory animals

DFG-Vordruck 55.03 – 03/15

Seite 1 von 1

Hinweis

Richtwerte für die Beantragung von Tierkosten

guide values for basic animal husbandry:

- 0,70 € per mouse/week
- 1,40 € per rat/week

separate application for animal purchase

DFG-Vordruck 55.04 – 06/16

Seite 1 von 12

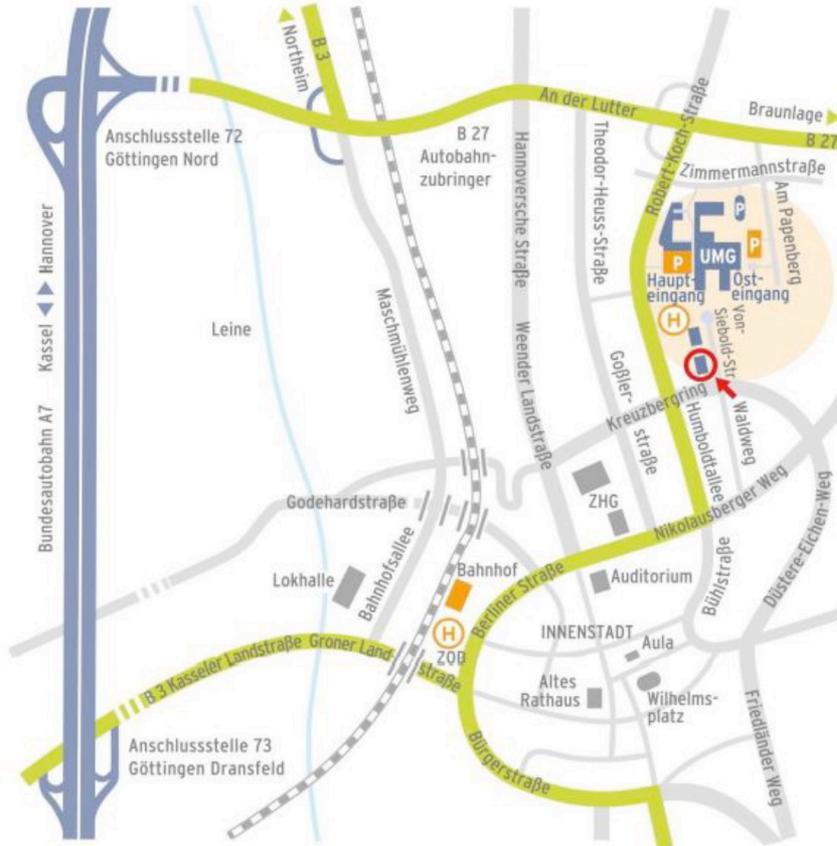
Hinweise

zu Gerätenutzungskosten und zu Gerätezentren

- Magnetic resonance imaging
- Mass spectrometry
- Advanced light microscopy
- Electron microscopy
- NMR spectroscopy
- Flow cytometry

It can only be applied for project-specific costs!

Contact Details – Forschung und EU-Büro



Forschung und EU-Büro
 Von-Siebold-Str. 3, 37075 Göttingen
forschung@med.uni-goettingen.de

