

# NEWSLETTER

MAY 2021



## WELCOME

The German Human Genome-Phenome Archive is growing and gaining traction. Over the last few months, new team members have started almost every other day. The newly created biweekly GHGA Team meeting is now regularly attended by over 20 people. And more are being hired. In addition to (wo)man-power, several working groups have been formed to foster co-operation across the different task areas. This will combine and streamline efforts to move GHGA development - particularly in the areas of the software architecture and the ethico-legal framework - forward.

In parallel, we are booting up our communication measures - both internally and

externally. To keep all GHGA members up to date and connected, we have rolled out a GHGA knowledge base on [Confluence](#). Invitations are currently being sent out - if you have not gotten yours yet and are keen to start please contact the [GHGA office](#). In addition, as you are reading this, you see the first edition of our new and regular GHGA Newsletter pointing out recent activities and developments!

The first edition of the GHGA Newsletter focuses on the GHGA team. We are happy to introduce our talented interdisciplinary technical, legal and administrative team. On top you will find some updates on recent activities within and around GHGA.

We hope you enjoy the Newsletter.

## CONTENT:

[Meet the GHGA Team](#)

[GHGA Working Groups](#)

[News](#)

[Save the Dates](#)

[Jobs in GHGA](#)

# MEET THE GHGA TEAM

Under coordination of Jan Eufinger (administrative side) and Koray Kirli (technical side), the GHGA Team currently consists of an administrative team (four people), technical team (ten people), two data steward and data standards officers and three legal and ethics expert.

The team is spread across Germany.

Below we introduce all current GHGA team members. The full profiles, where you can also hear from each person themselves can be found on the [GHGA Confluence page](#).

JAN EUFINGER  
ADMINISTRATIVE  
COORDINATOR  
HEIDELBERG



Main tasks:

Co-lead of the GHGA Team  
Organization of all administrative tasks  
Development of the legal framework for GHGA

KORAY KIRLI  
TECHNICAL  
COORDINATOR  
HEIDELBERG



Main tasks:

Co-lead of the GHGA Team  
Architecture concept and implementation  
GHGA Operations

SABINE BLUM  
ADMINISTRATIVE ASSISTANT  
HEIDELBERG



Main tasks:

Administrative support  
General contact and inquiries

NICOLE SCHATLOWSKI  
PROJECT MANAGER  
TÜBINGEN



Main tasks:

Coordination of the Tübingen hub  
General project management support  
Organisation of progress status reports

ULRIKE TRÄGER  
COMMUNICATION  
OFFICER  
HEIDELBERG



Main tasks:  
Internal and external communication  
Linking to Communities  
Admin and project management support

BARBARA STROBL  
OUTREACH OFFICER  
FOR RARE DISEASES  
TÜBINGEN



Main tasks:  
Community engagement and outreach,  
focusing on rare disease  
Science communication

SIMON PARKER  
DATA STEWARD  
HEIDELBERG



Main tasks:  
GHGA Data Management Plan and  
Standard Operating Procedures  
Data Stewardship and User Support

ANANDHI IYAPPAN  
DATA STANDARDS OFFICER  
HEIDELBERG



Main tasks:  
Harmonization and standardization of  
data and metadata  
Defining standards for data access,  
security, and privacy

CHRISTIAN SCHUDOMA  
BIOINFORMATICS CLOUD  
AND WORKFLOW ENGINEER  
HEIDELBERG



Main tasks:  
Harmonization & Standardization of data  
CoGDat

CHRISTOPHER HAKKAART  
POSTDOCTORAL RESEARCH  
FELLOW, BIOINFORMATICIAN  
TÜBINGEN



Main tasks:  
Data curation  
Establishing data processing workflows

CHRISTINE OELLIG  
SCIENTIFIC ASSISTANT  
DRESDEN



Main tasks:

Data hub implementation at the TU  
Dresden

Database design

FLORIAN KRAUS  
BIOINFORMATICIAN  
TÜBINGEN



Main tasks:

Conceptual requirements of GHGA  
Best practices of FAIR Omics data

DEEPAK UNNI  
SOFTWARE DEVELOPER  
HEIDELBERG



Main tasks:

Development of the front end and back  
end of GHGA

Addressing (meta)data challenges

Support of existing and new data types  
and modalities in GHGA

MORITZ HAHN  
SOFTWARE DEVELOPER  
TÜBINGEN



Main tasks:

GHGA Software Architecture  
CoGDat

KERSTEN HENRIK BREUER  
SOFTWARE DEVELOPER  
HEIDELBERG



Main tasks:

Design and implementation of the central  
microservice infrastructure

Development of big-data workflows  
within our cloud infrastructure

CoGDat

NICHOLAS SMITH  
BIOINFORMATICIAN  
MÜNCHEN



Main tasks:

