

Searching for a Ph.D. student in molecular ecotoxicology
University of South Bohemia & Czech Academy of Sciences

Hunting down the Eagle Killer : Investigations into the Cyanotoxin Causing Avian Vacuolar Myelinopathy

*Avian Vacuolar Myelinopathy (AVM) is a fatal neurological disease of birds. Its alarming spread in USA during the last 25 years has raised concerns about avian populations, including the iconic bird of prey, the **bald eagle**. All evidence points at AVM being caused by a **novel cyanobacterial toxin** that is produced by cyanobacteria of the novel species *Aetokthonos hydrillicola*, growing epiphytic on aquatic plants and travelling up the food chain, finally causing the typical brain lesions observed in AVM affected birds.*

The main task of the PhD student is to **elucidate the biosynthesis of the new toxin by analysis of the candidate gene cluster** using:

- whole genome sequencing
- gene manipulation and heterologous expression
- *in vitro* enzymatic essays

What we offer:

- a friendly group of young scientists
- participation in a **funded international project** (2019-2021)
- wide array of genomic and analytical methods
- collaboration with German and American partners
- paid internship in Germany (structural biology, MALDI imaging)
- **50% job** at the Biology Centre CAS in addition to your stipend
- Good publication perspective

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To apply, send your professional CV and recommendation letter by your former supervisor

