



ISM Lunchtime Seminar Series

The ISM Lunchtime Seminars are online monthly events, which take place on Thursdays, 13:00-13:30h, and are open to all interested colleagues and students. ISM researchers and guest speakers present their work during a 15 min seminar, in the English language, followed by a brief Q&A session.

We are happy to announce our next speaker: Müge Yalçın, M.Sc. from the research group of Prof. Dr. Angela Relógio.

Title: A role for the circadian clock in cellular pathways associated with cancer and neurodegeneration?

Abstract: Cancer and neurodegenerative diseases are two aging-related pathologies with differential developmental characteristics, but they govern the disruption of common cellular pathways. Interestingly, dysregulations in the circadian clock are reported to be linked to both diseases, though the extent and potential consequences of such disruption have not been fully explored. In this study, we aimed at characterizing global changes in common cellular pathways associated with Parkinson's disease (PD) and colorectal cancer (CRC). We used high throughput transcriptomics data sets retrieved from an idiopathic PD (IPD) patient cohort and in vitro CRC model with cells depicting a robust circadian clock (HCT116 and SW480 cell lines) and cells with a dysregulated clock (SW620, the metastatic counterpart of SW480 from the same patient, and HCT116 clock-KO cells). Our results highlight common differential regulation of genes between IPD patients and cells with disrupted clocks, suggesting a role for the circadian clock in the regulation of pathways altered in both pathologies. Interestingly, several of these genes are related to cancer hallmarks and may have an impact on the overall survival of colon cancer patients, as suggested by our analysis.

When: 23rd June 2022 at 13:00h **Where:** [KaiserKai Room 7.02](#) or via MS-Teams (to join, please click [here](#))

Please follow the rules below to make these seminars a success:

- Please use your real name while entering the meeting. Participants with cryptic names will not be given access to the seminar.
- Please turn off your microphone while the seminar is taking place.
- Please feel free to ask questions!

Contact information

Please contact [Dr. Deeksha Malhan](#) or [Dr. Annakarina Mundorf](#) for further information.