Standardize and improve the quality of  
genetic data processing

Development of effective pipelines for  
submitting, storing, and processing data

**MANIKANDAN RAVICHANDRAN**  
SOFTWARE DEVELOPER  
HEIDELBERG



Main tasks:  
Architecture design solution that complement microservices  
Validate user requirements and possible tech stacks

**CHRISTIAN MERTES**  
BIOINFORMATICIAN  
MÜNCHEN



Main tasks:  
Implementation and management of the Munich data hub  
Development and Deployment of workflows for analysis and quality control

**LISA KALDOWSKI**  
RESEARCH FELLOW  
HEIDELBERG



Main tasks:  
Legal topics around research use of genome data  
Legacy consent

**ANDREAS BRUNS**  
RESEARCH FELLOW IN ETHICS  
HEIDELBERG/LEEDS



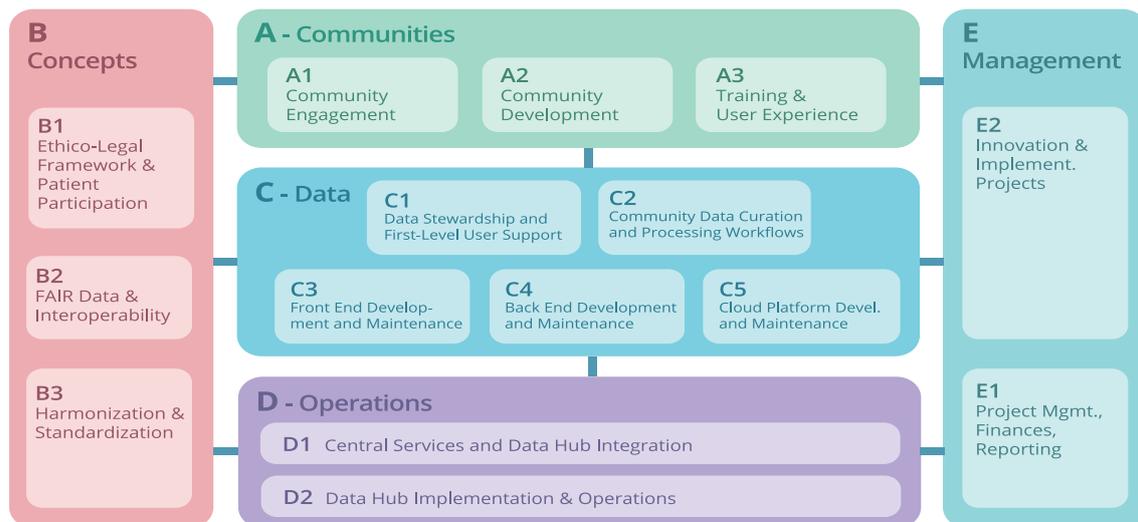
Main tasks:  
Issues concerning the ethics of consent  
Ethico-legal framework for big data in biomedical research

**AMELI SCHENK**  
RESEARCH ASSISTANT  
HEIDELBERG

Main tasks:  
Ethico-legal framework

# GHGA WORKING GROUPS

The GHGA project spans over 15 task areas and 44 measures, which list 115 milestones for the success of GHGA. To enable seamless development and gather information in a unified way, several work streams have been initiated. These form structures overlapping multiple task areas to move GHGA ahead efficiently. Information on all current work streams can be found on the [GHAG Confluence](#).



## [Architecture Working Group](#)

In order to discuss and finalize the GHGA architecture concept and start the development the Architecture Working Group was formed. It covers all software development and IT operations (DevOps) aspects of GHGA, forming an umbrella for task areas C3, C4, C5, D1 and D2.

The working group is overseen by a steering committee (Ivo Buchhalter, Oliver Kohlbacher, Koray Kirli, Jens Krüger, Sven Nahnsen and Oliver Stegle). Working group and steering committee meetings take place biweekly on Tuesdays. The working group is open for everyone interested.

Regularly assessing progress allows the formation of [task forces](#) when concentrated effort is needed. So far task forces on GHGA Services and Microservices, Deployment Solutions, DevOps SOPs, Metadata Implementation and Aligning with Community Standards have been created. The task forces meet regularly. Collected key information and how to join these efforts can be found on [Confluence](#).

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## [Data Management Plan/ Legal Working Group](#)

The ethico-legal framework around GHGA needs to be set up before the archive can go online to ensure the secure usage of sensitive data. Development of the Data Management Plan (DMP) and legal documents is therefore not just key but also time sensitive. As the legal documents cut across the original task areas a joint effort - in the form of the DMP and Legal Working Group- is needed to drive the development of these documents forward.

The working group will help translate the output of legal and ethical work streams into practical operation procedures and work with host institutions of the data hubs to ensure all required legal documentation is in place. First efforts focus on finalizing the core architecture concept (together with the Architecture Working Group) and defining the roles of the GHGA data hubs from a legal perspective.

