

Narrative 14: Research Integrity

While of course any person working in academia must think about research integrity and the peculiarities of scientific writing and publishing, I had not been exposed formally to this topic during my graduate and postgraduate education.

Apart from thoughts on the effect of citation styles

Clauss M, Müller DWH, Codron D (2013) Source references and the scientist's mind-map: Harvard vs. Vancouver style. *Journal of Scholarly Publishing* 44: 274-282

or seemingly unreflected ways of interpreting data especially in palaeoreconstructions

Clauss M (2021) Bio- and palaeoreconstructions: correlates and proxies. *Ecology and Evolution* 11: 10769-10771

I developed a teaching module started as a combination of an outline to the process of organizing a research project and publishing the results, and a haphazard list of frustrating experiences and publications that had occurred to me over the years.

I have been teaching parts of this module in the last decade at various courses or guest lectures. In particular, components of this were part of the

invited plenary lectures at the Conference of the Comparative Nutrition Society at Nuremberg Zoo in Salt Lake City, USA in 2022

Clauss (2022) Comparative nutrition and digestive physiology - thoughts about future possibilities. *Proc Comp Nutr Soc* 14: 15-18

Apart from the logistical and procedural aspects of performing a scientific project and publishing, these modules contain philosophical aspects of how to present scientific results, how to ask scientific questions, how to judge scientific contributions, or how to judge a research program.

My activities in this respect led, I think, to the award of the **Sarton Medal** by the Veterinary Faculty of Gent University in 2023 for contributions to the history and philosophy of science, with a corresponding award lecture and contribution

Clauss M (2023) Historical (and psychological) aspects of zoological science: the power of words, the tenacity of both simple rules and exceptionalism, and how the belief in perfection – not in God – separates creationists from evolutionists. *Sartoniana* 36: 185-206

A part of this integrity is the acknowledgement of serendipity when presenting a research result as done in

Dittmann, ..., Clauss (2017) Ingestive mastication in horses resembles rumination but not ingestive mastication in cattle and camels. *J Exp Zool A* 327: 98-109

Schiffmann, ..., Clauss (2019) Elephant body mass cyclicality suggests effect of molar progression on chewing efficiency. *Mamm Biol* 96: 81-86

To me, corrections of presumably science-based 'knowledge' and 'tradition' has been a major component of my scientific life. Current examples include a reply to a comparative study on zoo animal cancer

Clauss, Müller (2024) Putting zoo animal cancer into perspective. *Zoo Biol* 43: 15-21

a demonstration that UV light has not only an effect on a herbivore but a very important effect on its food source

Mäkitaipale, ..., Clauss, et al. (2024) Serum vitamin D concentrations in rabbits (*Oryctolagus cuniculus*) are more affected by UVB irradiation of food than irradiation of animals. *Vet J* 306: 106149

or a rejection of the concept that animals with so-called 'ever-growing' teeth have higher calcium requirements

Mäkitaipale, ..., Clauss, et al. (2025) Tooth meal serves as a calcium source for rabbits (*Oryctolagus cuniculus*). *Vet J* 309: 106268