**V-Modul Complex Systems in Biomedical Applications**

**Online-Introduction**

Montag, 16. Okt. 2023, 14:30

[**https://fu-berlin.webex.com/fu-berlin/j.php?MTID=mb47f7669e33e26c1dfa1124ac8303fb8**](https://fu-berlin.webex.com/fu-berlin/j.php?MTID=mb47f7669e33e26c1dfa1124ac8303fb8)

**Time Table**

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| **16.10.2023** | **14:30 - 15:30** |  |  | **Introduction** | Günzel et al. |
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| **23.10.2023** | **14:30 – 16:00** | Lecture | VW 24 SR 01 034 | **Cardiovascular System** | Szulcek |
| **23.10.2023** | **16:15 - 17:45** | Lecture | VW 24 SR 01 034 | **Transport Processes 1** | Kucherenko |
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| **30.10.2023** | **14:30 – 16:00** | Lecture | VW 24 SR 02 009 | **Modell. Physiol. Systems: Circ Rhythm** | Maggioni |
| **30.10.2023** | **16:15 - 17:45** | Lecture | VW 24 SR 02 009 | **Modell. Physiol. Systems: Body Composition** | Maggioni |
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| **6.11.2023** | **14:30 – 16:00** | Lecture | VW 24 SR 02 009 \* | **Modell. Physiol. Systems: Thermoregulation, Exercise Physiology** | Maggioni |
| **6.11.2023** | **16:15 - 17:45** | Exercise | CCO 01 324 & 325 | **Modell. Physiol. Systems: Thermoregulation, Exercise Physiology** | Maggioni |
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| **13.11.2023** | **14:30 – 16:00** | Exercise | CCO 01 324 & 325 | **Modell. Physiol. Systems: Body Composition** | Maggioni |
| **13.11.2023** | **16:15 - 17:45** | Exercise | CCO 01 324 & 325 | **Modell. Physiol. Systems: Body Composition** | Maggioni |
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| **20.11.2023** | **14:30 – 16:00** | Lecture | VW 24 SR 01 034 | **Transport Processes 2** | Kucherenko |
| **20.11.2023** | **16:15 - 17:45** | Exercise | VW 24 SR 03 013 | **Cardiovascular System** | Szulcek |
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| **27.11.2023** | **14:30 – 16:00** | Lecture | Kl. Hörsaal Hautklinik | **Innate to Adaptive Immunity** | Simmons |
| **27.11.2023** | **16:15 - 17:45** | Exercise | BHH SR 14 003 | **Innate to Adaptive Immunity** | Simmons |
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| **04.12.2023** | **14:30 – 16:00** | Exercise | VW 24 SR 03 013 | **Transport Processes 1** | Kucherenko |
| **04.12.2023** | **16:15 - 17:45** | Exercise | VW 24 SR 03 013 | **Transport Processes 2** | Kucherenko |
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| **11.12.2024** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Diffusion (Pattern formation** | Günzel |
| **11.12.2024** | **16:15 - 17:45** |  | CBF | **in embryology)** |  |
|  | | | | | |
| **18.12.2024** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Buffering/Sequestration: intra-/** | Günzel |
| **18.12.2024** | **16:15 - 17:45** |  | CBF | **extracell. pH, Ca in muscle** |  |
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| **08.01.2024** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Channels/Aquaporins** | Günzel |
| **08.01.2024** | **16:15 - 17:45** |  | CBF | **from nerve to kidney** |  |
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| **15.01.2024** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Carriers/Transport coupling** | Günzel |
| **15.01.2024** | **16:15 - 17:45** |  | CBF | **energetics and equilibria** |  |
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| **22.01.2024** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Pumps:** | Günzel |
| **22.01.2024** | **16:15 - 17:45** |  | CBF | **ATPases and beyond** |  |
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| **29.01.2024** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Tight Junctions** | Günzel, Piontek |
| **29.01.2024** | **16:15 - 17:45** |  | CBF | **The paracellular pathway** |  |
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| **05.02.2024** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Epithelial Transport** | Günzel |
| **05.02.2024** | **16:15 - 17:45** |  | CBF | **trans or para?** |  |
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| **12.02.2024** | **14:30 – 16:00** | Exercise | CBF | Q & A | Günzel |
| **12.02.2024** | **16:15 - 17:45** |  | CBF |  |  |
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| **Mid/end February** | **(Planned)** | exam |  |  | Günzel, N.N. |