6. Advisory services at the Department of Medical Informatics

Dr. Harald Kusch

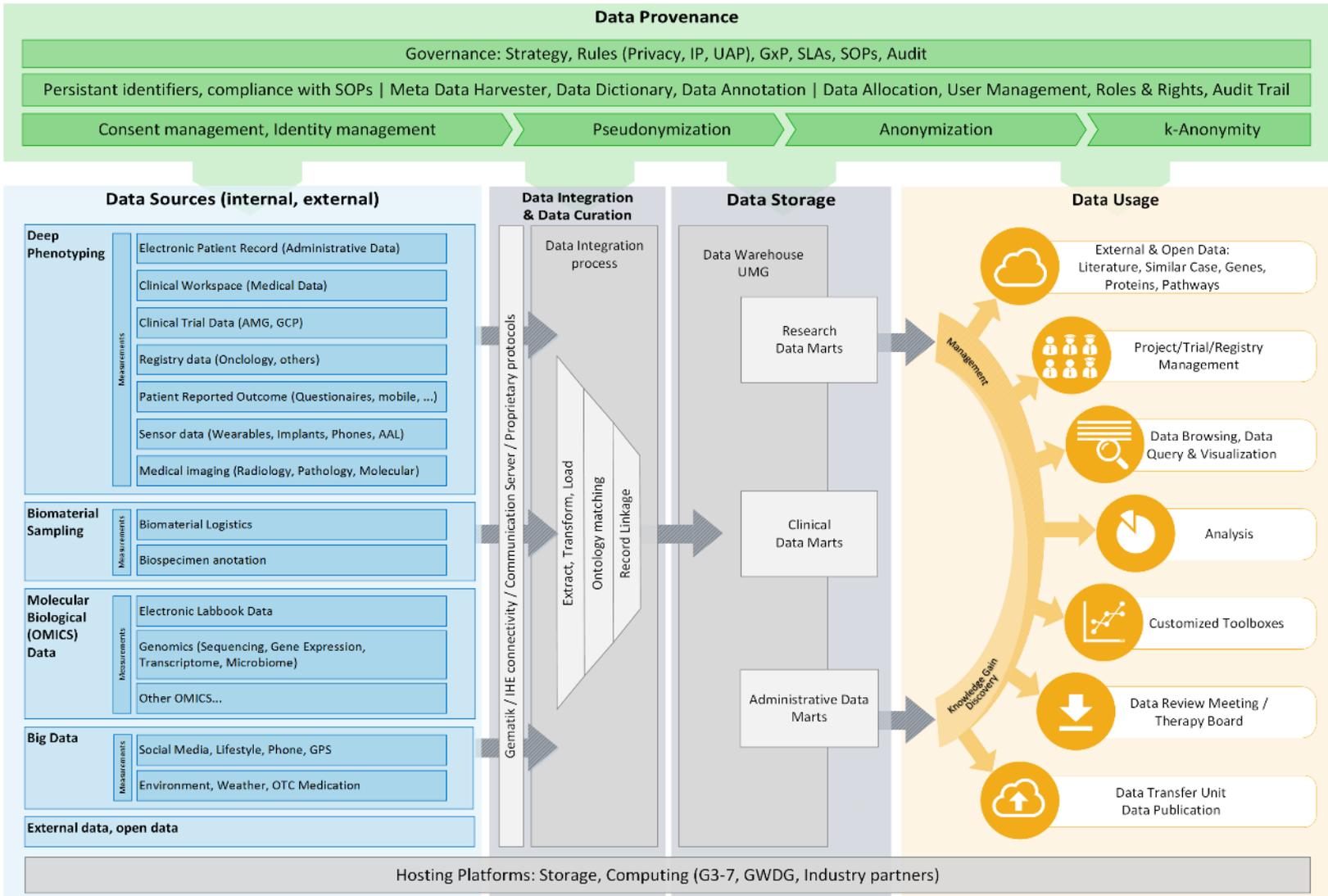
mi.med.uni-goettingen.de



Advisory services at Department of Medical informatics

- Support for design of scientific studies in coordination with Med. Statistics, KSM or other service facilities at Göttingen Campus
- Provision of information infrastructures in cooperation with computing centers, external research institutions, biobanks etc.
- Open for all institutions, working groups and PhD students
- Open also for national or international research partners or consortia

Hard- und software infrastructure



Example services

- Clinical Case Study: Investigation of rare cases in the children's hospital
- Pseudonymization of sensitive patient data: Multiple sclerosis
- Disease registers: European multiple sclerosis register (EUReMS)
- OMICS Data management: Systems medicine-consortia sysINFLAME, Deutsches Zentrum für Herz- und Kreislaufforschung (DZHK)
- Long-term analysis of data: Nationales Demenz-Netz
- IT-infrastructures for stem cell-research: DZHK
- INF-project of a Collaborative Research Center: Cardiology CRC 1002
- National consortia: Psychiatrie Netzwerk, Deutsches Zentrum für Herz- und Kreislaufforschung

