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

**Online-Introduction**

Montag, 14. Okt. 2024, 14:30

https://fu-berlin.webex.com/fu-berlin/j.php?MTID=m086208d587787eb1998bae7eba982f92

**Time Table**

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| --- | --- | --- | --- | --- | --- |
| **14.10.2024** | **14:30 - 15:30** |  | **online** | **Introduction** | Günzel et al. |
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| **21.10.2024** | **14:30 – 16:00** | Lecture | VW 9 SR 404 | **Cardiovascular System** | Szulcek |
| **21.10.2024** | **16:15 - 17:45** | Lecture | VW 9 SR 404 | **Transport Processes 1** | Kucherenko |
|  | | | | | |
| **28.10.2024** | **14:30 – 16:00** | Lecture | VW 9 SR 403 | **Modell. Physiol. Systems: Circ Rhythm** | Stahn |
| **28.10.2024** | **16:15 - 17:45** | Lecture | VW 9 SR 403 | **Modell. Physiol. Systems: Body Composition** | Stahn |
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| **4.11.2024** | **14:30 – 16:00** | Lecture | VW 9 SR 404 | **Modell. Physiol. Systems: Thermoregulation, Exercise Physiology** | Stahn |
| **4.11.2024** | **16:15 - 17:45** | Exercise | VW 06 ÜbR 324 | **Modell. Physiol. Systems: Thermoregulation, Exercise Physiology** | Stahn |
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| **11.11.2024** | **14:30 – 16:00** | Exercise | VW 9 SR 401 | **Modell. Physiol. Systems: Body Composition** | Stahn |
| **11.11.2024** | **16:15 - 17:45** | Exercise | VW 06 ÜbR 324 | **Modell. Physiol. Systems: Body Composition** | Stahn |
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| **18.11.2024** | **14:30 – 16:00** | Lecture | VW 9 SR 403 | **Transport Processes 2** | Kucherenko |
| **18.11.2024** | **16:15 - 17:45** | Exercise | VW 9 SR 403 | **Cardiovascular System** | Szulcek |
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| **25.11.2024** | **14:30 – 16:00** | Lecture | HW 05 UntR 410 | **Innate to Adaptive Immunity** | Simmons |
| **25.11.2024** | **16:15 - 17:45** | Exercise | HW 05 UntR 410 | **Innate to Adaptive Immunity** | Simmons |
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| **02.12.2024** | **14:30 – 16:00** | Exercise | VW 9 SR 403 | **Transport Processes 1** | Kucherenko |
| **02.12.2024** | **16:15 - 17:45** | Exercise | VW 9 SR 403 | **Transport Processes 2** | Kucherenko |
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| **09.12.2025** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Diffusion (Pattern formation** | Günzel |
| **09.12.2025** | **16:15 - 17:45** |  | CBF | **in embryology)** |  |
|  | | | | | |
| **16.12.2025** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Buffering/Sequestration: intra-/** | Günzel |
| **16.12.2025** | **16:15 - 17:45** |  | CBF | **extracell. pH, Ca in muscle** |  |
|  | | | | | |
| **06.01.2025** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Channels/Aquaporins** | Günzel |
| **06.01.2025** | **16:15 - 17:45** |  | CBF | **from nerve to kidney** |  |
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| **13.01.2025** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Carriers/Transport coupling** | Günzel |
| **13.01.2025** | **16:15 - 17:45** |  | CBF | **energetics and equilibria** |  |
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| **20.01.2025** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Pumps:** | Günzel |
| **20.01.2025** | **16:15 - 17:45** |  | CBF | **ATPases and beyond** |  |
|  | | | | | |
| **27.01.2025** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Tight Junctions** | Günzel, Piontek |
| **27.01.2025** | **16:15 - 17:45** |  | CBF | **The paracellular pathway** |  |
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| **03.02.2025** | **14:30 – 16:00** | Lecture + Exercise | CBF | **Epithelial Transport** | Günzel |
| **03.02.2025** | **16:15 - 17:45** |  | CBF | **trans or para?** |  |
|  | | | | | |
| **10.02.2025** | **14:30 – 16:00** | Exercise | CBF | **Final results** | Günzel |
| **10.02.2025** | **16:15 - 17:45** | Exercise | CBF | **Q & A** |  |
|  | | | | | |
| **Mid/end February** | **(Planned)** | exam |  |  | Günzel, N.N. |

Seminar Rooms at CCM (Charité Mitte, see map below):

VW: Virchowweg; HF Hufelandweg

Official address of the seminar rooms 401, 403 and 404 at CCM is Sauerbruchweg 3. However, the rooms are best reached through Virchowweg 9 (Yellow 9 in the plan below).

Seminar Rooms at CBF (Campus Benjamin Franklin; Hindenburgdamm 30 in Steglitz) will be announced later.

CCM:

