

# Workshop 2019

## AGENDA

**Thursday, 05<sup>th</sup> December 2019**

### **Introduction to R language & applications**

(Dr. Markus List, Big Data in BioMedicine Group, Chair of Experimental Bioinformatics, TUM)

08.30 - 9.00 Introduction / working with R: Rstudio, R notebooks

9.00 -10.00 R data handling basics - tidyverse, bioconductor

10.00 - 10.15 Coffee break

10.15 -12.00 Writing your own R package including automated testing of your code

12.00 - 13.00 Lunch break

13.00 - 14.45 Epigenomic data analysis with DeepBlueR

14.45 - 15.00 Coffee break

15.00 - 16.30 Turn your analysis into an interactive web application with R shiny

16.30 – 17.00 Wrap-up and discussion

### **SFB1321 seminar series**

17.00 – 18.00 Dr. Nicholas McGranahan (invited by Prof. Dieter Saur)

‘Game of Clones: Lung Cancer Evolution and Immune Escape’

from 18.00 social event: Evening at Tollwood Winter Festival

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**Friday, 06<sup>th</sup> December 2019**

## **SFB1321 Young Scientist Meeting – Tools & Methods in pancreatic cancer research**

09.00 - 09.40 Autophagy in pancreatic cancer (*Kivanc Grörgülü – Algül Lab*)

09.45 - 10.25 ATAC-seq and Chip-Seq methodology/data analysis  
(*Andrea Terrasi – Schotta Lab*)

10.30 - 11.00 coffee break

11.00 - 11.40 Basics in Proteomics (*Stella Koutsouli – Robles Lab*)

11.45 - 12.25 CRISPR/CAS9 tool kit for cancer research (*Sebastian Widholz – Rad Lab*)

12.30 - 13.30 lunch break

13.30 - 14.30 Single cell RNA sequencing analysis  
(*Jonas Mir – Flossdorf Lab, Stefanie Bärthel – Saur Lab*)

14.30 - 15.15 Effects of Kras dosage variation on pancreatic cancer  
(*Roman Maresch – Rad Lab*)

15.20 - 16.00 Intravital Two-Photon Microscopy for pancreatic cancer analysis  
(*Hellen Ishikawa-Ankerhold – Massberg Lab*)

16.00 wrap-up and coffee break