Contact persons at Department of Medical Informatics

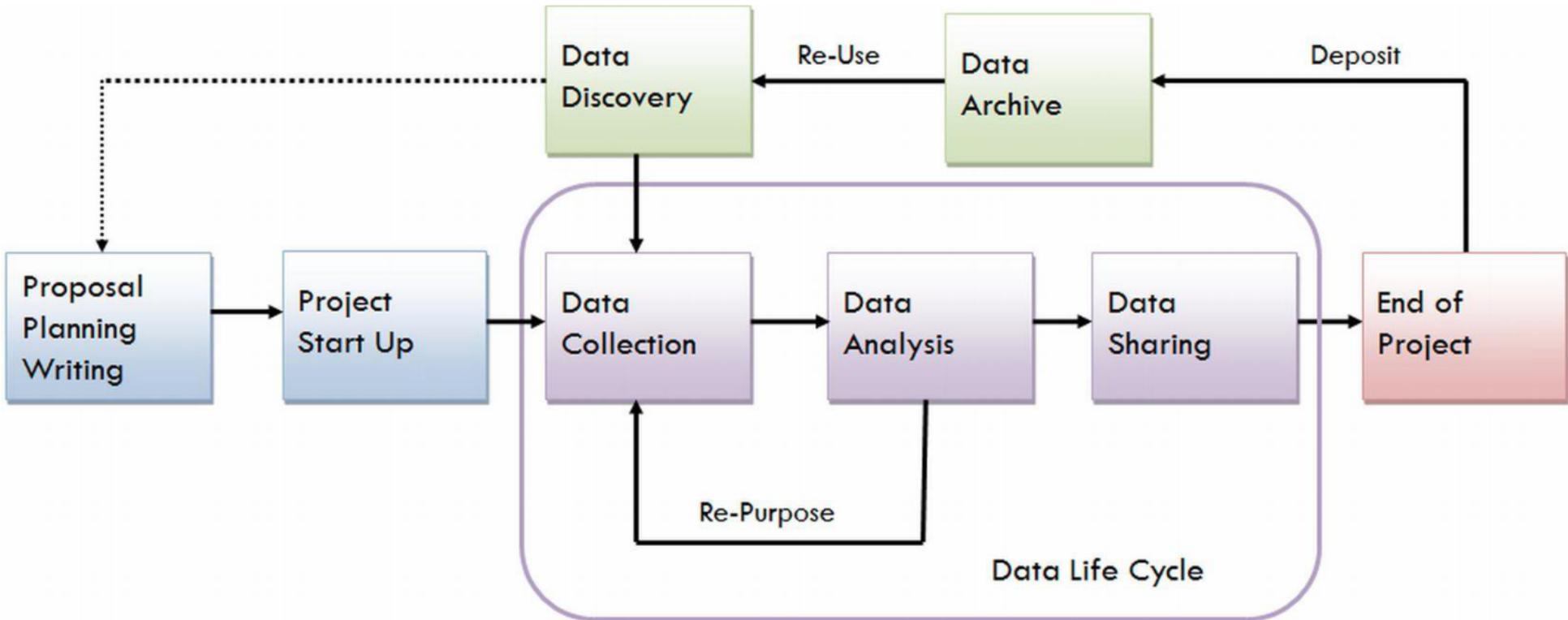
Prof. Dr. Dagmar Krefting	Head of Department
Prof. Dr. Ulrich Sax	IT-infrastructures for translational research
Sabine Hanß	IT-infrastructures for clinical collaborative research
Prof. Dr. Tibor Kesztyüs	Medizinisches Forschungs-Daten-Integrations-Centrum (UMG-MeDIC)
Kerstin Pischek-Koch	Intersectoral research
Dr. Harald Kusch	IT infrastructures in biomedical basic research
	Contact to Göttingen eResearch Alliance



