

## Third workshop of IMMUTRAIN Scientific writing | Career in the non-academic sector | Data mining and analysis workshop

From Tuesday 10<sup>th</sup> April to Friday 13<sup>th</sup> April, 2018 in Munich

| Tuesday 10 <sup>th</sup> April, 2018 |   |
|--------------------------------------|---|
| 8.30 – 9.00                          | Coffee - Conference room "Viereckhof" ground floor  |
| Introductio                          | on .  |
| 9.00 – 9.10                          | Prof. Dr. Stefan Endres, coordinator of IMMUTRAIN PD Dr. med. Sebastian Kobold, scientific coordinator of IMMUTRAIN   |
| Scientific so                        | oft skills workshop - Effective scientific writing,   |
| Avril Arthu                          | r-Goettig, PhD  |
| 09.10-17.00                          | Place: Katholische Akademie<br>Room: Conference room "Viereckhof" ground floor  |
| Meeting of                           | ESR   |
| 17.00-18.00                          | Meeting of ESR and Simone Gautier, project manager of IMMUTRAIN: training issues on European level Place: Katholische Akademie Room: Conference room "Viereckhof" ground floor  |
| 18.00                                | Dinner at Katholische Akademie  |
| Wednesday                            | y 11 <sup>th</sup> April, 2018  |
| Scientific so                        | oft skills workshop – Effective scientific writing (continued)  |
| Avril Arthu                          | r-Goettig, PhD  |
| 09.00-17.00                          | Place: Katholische Akademie<br>Room: Conference room "Viereckhof" ground floor  |
| Career in th                         | ne non-academic sector  |
| Chairs: Simone                       | <ul> <li>lum - Leopoldstr. 65/3. OG (Eingang Siegfriedstr.)</li> <li>Formisano, Early Stage Researcher of IMMUTRAIN at LMU and Alexandre Taleb, Early Stage</li> <li>MMUTRAIN at Roche Munich Innovation Center</li> </ul>  |
| 18.00-18.10                          | Introduction Simone Gautier, project manager of IMMUTRAIN   |
| 18.10 – 19.00                        | "Exchanging lab coat for briefcase"  Dr. Stefan Strobl, Head of Small Molecules - BioNTech Smalll Molecules GmbH  |
| 19.00 - 19.45                        | Round table - questions and answers session  Dr. Florian Loher, European Patent Office, Munich  PD Dr. Barbara Mayer, Founder and Head of Research and Development, Spherotec  Dr. Daniel Moik, Medical Science Liaison Manager, Takeda Pharmaceutical  Dr. Marco Reis, Project Leader and Laboratory Head, Pharma Research & Early Development (pRED), Functional Characterization, Large Molecule Research (LMR), Roche Therapeutics GmbH |
|                                      | <ul><li>Dr. Christian Wisskirchen, Senior Medical Project Manager, HIV Medical Affairs, at Gilead Sciences</li><li>GmbH</li><li>Dr. Cornelia Wurzenberger, Senior Scientist, Preclinical Development, Morpho Sys AG</li></ul>   |

Organised by Ludwig-Maximilians-Universität Munich, and CompanDX ltd, Nottingham, UK







| 19.45 -22.00   | Buffet dinner   |  |
|--|---|--|
| Thursday   | 12 <sup>th</sup> April, 2018  |  |
| Data mining and analysis workshop  |   |  |
| Prof. Graham Ball, Nottingham Trent University and Head of CompanDX ltd - UK |   |  |
| Place: Katholis  | che Akademie  |  |
| Room: Conference room "Viereckhof" ground floor                              |   |  |
| 09.00-10.00  | Lecture 1: Introduction to Bioinformatics   |  |
|  | (Bioinformatics tools, bioinformatics software, computational genomics, computational systems biology)  |  |
| 10.00-10.15  | Coffee break  |  |
| 10.15-12.15  | Workshop 1: Introduction to data bases and analytics in biology   |  |
|  | (Public data repositories GEOD, GENT, TCGA etc. Microsoft Excel basic. Handling text files and importing text files.)   |  |
| 12.15-13.15  | Lunch   |  |
| 13.15-16.15  | Workshop 2: Obtaining and formatting data from array express.  (Verification of data quality and the MIAMI standard. File types and annotations. Accessing The Cancer Genomes Atlas. Experiment and data types. Search methods in data repositories.)                               |  |
| 16.15-16.45  | Coffee break  |  |
| 16.45-17.45  | Lecture 2: Regression methods for analysis of big data (Interpretation of findings, assumptions of methods, limitations of the approach. Standard residuals, outliers, linear modelling and extensions of linear modelling. Volcano plots. Multivariate and non-linear regression.) |  |
| Friday 13 <sup>th</sup> April, 2018  |   |  |
| Data mining and analysis workshop (continued)                                |   |  |
| Prof. Graham Ball, Nottingham Trent University and Head of CompanDX ltd – UK |   |  |
| Place: Katholische Akademie  |   |  |
| Room: Conference room "Viereckhof" ground floor                              |   |  |
| 09.00-10.30  | Workshop 3 part 1: Regression data analysis for transcriptomic data   |  |
| 10.30-10.45  | Coffee break  |  |
| 10.45-12.15  | Workshop 3 part 2: Regression data analysis for transcriptomic data   |  |
| Supervisory Board Meeting  |   |  |
| 12.15-14.15  | Working lunch for the project leaders, the representatives of the ESR and the project management team  Room: Conference room "Viereckhof" ground floor  |  |
| Data mini  | ng and analysis workshop (continued)  |  |
| 14.15-15.15  | Lecture 3: Ontological methods for study of biological systems  |  |
| 11.13 13.13  | (GO (Gene Ontology) databases, gene cards, the Human Protein Atlas, Gene mania, Cosmic string, panther and KEGG.)   |  |
| 15.15-15.30  | Coffee break  |  |
| 15.30-17.30  | Workshop 4: Ontological and pathways analysis using the methods for the results from the previous workshop  |  |
| 17.30-18.00  | Summary , reflection and end of the workshop  |  |





