PROGRAMME

11-13 October
Groningen, The Netherlands
DataSHIELD 2023
Secure Bioscience Collaboration

Pre-conference workshop

09.00 – 12.00	**Beginner's Workshop:** This workshop will begin with a short 30-minute introductory talk about DataSHIELD, including how it works and how it facilitates data sharing. This will be followed by a hands-on practical where participants will learn how to assign data from Opal servers, carry out basic data manipulations such as subsetting data and creating new variables and perform some simple data analysis. There will also be some short demonstrations of more advanced statistical methods in DataSHIELD. (***Tutors:*** *Angela Pinot de Moira, Tim Cadman, Andrei Morgan, Juan Ramón Gonzalez and Demetris Avraam*)

Conference

12.30 – 13.30	**Registration and lunch** (joint with EUCAN-Connect Consortium)
13.30 – 13.45	**Welcome** – *Morris Swertz, UMCG and Andrei Morgan (INSERM)*
13.45 – 15.00	<u>**DS Software Compliance & Audit Discussion**</u> *(Moderator Andrei Morgan)* - DataSHIELD disclosure risk response – *Becca Wilson* (15 minutes) - DataSHIELD software audit process – *Tom Bishop* (15 minutes) *Discussion time: 45 minutes*
15.00 – 15.30	<u>**DS Infrastructure Updates**</u> *(Moderator Andrei Morgan)* - dsBase updates – *Stuart Wheater, Arjuna Technologies* (10 minutes) - Opal updates – *Yannick Marcon, Epigeny* (10 minutes) - Molgenis updates – *Morris Swertz, UMCG* (10 minutes)
15.30 – 16.15	**Coffee Break and discussion**
16.15 – 17.15	<u>**DataSHIELD Community Session**</u> - Updates from DataSHIELD Steering Committee – *Andrei Morgan and Theme Leads* (50 minutes) - updates from DataSHIELD Advisory Board – *Simon Parker* (10 minutes)

08.45 – 09.15	**Registration and coffee**
09:15 – 09:30	**Welcome:** *Morris Swertz, UMCG*
09.30 – 10.30	**Keynote Talk:** The Netherlands Cancer Registry: more data, more impact, more privacy - *Gijs Geleijnse, IKNL (Moderator Morris Swertz)*
10.30 – 11.15	**Coffee Break**
11.15 – 12.45	**Machine Learning** *(Moderator Demetris Avraam)* **Talk:** Federated Non-Linear mixed effect modelling in DataSHIELD using Julia – *Manuel Huth, Helmholtz Munich* (20 minutes) **Talk:** A Versatile DataSHIELD package for Lung CT Scan Analysis & Beyond – *Juan Ramon Gonzalez, ISGlobal* (20 minutes) **Talk:** dsMatchIt: federated matching methods for Covariate Balancing – *Roy Gusinow, Helmholtz Munich* (20 minutes) **Talk:** New DataSHIELD functions from dsCluster analysis & dsIntestional microbiomics packages – *Florian Schwarz, German Inst. Of Human Nutrition, Potsdam-Rehbruecke* (20 minutes) *Discussion time: 10 minutes*
12.45 – 13.45	**Lunch**
13.45 – 14.30	**Omics** *(Moderators Juan Ramón Gonzalez)* **Talk:** Enabling federated multi-omics analysis on virtual cohorts – *Mark Ibberson, Swiss Inst. Of Bioinformatics* (20 minutes) **Talk:** Using DataSHIELD to examine the association between body mass index and gut microbiota composition among adults from multiple european observational studies – *Carolina Schwedhelm, Max Delbruck Centre for Molecular Medicine* (20 minutes) *Discussion time: 5 minutes*
14.40 – 15.00	**Infrastructure I** *(Moderator Juan Ramón Gonzalez)* **Lightning Talk:** Why not DataSHIELD with Ansible? - *Ahmet Akkoc, Zitelab Apps* (5 minutes)