7. Core Facility

Medical biometry and Statistical Bioinformatics

Dr. Andreas Leha



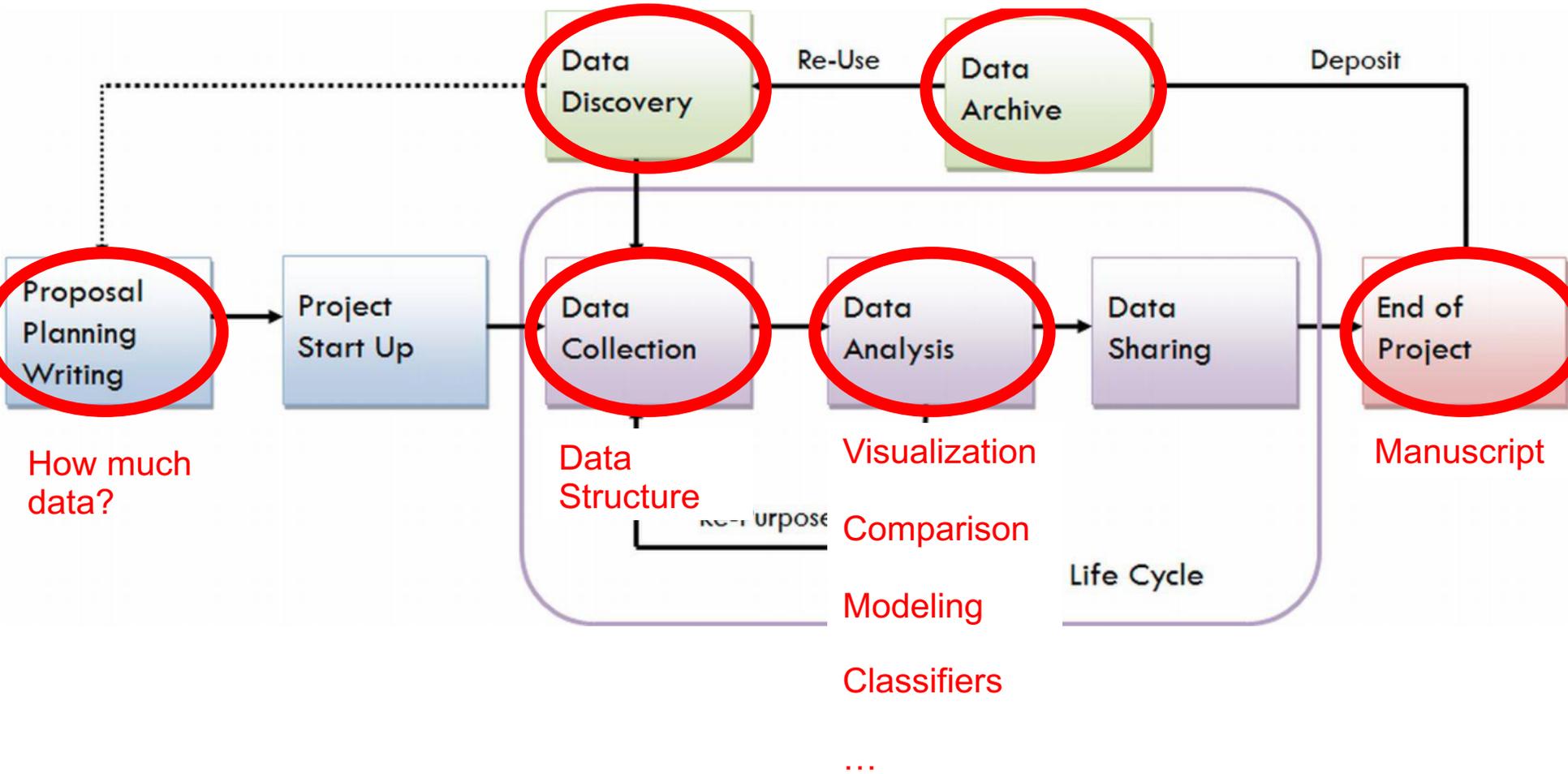
MetaAnalyses

Zenodo+github

Public
Repositories
(e.g. TCGA)

