

Seminar Presentations – Possible Topics

In the seminar, the topics of the lecture will be discussed from a broader perspective in the form of presentations. The times for the seminars and the specific topics will be scheduled in the lecture.

The seminar lectures should be held in English and should last at least 20 minutes but not more than 30 minutes. Afterwards an informal discussion takes place. Possible topics are:

1. Amino acids as limiting factor in cattle nutrition (J.C.)
2. Beyond EPO and hormones - nutritional supplements for high performance sports (ZA)
3. Nobel Prize in Physiology 2019: “How cells sense and adapt to oxygen availability” (CX)
4. Novel trends in fighting obesity and diabetes (V.R.)
5. Molecular machines – learning from nature (L.D.)
6. Insulin and its formulations (J.F.)
7. Green biotech approaches to reduce CO₂ emission (OH)
8. Sexual hormones and how they function (M.G.)
9. Warburg effect and its translation to treatment strategies in cancer (D.H.)
10. Inborn metabolic disease (e.g. defects of urea cycle, sphingolipidoses, etc) (J.M.)
11. Roundup or glyphosate – mode of action and how to engineer resistant plants (L.H.)
12. Vitamins and their role for the body (SOH) Essential fatty acids and their role for nutrition (HJL)
13. Essential fatty acids and their role for nutrition (HJL)
14. Hemoglobin (D.T.)
15. CRISPR/Cas9 (S.H.)
16. β -hydroxyaspartate cycle (Nature 575, 500–504 (2019) doi:10.1038/s41586-019-1748-4)
17. Transporters and shuttles and examples of their role in metabolism
18. Hijacking of host metabolism by parasites (auxotrophes)
19. RNAi as a tool for investigating metabolism