

## MCBD KICK OFF WS 2021/2022

**84** PhD students are currently active in MCBD

**22** PhD started since 2021, **10** graduated

# Welcome GEG students



## MCBD and GEG PhD-program fusion:

- Change of programm possible and easy (PhD start 20/21)
- All credits can be transferred
- Teaching now within the MCBD program

# New homepage online.....

Innsbruck PhD School for  
Biomedical Sciences

Medical University of Innsbruck

<https://biomed-phd.i-med.ac.at>

→ All information on teaching (methods courses, core lectures, MCBD seminars)



# Coordination team



**Patrizia Stoitzner**

**MCBD coordinator**

Dept. Dermatology,

Venereology & Allergology

[patrizia.stoitzner@i-med.ac.at](mailto:patrizia.stoitzner@i-med.ac.at)



**Matthias Erlacher**

**GEG/MCBD coordinator**

Biocenter

Genomics and RNomics

[Matthias.erlacher@i-med.ac.at](mailto:Matthias.erlacher@i-med.ac.at)



**Verena Labi**

**MCBD coordinator**

Biocenter

Developmental Immunology

[verena.labi@i-med.ac.at](mailto:verena.labi@i-med.ac.at)

# Administration team



**Petra Duspara**

**PhD Office**

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E-Mail: [PhD-School@i-med.ac.at](mailto:PhD-School@i-med.ac.at)



**Brigitte Amtmann,**

**PhD Office**

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**Please make an appointment before going there.**

# MCBD student representatives

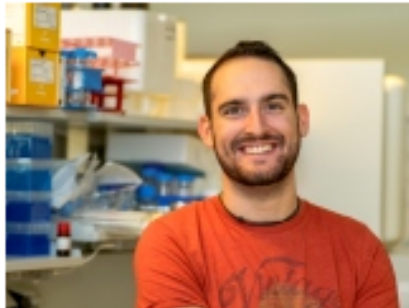


**Hofer Tamara**

**E-Mail:** tamara.hofer@student.i-med.ac.at

**Supervisor: von Laer Dorothee**

**We are searching  
for a new student  
representative**



**Braun Vincent**

**E-Mail:** vincent.braun@i-med.ac.at

**Supervisor: Villunger Andreas**

# MCBD at a glance

- MCBD is a **full-time degree** PhD-program
- minimum study duration for a PhD programme at the MUI is **6 semesters**, an equivalent to 180 ECTS point.

**180 ECTS = 160 ECTS for your research project & thesis + 20 ECTS for curricular courses/seminars/lectures**

# Research project & thesis (160 ECTS)

- This is the **most important part** of your thesis!
- Guided and trained by your **supervisor** & thesis advisory committee (**TAC**)
- **Progress is monitored** in regular meetings with your PI, at the MCBD seminars (mandatory, once a year) and at the TAC-meeting (mandatory, once a year)



# Curricular courses/seminars/lectures: 20 ECTS

|                                   |  | ECTS              | 1 | 2 | 3 | 4 | 5 | 6 |
|-----------------------------------|--|-------------------|---|---|---|---|---|---|
| <b>Thematic Seminar: 6 ECTS</b>   | <b>Seminar (+PhD proposal, 2-3 pages in the 1st year) (6 = 6 x 1)</b>  | 6 x 1 ECTS        |   |   |   |   |   |   |
| <b>Core subjects: 8-10 ECTS</b>   | <b>Core lectures</b>   | 2 x 1,5 ECTS      |   |   |   |   |   |   |
|                                   | <b>Joint Seminars</b>  | max. 6 x 0,5 ECTS |   |   |   |   |   |   |
|                                   | <b>Methods courses</b> <ul style="list-style-type: none"> <li>• Molecular Biology, Cell Biology &amp; Biochemistry</li> <li>• Imaging / FACS</li> <li>• BioInformatics, Data Bases access &amp; analysis</li> <li>• Onco-Immunology</li> </ul> | take two courses  |   |   |   |   |   |   |
|                                   | <b>Scientific Presentations on International Conferences &amp; Courses</b>   | max. 2 ECTS       |   |   |   |   |   |   |
| <b>General Subjects: 4-6 ECTS</b> | Ethics<br>Good scientific practice<br>Statistics<br>Animal experimentation<br>.....  |                   |   |   |   |   |   |   |

## Core Subject

# Core lectures: Pathology lecture hall

(2 x 1.5 ECTS)

1.5 ECTs: 12 units a 90 min in the WS & SS

- new interesting lectures
- every day for three weeks
- content: Short intro by the lecturer, who explains the concept and the open questions in the field → presents **a recent paper that was transformative for a field** followed by a discussion of the results and how they change the way we see biology