GEO / SRA

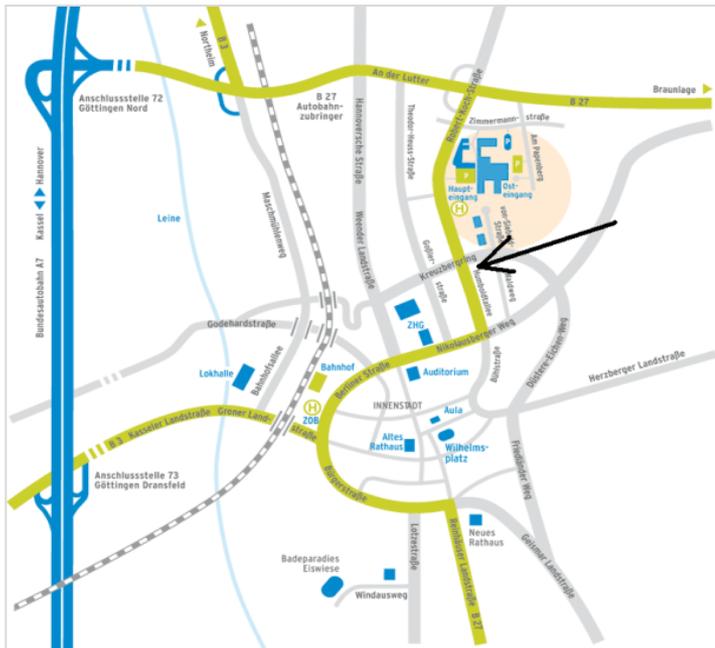
PRIDE



Core Facility

Medical Biometry and Statistical Bioinformatics

Contact



University Medical Center Göttingen
Department of Medical Statistics

37099 Göttingen **Mailing Address**
Humboldtallee 32, 37073 Göttingen **Address**
0551 / 39-4987 **Phone**
0551 / 39-4995 **Fax**

service.biometry.bioinformatics@med.uni-goettingen.de **E-Mail**
www.ams.med.uni-goettingen.de/service-en.shtml **Website**

Core Facility

Medical Biometry and Statistical Bioinformatics

Short consulting

- ▶ Help with short questions concerning biostatistical or bioinformatical methods
- ▶ **Tuesday, 1pm – 3pm**
at the Department of Medical Statistics, Humboldtallee 32
- ▶ Can be visited without prior appointment



Core Facility

Medical Biometry and Statistical Bioinformatics

Coached working

- ▶ Assistance with statistics- and bioinformatics-software
- ▶ Location:
 - ▶ CIP-pool of the Department of Medical Statistics
 - ▶ Learning Ressource Center (Medical Library)
- ▶ No prior appointment necessary
- ▶ Time schedule available at the departments website



Core Facility

Medical Biometry and Statistical Bioinformatics

www.ams.med.uni-goettingen.de

► Coached working

Home German Sitemap Disclaimer (German)

UNIVERSITÄTSMEDIZIN GÖTTINGEN **UMG**

Aa+ Aa Aa-

ams

Contact

Department of Medical Statistics
Humboldtallee 32
D-37073 Goettingen

Head of Department
Prof. Tim Friede
Office:
Dorit Meyer
TEL: 0551-39-4990
FAX: 0551-39-4995
E-Mail:
Sekretariat.AMS@med.uni-goettingen.de

News

[Calendar Coached Working](#)

[Calendar NGS Consulting](#)

06 - 07. Dez. 2018 - Workshop
"Bayesian methods ..."

About us | **Research** | **Teaching** | **Staff** | **Services**

Medical Statistics

Welcome to the Department of Medical Statistics

Dear guests and colleagues!

The activities of the Department of Medical Statistics include clinical cooperations that we see through from grant applications to publications, a biostatistical advisory service for doctoral students and early career scientists, research in statistical methodology and teaching. More detailed information on these topics can be found on this homepage under the corresponding headers.

The current organisational structure of the Department includes two working groups. These are "Statistical Bioinformatics" led by Prof. Tim Beißbarth and "Clinical Trials" led by Prof. Reinhard Hilgers and myself. Furthermore, the **Core Facility Medical Biometry and statistical Bioinformatics** is based at the Department.

Different main research areas with special expertise and experience have been established within the last years - as **Nonparametric Statistics**, **Systematic Reviews and Meta-Analyses** and **Statistical Methods for Infectious Diseases** .

Further details on the structure of the Department are given in [the organisational chart](#).

If you have any questions or comments, please do not hesitate to contact us.