The working group is open to all GHGA members. A representative of each GHGA data hub has already been assigned. Members of the working group will be in close contact with their local legal and data protection team to engage them in the process. More information on the DMP/legal working group can be found [here](#).

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## Additional Working Groups

GHGA will have Standard Operating Procedures (SOP) for all regularly recurring tasks, for example to ensure comparable work flows for the different data hubs. The [task force SOP](#) has been started to oversee, save and share SOPs.

Several task areas and members of the GHGA team are currently working on concepts for metadata use within GHGA. As part of this activity a workshop on metadata will be organized. The workshop will take place on Tuesday, June 8, 2021, further details can be found [here](#).

[Central project management](#) is also unified in one working stream, ensuring best practice task sharing and communication.

## NEWS

### [Data Use Ontology - DUO workshop](#)

GHGA members interested in metadata and ontologies attended the [DUO workshop](#) held by The Global Alliance for Genomics and Health (GA4GH) on 6th of May. DUO contains a standardized vocabulary for tagging genomic datasets with usage restrictions. This allows automating the discovery and access request processes. GHGA, together with EGA, will utilize DUO terms to reflect the consent of the datasets.

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### [NFDI: new Activities kicking off within the newly established NFDI e.V.](#)

Surely everybody is aware that GHGA is funded via the German national program for research data infrastructures, the NFDI. Recently, the NFDI office in Karlsruhe has been turned into a registered association - "eingetragener Verein" or e.V. in German. As part of the activities of NFDI e.V., GHGA will be involved in several cross-cutting activities, which are currently being formed as sections within NFDI e.V..

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### [BMBF introduces NFDI to the world](#)

On the 22nd of April the BMBF held a press conference to announce the start of NFDI. Following statements by Federal Research Minister Anja Karliczek and AWI-Director Antje Boetius, NFDI Director York Sure-Vetter introduced NFDI and its goals.

## genomDE concept shaping - GHGA organizes workshop on shaping a Genome Data Infrastructure in Germany

At the end of January 2021, GHGA organized an interdisciplinary workshop entitled "Towards building a national genome data infrastructure - Synergies and Challenges". Over 50 participants from various institutions and organizations, ranging from clinical practice to fundamental research, discussed how to set up a Genome Data Infrastructure for Germany. The new structure needs to fulfill both the needs for an innovative diagnostics program and serve as an infrastructure delivering invaluable genome data for fundamental and translational research. As a follow-up of this workshop, a white paper is under preparation summarizing key points discussed during the workshop.

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## [FORUM Science & Health: Digital Medicine](#)

The Corona pandemic has shown us just how important sharing access to research as well as clinical data is. Fittingly, the second FORUM Science & Health von BioM discussed digital medicine and whether Germany is a "data treasure" or "data desert". GHGA co-speaker Prof. Dr. Juliane Winkelmann joined the panel and positioned GHGA centrally in the discussion, explaining why data sharing after the FAIR-principle is key in genomic research. The one hour long discussion around data protection, fears surrounding the topic and who should be able to gain access to patient data can be viewed [here](#) (german only).

## SAVE THE DATE

### GHGA ALL HANDS MEETING

21.05.2021  
1-4 PM

[AGENDA](#)

### GHGA METADATA WORKSHOP

08.06.2021  
10-12 AM

[AGENDA](#)

### 3<sup>RD</sup> NFDI CONFERENCE (WEBINAR)

8.07.2021

### NFDI ONBOARDING EVENT

14.07.2021  
morning

### GHGA ALL HANDS MEETING

28.07.2021  
3PM

[AGENDA](#)

# JOBS IN GHGA

The German National Cohort (NAKO) is looking for a [Project Manager and Data Engineer](#) (focusing on Omics). Managing NAKOs tasks within the context of GHGA, the person will develop a concept for the storage and use of NAKO-OMICs data in the context of national and international consortia.

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The GHGA Office in Heidelberg is going to advertise three more positions soon. We are looking for:

An experienced **System Administrator/Cloud Specialist** to develop the cloud infrastructure concept and monitoring strategy. The person will also maintain cloud services and create an easily deployable virtual infrastructure to share between the hubs.

A **Software Developer** to contribute to front and back end development of the GHGA software and data portal. The person will design and specify features and align them with international standards.

A senior **Full Stack Developer** to coordinate and contribute to the design, implementation and operation of the GHGA core software architecture. The person will further participate in developing the federated EGA network.

If you are interested or know someone interested, please contact [Koray Kirli](#).

## DID YOU LIKE THE GHGA NEWSLETTER?

Please send feedback or suggestions, and any events, jobs or news items for the next edition to [Ulrike Träger](#) or the [GHGA Office](#).