



Einladung

zu dem am Donnerstag, dem 22. Januar 2026, ab 14 Uhr
im Kurt-Alder-Hörsaal,
Greinstraße 4, 50939 Köln
stattfindenden öffentlichen

wissenschaftlichen Habilitationsvortrag
CECAD
(Fach: Biologie)
von

Ph.D. Henning Fenselau
über das Thema

„Why we sleep: Unlocking the brain’s nighttime activity”

Sleep is essential, yet one of the most profound questions in neuroscience remains unanswered: why do we sleep at all? While conserved across species, some have even suggested that sleep is an evolutionarily “maladaptive” behavior, as it consumes a significant portion of life. This lecture will explore the two major regulators of sleep - circadian rhythms and sleep pressure - and their integration with dedicated brain pathways. I will discuss current neurobiological theories, from renormalization to metabolic restoration of synapses, that attempt to explain the purpose of sleep. Finally, I will examine how sleep disturbances arise, both from pathological changes, such as loss of orexin neurons, and from environmental factors in modern life, highlighting their impact on sleep health, aging, and longevity.



G. Bareth
Dekan