# Core lectures

*Time: 8:15-10:00*

*Location: Pathologie-HS (Müllerstraße 44)*

## MCBD I Core Lecture – WS 2021/22

|                                     |    |    | Date            | Program   | Lecturer            | Room          |
|-------------------------------------|----|----|-----------------|---|---------------------|---------------|
|                                     | Do |    | 07.10.<br>08:00 | MCBD – Semester Kick-Off<br>Introduction/Information          | Stoitzner           | Pathologie-HS |
| Cell biology                        | Do | 1  | 07.10.          | Regulation of gene expression                                 | Vietor              | Pathologie-HS |
|                                     | Fr | 2  | 08.10.          | Mitosis and cell division                                     | Geley               | Pathologie-HS |
|                                     | Mo | 3  | 11.10.          | Regulation of protein synthesis                               | Erlacher            | Pathologie-HS |
|                                     | Di | 4  | 12.10.          | Organelle signaling   | Teis                | Pathologie-HS |
|                                     | Mi |    | 13.10.          | MCBD Seminar  |                     |               |
|                                     | Do | 5  | 14.10.          | Cytoskeleton & Motors   | Dayal               | Pathologie-HS |
|                                     | Fr | 6  | 15.10.          | Cell death  | Villunger           | Pathologie-HS |
| Metabolism and cellular homeostasis | Mo | 7  | 18.10.          | DNA methylation   | Labi                | Pathologie-HS |
|                                     | Di | 8  | 19.10.          | Cellular degradation pathways                                 | Schmidt             | Pathologie-HS |
|                                     | Mi |    | 20.10.          | MCBD Seminar  |                     |               |
|                                     | Do | 9  | 21.10.          | Kinases and Phosphatases in cellular homeostasis and diseases | Kullmann            | Pathologie-HS |
|                                     | Fr | 10 | 22.10.          | Signaling in Cancer: drug discovery                           | Dunzendorfer – Matt | Pathologie-HS |
|                                     | Mo | 11 | 25.10.          | Lipid metabolism  | Keller              | Pathologie-HS |
|                                     | Di |    | 26.10.          | Public Holiday  |                     |               |
|                                     | Mi |    | 27.10.          | MCBD Seminar  |                     |               |
|                                     | Do | 12 | 28.10.          | Changes in metabolic pathways                                 | Hagenbuchner        | Pathologie-HS |

# Core Subject

## Joint Seminars

(0.5 ECTS / semester, max. 3 ECTS)

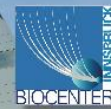
- Choose to attend group-meetings of other MCBD groups → at least 4 x / semester
- Find a list of all group meetings on the homepage
- It is a good idea to contact the PI / group beforehand
- Don't forget to bring your attendance sheet and hand it in (once it is complete) to the PhD School front office. **Don't forget to write your name on the sheet!**
- also an option: Biocenter Seminar: Time: Friday's, 4pm