With best regards

Tim Friede
Professor of Biostatistics
Chair, Department of Medical Statistics

About us

- Structure of Department
- Travel Directions
- Publications
- Jobs
- External links

Find us on Facebook

M. Sc. Studiengang "Applied Statistics"

- deutsch
- englisch

Core Facility

Medical Biometry and Statistical Bioinformatics

► Coached working

Unser Service „Betreutes Arbeiten“ dient der direkten Unterstützung am Computer bei der Auswertung Ihrer medizinischen und experimentellen Daten. Das „Betreute Arbeiten“ findet entweder im CIP-Raum des Instituts für Medizinische Statistik oder im LRC in der Bereichsbibliothek Medizin statt (siehe aktueller Plan).

[Bearbeiten](#)

Aktueller Belegungsplan

Belegungsplan CIP-Raum folgende Woche & LRC

[Drucken](#)

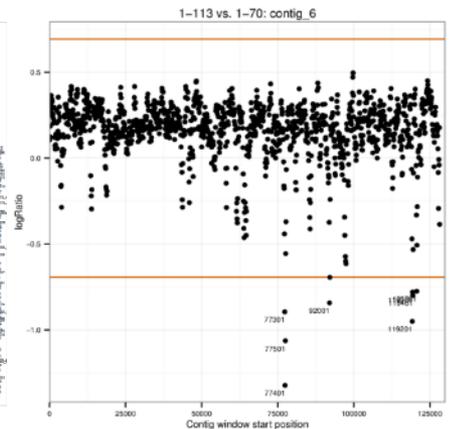
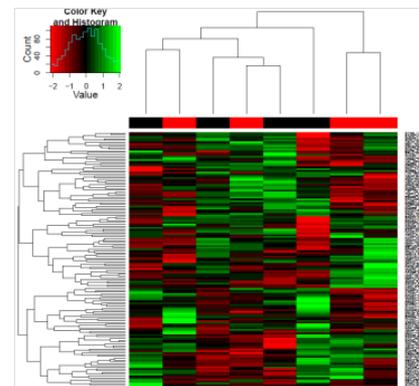


Core Facility

Medical Biometry and Statistical Bioinformatics

Project-related support

- ▶ We can carry out the biometrical and bioinformatical **planning** and **analysis** of your scientific experiments and studies:
 - ▶ Design of experiments, sample size planning
 - ▶ Statistical analysis
 - ▶ Bioinformatics analysis (e.g. array-, proteomics- and NGS-data)
 - ▶ Reporting of results

