

## PUBLIC LECTURE EVALUATION

### Masaryk University

**Faculty****Procedure field****Applicant****Lecture date****Lecture topic**

## Persons present

(number)

## Designated evaluators

(board members)

Faculty of Science

Zoology

doc. RNDr. Martin Reichard, Ph.D.

29.10.2020

Host-parasite relationships in a dynamic world

113 (2 present, 111 on-line)

prof. RNDr. Michal Horsák, Ph.D.

Univ.-Prof: Dipl.-Ing. Dr. Kristina Sefc

prof. RNDr. Miloš Macholán, CSc.

prof. Ing. Petr Ráb, DrSc., dr.h.c.

prof. RNDr. Zdeněk Laštůvka, CSc.

In the first part of his general talk, Martin Reichard introduced host-parasite relationships in general, with an extension towards other co-evolutionary relationships such as mutualism and predator-prey interactions. He described different forms of host-parasite relationships, depending on the strength of the relationship and resources that a parasite extracts from its host. He then moved onto introducing brood parasitism and its more general form called reproductive parasitism. The candidate then defined the umbrella term of a dynamic world from the title of his talk. He divided the term "dynamic world" into three parts. The first refers to evolutionary time (co-evolution). The second includes ecological time, which can be well studied using the cases of biological invasions and adaptation to human-altered environments. The third part comprises dynamic changes within the individual lifespan of the host and the parasite. This includes immune responses as well as individual learning.

In the second part of the talk he illustrated the concepts on the basis of his own research programme, starting with examples from the relationship between bitterling fish and freshwater mussels. He demonstrated how co-evolutionary systems might become a powerful tool to understand rapid changes in ecological communities. Finally, he introduced his recent experimental work on brood parasitic cuckoo catfish and their African mouth-brooding cichlid fish hosts. This part of the talk demonstrated the significant contributions of his own work to the research field.

The talk highly resonated among the audience, resulting in a fruitful and long discussion raising many interesting and stimulative ideas. The evaluation committee members concluded that this was the kind of seminal talk that one expects from a well-recognised researcher and scientist with well-developed pedagogical skills. Martin Reichard reached the highest possible level in both aspects and received credit both from the committee members and the audience.

### Conclusion

The lecture delivered by Martin Reichard, entitled Host-parasite relationships in a dynamic world and delivered as part of the professor appointment procedure, **demonstrated** sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a professor appointment procedure in the field of Zoology.

Date: 30.10.2020

Michal Horsák.