hybrid seminars: CCB Seminar Room M 01.470/M 01.490 and online via Zoom

<https://us02web.zoom.us/j/82275383658?pwd=aFY2ZGhxWmhGdzBOaWs2V3BWSUMvdz09>

Meeting ID: 822 7538 3658, Passcode: 715884

Confirmation of attendance: e.g. screen shot + attendance sheet



## Biocenter Seminar Series WS 2021/22

| Date     | Speaker<br>Title  | Lab, Institute                              | Fridays at 16:00 s.t.<br>Lecture hall |
|----------|---|---|---------------------------------------|
| 08.10.21 | <b>Zlatko Trajanoski</b><br><b>Director Visions</b>   | Bioinformatics, Zlatko Trajanoski           | M.01.470<br>M.01.490                  |
| 15.10.21 | <b>Sebastian Werten</b><br><b>New developments in structural biology</b>  | Biological Chemistry, Klaus Scheffzek       | M.01.470<br>M.01.490                  |
| 22.10.21 | <b>Galina Apostolova</b><br><b>From nuclear lamina to genome architecture to cognition:<br/>is SATB2 the missing link?</b>                  | Institute for Neuroscience, Georg Dechant   | M.01.490                              |
| 29.10.21 | <b>Johannes Holfeld</b><br><b>Heart regeneration becomes reality:<br/>Shockwave therapy from bench to the CAST-HF trial</b>                 | Department of Cardiac Surgery               | M.01.470                              |
| 05.11.21 | <b>Clara Baldin</b><br><b>Inducible selectable marker genes to improve <i>Aspergillus fumigatus</i><br/>genetic manipulation</b>            | Molecular Biology, Hubertus Haas            | M.01.470                              |
| 12.11.21 | <b>Chris Dunworth</b><br><b>Role of the endoplasmic reticulum in the biogenesis of Lewy bodies</b>  | Pathophysiology, Hesso Farhan               | M.01.470<br>M.01.490                  |
| 19.11.21 | <b>Jeannett Holzknecht</b><br><b>In vitro skin infection models to study the efficacy of antifungal proteins<br/>from filamentous fungi</b> | Molecular Biology, Florentine Marx-Ladurner | M.01.470<br>M.01.490                  |
| 26.11.21 | <b>Katharina Klee</b><br><b>A CRISPR/Cas9 knockout screen in polarized epithelial cells</b>   | Cell Biology, Georg Vogel                   | M.01.470                              |
| 03.12.21 | <b>Mario Aguiar</b><br><b>Siderophore uptake in <i>Aspergillus fumigatus</i></b>  | Molecular Biology, Hubertus Haas            | M.01.470                              |
| 17.12.21 | <b>Gerlinde Karbon</b><br><b>BCL2 family proteins and the spindle assembly checkpoint</b>   | Developmental Immunology, Andreas Villunger | M.01.470<br>M.01.490                  |
| 14.01.22 | <b>Mariana Araujo</b><br><b>Unexpected new functions of the KICSTOR component SZT2<br/>in neuronal development and related diseases</b>     | Cell Biology, Lukas Huber                   | M.01.470<br>M.01.490                  |
| 21.01.22 | <b>David Heimdörfer</b><br><b>Non-coding RNAs and their functions in neuro-developmental disease</b>  | Genomics and RNomics, Alexander Hüttenhofer | M.01.470<br>M.01.490                  |
| 28.01.22 | <b>Gregor Sturm</b><br><b>scRNAseq in cancer</b>  | Bioinformatics, Zlatko Trajanoski           | M.01.470<br>M.01.490                  |

ZOOM ID: 822 7538 3658, Passcode: 715884

Supported by



Seeing beyond



# Core Subject

## Method courses

(min: 2 courses, 2 x 1.5 ECTS)

- **Molecular Biology**
  - Genome Editing, Molecular biological Techniques
  - CSI Innsbruck
  - Next generation sequencing
- **Cell Biology & Biochemistry**
  - Cell culture, lysis, fractionation and detection of specific proteins and their activity
  - Mass spectrometry, metabolomics, lipidomics
- **Imaging /FACS**
  - Fluorescence Microscopy Techniques
  - Live cell imaging and superresolution microscopy
  - Introduction to Flow Cytometry
- **Bioinformatics, Data Bases access & analysis**
  - Introduction to R programming for data science
  - Bioinformatics
  - Biological databases
- **Onco-Immunology**
  - Immunology
  - Translational Oncology
- **3D-bioprinting**

**PLEASE SIGN UP  
THROUGH THE PhD OFFICE ->  
email to Petra Duspara  
no later than 11.10.2021**

# Method courses for WS

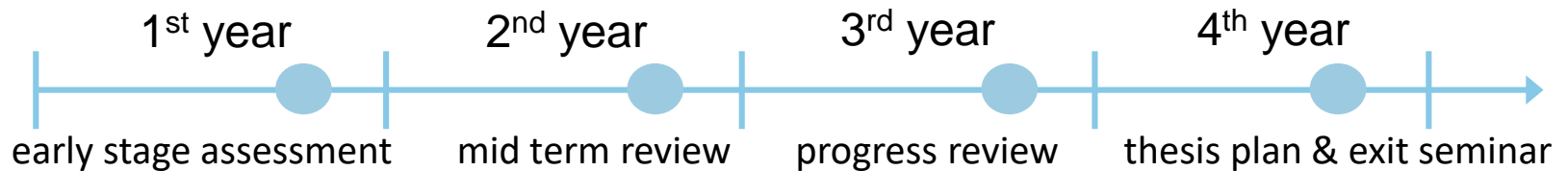
| LV-Nr  | Titel der LV   | Lehrende   |
|--------|--|--|
| 040019 | Immunology   | Stoitzner P, Posch W, Tripp C, Wilflingseder D         |
| 041035 | Bioinformatics   | Hackl H  |
| 041510 | Molecular Biological Techniques  | Dayal A  |
| 041538 | Translational Oncology   | Sampson N, Pühr M, Schäfer G (Deichsler S), Wollmann G |
| 170092 | Introduction into Flow Cytometry   | Sopper S (Bösch M)                                     |
| 049004 | Biological Databases   | Schwelberg H   |
| 049511 | 3D Bioprinting Tissue Engineering and Rapid Prototyping  | Außerlechner M, Hagenbuchner J                         |
| 041540 | Key Techniques: cell culture ,lysis, fractionation and detection of specific proteins and their activity | Eca Guimaraes Araujo M, Vietor I                       |
| 999551 | Introduction to data analysis with R   | Keller M (Koch J)                                      |