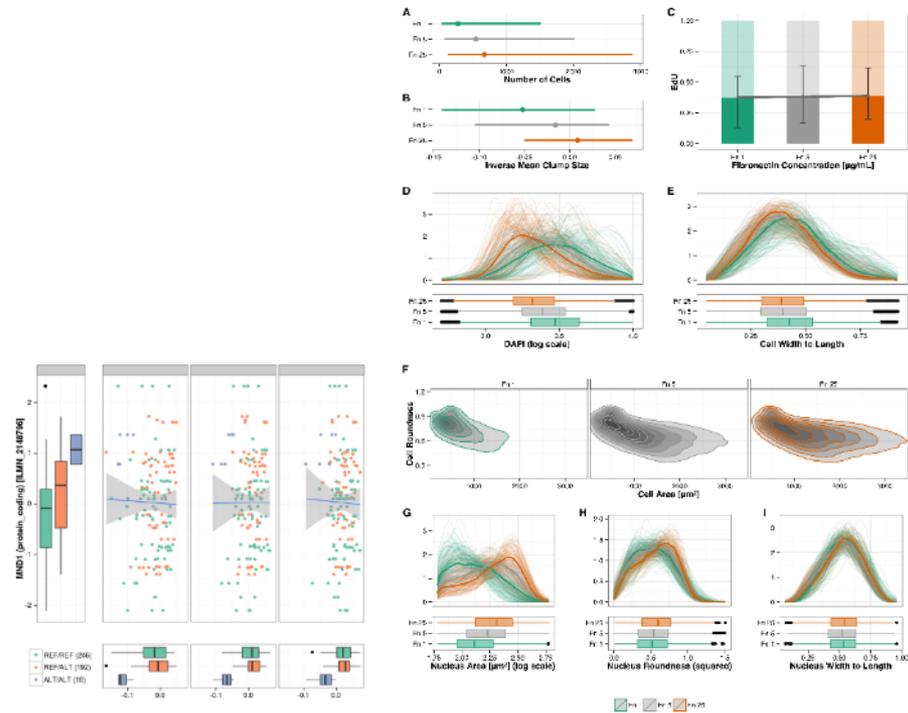


Core Facility

Medical Biometry and Statistical Bioinformatics

Project-related support

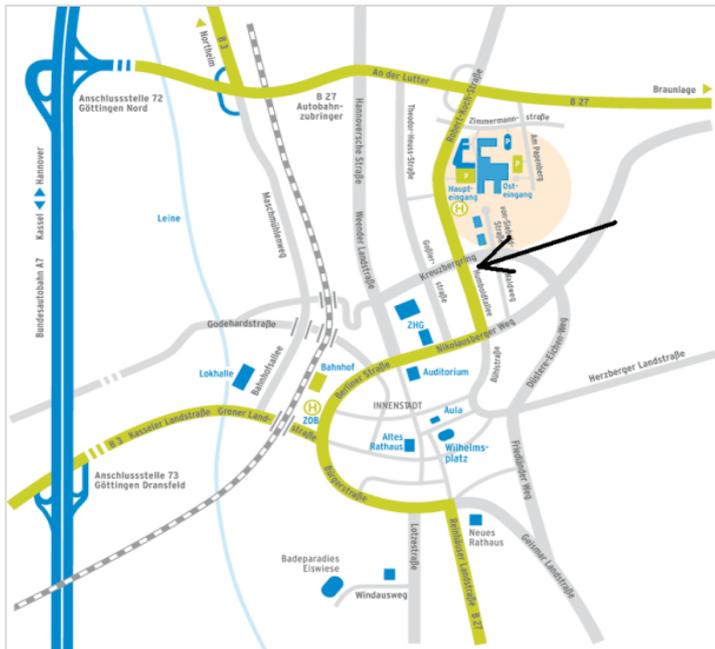
- ▶ We recommend early involvement (i.e. already in the planning phase)
- ▶ Appointment via our web form preferred (department homepage)
- ▶ There will be an invoice
 1. Discussion of project
 2. Cost estimate based on time effort
 3. Service request



Core Facility

Medical Biometry and Statistical Bioinformatics

Contact



University Medical Center Göttingen
Department of Medical Statistics

37099 Göttingen **Mailing Address**
Humboldtallee 32, 37073 Göttingen **Address**
0551 / 39-4987 **Phone**
0551 / 39-4995 **Fax**

service.biometry.bioinformatics@med.uni-goettingen.de **E-Mail**
www.ams.med.uni-goettingen.de/service-en.shtml **Website**

8. Services of the central UMG Biobank

PD Dr. Sara Nußbeck

7. Services of the Central Core Facility UMG Biobank



PD Dr. Sara Nußbeck, Head of UMG Biobank

WHAT IS A BIOBANK?

- Centralized core facility at the UMG
- Logistics unit for standardised storage of biomaterials and accompanying data

