



EADV-ESDR Summer Research Workshop: Big Data and Translation in Dermatology

Residents Course | 10-14 July 2023 | Freiburg im Breisgau, Germany

Faculty

Course Chairs: Kilian Eyerich, Stefanie Eyerich, Natalie Garzorz-Stark

Speakers: Alexander Zink, Matthias Augustin, Maria Quaranta, Heydar Maboudi, Kristian Reich, Christian Greis, Tobias Seidl, Christina Hillig

Tutors: Frank Meiß, Cristina Has, David Ranzinger

Assistants: Menna Mubarak, Emanuele Scala, Sabine Acker-Heinig

Course Description

Precision medicine is the term that represents modern treatment approaches on patient level. But how is precision medicine achieved? Which methods have been developed to get insights into diseases on patient level? With this course we aim to give an overview on big data sources that enable insights into diseases on patient and even cellular level, discuss their chances and pitfalls and give insights how big data can instruct translational research and therapy development.

Learning Objectives

1. To get an overview on big data sources in health research
2. To understand analysis procedures and pitfalls of big data
3. To understand the potential of big data for translational research and therapy development

Pogramme

Monday, 10 July 2023

- 14.00-15:00 Welcome address: ESDR, local organising committee
15.00-16:00 **Tools**
„Artificial intelligence – Google or Microsoft?“ - Alexander Zink
16.00-16.15 Coffee break
16.15-17.15 Presentations by participants

Tuesday, 11 July 2023

- 09.00-10.00 **Tools**
„How to exploit big data sources for epidemiological science“ - Matthias Augustin
10.00-11.00 **Big data techniques**
„Genetics“ - Maria Quaranta
11.00-11.15 Coffee Break
11.15-12.15 **Big data techniques**
„Advanced sequencing“ - Stefanie Eyerich
12.15-12.45 Presentations by participants
12.45-14.00 Lunch break
14.00-15.00 **Dermatology in motion**
„Dermato-Oncology“ - Frank Meiß
15.00-16.00 **Dermatology in motion**
„Genodermatoses“ - Cristina Has
16.00-16.15 Coffee Break
16.15-17.15 Keynote lecture - Kristian Reich

Wednesday, 12 July 2023

- 09.00-10.00 **Tools**
„AI for big data analysis“ - Christina Hillig, Martin Meinel
10.00-11.00 **Tools**
„Machine learning ABC“ - Heydar Maboudi
11.00-11.15 Coffee Break
11.15-12.15 **Tools**
„Statistics in clinical trials“ - Kilian Eyerich
12.15-12.45 Presentations by participants
12.45-14.00 Lunch break
14.00-15.00 Visit at FTD and dermatology department
15.00-15.30 **Dermatology in motion**
„Genodermatoses“ - Cristina Has
15.30-16.00 **Tools**
„Machine learning and FTD database“ - Heydar Maboudi
16.00-17.00 **Dermatology in motion**
„Inflammatory skin diseases“ - Kilian Eyerich

19.30 Networking Dinner with faculty and participants at Dattler Restaurant

Thursday, 13 July 2023

- 09.00-10.00 Presentations by participants
10.00-11.00 **Startup corner**
„Derma2go“ - Christian Greis
11.00-11.15 **Coffee Break**
11.15-12.45 **Startup corner**
The way to Dermagnostix - Natalie Garzorz-Stark
12.45-14.00 **Lunch break**
14.00-17.00 Visit at Dermagnostix

Friday, 14 July 2023

- 09.00-10.00 **Tools**
Regulatory aspects - Natalie Garzorz-Stark
10.00-10.15 **Coffee Break**
10.15-11.45 **Startup corner**
„Nia Health“ - Tobias Seidl
11.45-12.00 Wrap-up and farewell

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