	Lightning Talk: Addressing scalability challenges and enhancing user experiences in DataSHIELD: implementation of an identity & access management and central R server – *Sofia Maria Siampani, Max Delbruck Centre for Molecular Medicine* (5 minutes)
	Lightning Talk: Harmonisation of gut microbiome data from multiple european observational studies using a common bioinformatics data for analysis with DataSHIELD – *Carolina Schwedhelm, Max Delbruck Centre for Molecular Medicine* (5 minutes)
	Discussion time: 5 minutes
15.00 - 15.30	**Coffee break**
15.30 - 16.20	<u>**Infrastructure II**</u> *(Moderator Becca Wilson)*
	Talk: DataSHIELD Analysis in Python – *Yannick Marcon* (20 minutes)
	Talk: Integrating DataSHIELD with OMOP CDM: a novel approach for efficient data sharing and analysis of harmonized and standardized clinical data – *David Sarrat Gonzalez, ISGlobal* (20 minutes)
	Discussion time: 10 minutes
16.20 - 17.20	**Keynote Talk:** join the DataSHIELD train – but how far is the station? - *Bodil Svenbald, Uppsala University*
	(Moderator Becca Wilson)
17.20 - 17.30	
17.30 - 19.00	**Drinks Reception and Networking** - Café Willem Albert
19.00	**Conference Dinner** - Café Willem Albert

08.30 - 08.55	**Registration and coffee**
08.55 – 09.00	**Welcome**
09.00 – 10.00	**Keynote Talk:** NFDI4Health – building up a national research data infrastructure for personal health data – *Tobias Pischon, Max Delbruck Centre for Molecular Medicine* *(Moderator Manuel Huth)*
10.00 - 10.30	**Coffee break**
10.30 - 12.20	<u>**Longitudinal Data**</u> *(Moderator Angela Pinot de Moira)* **Talk:** Does federated analytics preserve statistical and scientific value of real world data? - *David Pau, Roche* (20 minutes) **Talk:** Survival according to sex at birth among extremely premature fetuses: a pan-European study from RECAP preterm platform of cohort and register data – *Andrei Morgan, INSERM* (15 minutes) **Lightning Talk:** Enhancing survival analysis with survival tables – Xavier Escriba Montagut, ISGlobal, (5 minutes) **Talk:** DARAH Project – deploying a DataSHIELD federated network in real world healthcare environments – *Camille Bachot, Roche* (20 minutes) **Talk:** Long-term follow up after Trials using a European platform of preterm birth cohorts – the LIFT-UP preterm study protocol – *Andrei Morgan, INSERM* (15 minutes) **Talk:** Legal Aspects and Review of DataSHIELD - *Fruzsina Molnar-Gabor* (20 minutes) *Discussion time: 15 minutes*
12.20 - 12.30	**Closing Remarks** – *Morris Swertz, UMCG and Andrei Morgan, INSERM*
12.30 - 13.30	**Lunch**

DIRECTIONS

CONFERENCE LOCATION

NH Groningen
Hanzeplein 132
9713GW Groningen

Website: https://www.nh-hotels.nl/hotel/nh-groningen

DATASHIELD BEGINNERS' WORKSHOP

University Medical Center Groningen (UMCG) Onderwijscentrum - room 10
Hanzeplein 1, 9713 GZ Groningen

Further instructions will be sent to the participants by email.