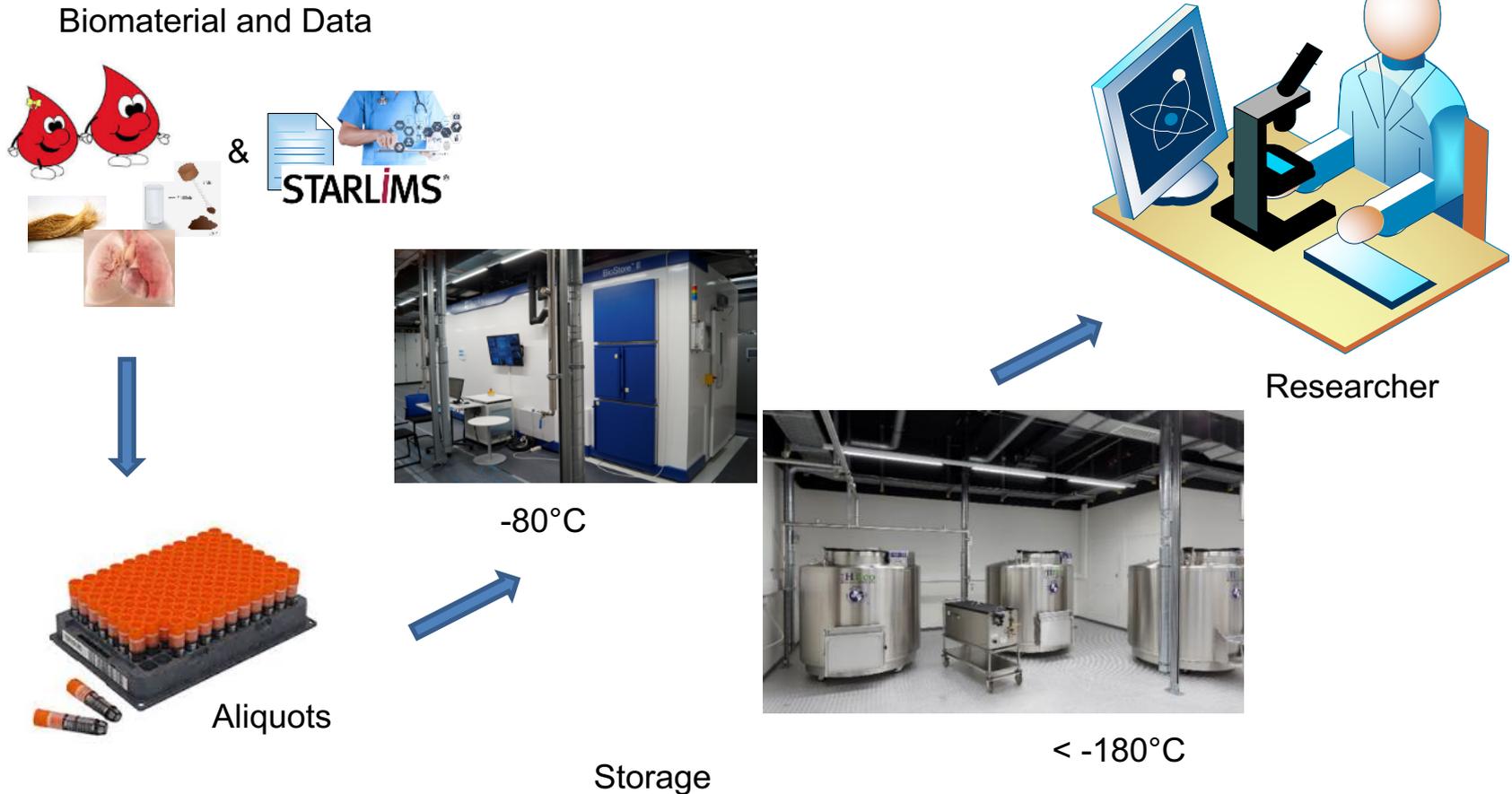


Automated storage at -80°C



Manual storage in vapor phase of LN_2

WORKFLOWS OF A BIOBANK



AIM

The aim of the UMG Biobank is to support biomedical research by providing high quality data and samples.

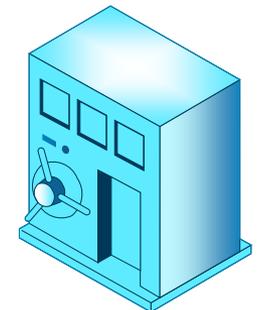
Three ways to **get in contact** with the UMG Biobank:

1. Donors / Patients provide biomaterial for research purposes
2. Independent researcher with own research proposal / project*
3. (Researcher in a clinic or department / project collaborating with the UMG Biobank – sample request from collection strategy)

* <http://www.biobank.med.uni-goettingen.de/de/content/forscher/226.html>

SERVICES

- Advise on sample quality and handling
- Advise on data management
- Sample processing, storage and management
- Provision of samples and data
-



IMPRESSIONS



ethics

IT systems and interfaces

automation

standardised workflows

frame work documents

backup strategies

CONTACT DETAILS AND MORE INFORMATION



biobank@med.uni-goettingen.de
www.biobank.med.uni-goettingen.de

Consultation hours: every 1st Thursday of the month (12-2 pm)

Thanks for your attention!
Are there further questions?

<http://ereseach.uni-goettingen.de>

info@ereseach.uni-goettingen.de