**Please also check out the  
courses for the SS  
on the homepage**

# MCBD seminar

Every Wednesday @ 12

## The annual progression points



**20 Minutes:**

**hypothesis – open questions - results – bigger picture**

**try to couple it to your TAC meeting**

**Location: Pathology Lecture Hall**

# MCBD seminar

## MCBD Seminar Talks – WS 2021/22

| date                             | student/lab/title/room  |
|----------------------------------|---|
| <u>06.10.2021</u><br>12:00-13:00 | <b>Emmanuel Heilmann (von Laer Lab)</b><br><i>High-throughput screening method for cis inhibitors of the SARS-CoV-2 3C-like protease</i><br><b>Jakob Hirsch (Holfeld Lab)</b><br><i>Progesterone promotes spontaneous coronary artery dissection</i><br>➤ Pathologie-HS (Müllerstraße 44) |
| <u>13.10.2021</u><br>12:00-13:00 | <b>Bernhard Radlinger (Kaser Lab)</b><br><i>tba</i><br><b>Julia Hofmann (Schneeberger Lab)</b><br><i>tba</i><br>➤ Pathologie-HS (Müllerstraße 44)   |
| <u>20.10.2021</u><br>12:00-13:00 | <b>Markus Ausserhofer (Finotello Lab)</b><br><i>tba</i><br><i>*slot available*</i><br>➤ Pathologie-HS (Müllerstraße 44)   |
| <u>27.10.2021</u><br>12:00-13:00 | <b>Raphael Gronauer (Hackl Lab)</b><br><i>tba</i><br><b>Michael Jäger (Wilfingseder Lab)</b><br><i>tba</i><br>➤ Pathologie-HS (Müllerstraße 44)   |
| <u>03.11.2021</u><br>12:00-13:00 | <b>Vincent Braun (Villunger Lab)</b><br><i>tba</i><br><b>Leo Pölzl (Holfeld Lab)</b><br><i>tba</i><br>➤ Pathologie-HS (Müllerstraße 44)   |
| <u>10.11.2021</u><br>12:00-13:00 | <b>Chiara Andolfi (Culig Lab)</b><br><i>tba</i><br><b>Sophia Lechner (Gollmann-Tepeköyliü Lab)</b><br><i>tba</i><br>➤ Pathologie-HS (Müllerstraße 44)   |
| <u>17.11.2021</u><br>12:00-13:00 | <b>Annika Rössler (von Laer Lab)</b><br><i>tba</i><br><b>Andreas Medici (Troppmair Lab)</b><br><i>tba</i><br>➤ Pathologie-HS (Müllerstraße 44)  |
| <u>24.11.2021</u><br>12:00-13:00 | <b>Elena Brunner (Sampson Lab)</b><br><i>tba</i><br><b>Deborah Minzaghi (Dubrac Lab)</b><br><i>tba</i><br>➤ Pathologie-HS (Müllerstraße 44)   |
| <u>01.12.2021</u><br>12:00-13:00 | <b>Elisabeth Damisch (Sampson Lab)</b><br><i>tba</i><br><b>Felix Nägele (Holfeld Lab)</b><br><i>tba</i><br>➤ Pathologie-HS (Müllerstraße 44)  |

## Core Subject

# Scientific Presentations on International Conferences & Courses (max. 2 ECTS)

- Presenting poster/talks on international conferences can be credited with max. 2 ECTS (depending on the duration/program)
- also possible international courses: e.g. EMBO courses / FEBS courses
- as a rule of thumb: for 1 ECTS at least scientific program over 2.5 days
- make sure that you provide all information (meeting program etc.) together with the form. We will be **very strict** with these regulations.



# General Subjects

- Transferable skills that cover a variety of topics
- it is planned to take courses in ETHICS & STATISTIC mandatory for all PhD students

**Please sign up though i-med inside  
or directly with the respective faculty**

# MCBO best paper award

every year for one excellent publication in the field of molecular cell biology

- eligible every MUI PhD-student
- up to 1500 € travel money

2020



2021



Sometimes your PhD  
will seem like an  
impossible task



With the help of  
others you will  
succeed