CONFERENCE DINNER AND NETWORKING DRINKS

Café Willem Albert - **The Market Hotel Groningen**
Grote Markt 31
9712 HS Groningen

Website:
https://themarkethotel.nl/eten-drinken/cafe-willem-albert/
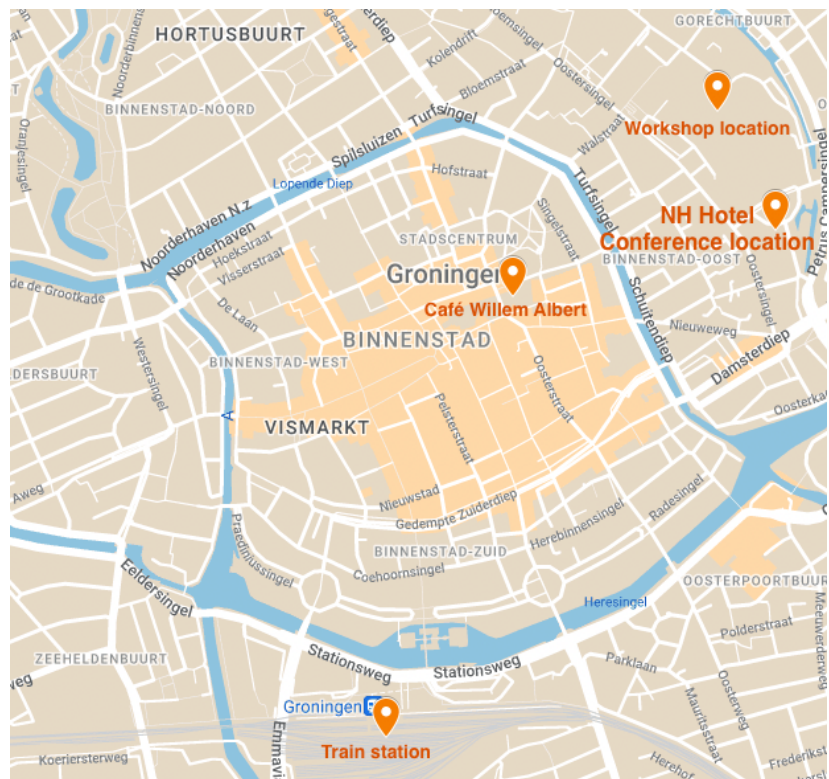
PUBLIC TRANSPORT

From Schiphol Airport direct trains to Groningen depart every hour. You don't need to book trains in advance, and you can buy your ticket on the spot or online. More information on traveling by train in The Netherlands can be found here:
https://www.ns.nl/en/travel-information/travelling-with-ns

From Groningen main station it's a 25-minute walk to the conference location.

There are several buses which run regularly from outside the bus station (to your right as you come out of the train station) to the UMCG "Hoofdingang" (main entrance). The journey takes about 10 minutes. You can take the 5, 6, 61, 65, 178 (make sure to check that the bus goes in the right direction). You can find the latest travel information on https://9292.nl/en.

A GUIDE TO GRONINGEN

THINGS TO DO

- o Enjoy Groningen from above on the Forum roof top.
- o Discover Groningen by foot with one of these tours:
    - o Street art tour with music
    - o 'Hofjes' tour: visit the hidden gems of the town.
- o Visit one of the musea:
    - o The Groninger Museum: currently showing the most complete exhibition of the Rolling Stones
    - o The Noorderlijk Scheepvaart museum (bonus: it gives you a chance to visit one of the oldest buildings in Groningen!)
    - o The University Museum
- o Climb the Martini Tower
- o Visit 'the colored houses'
- o With so many students and no official closing times, Groningen is famous for its nightlife, so go into town at night and discover the best bars or dance till sunrise!

WHERE TO EAT AND DRINK

- o Visit De Drie Gezusters, the largest pub in Europe!
- o NOK: Restaurant with great views on the highest level of the Forum building.
- o Mr. Mofongo: restaurant, wine bar, cocktail bar (check out the cocktail robot arm) and much more.
- o DOT: Located in a dome with a 3D movie theater (fun fact: in winter it becomes the largest Christmas ball in Europe).
- o Zondag: a cozy place located a bit out of the city center in the most famous park of Groningen.
- o Try an 'Eierbal'. You can't leave Groningen without trying out this local delicacy. Although many places serve it as a snack, the locals preferably get one out of 'the wall'.