

## INVITATION

Conférence donnée dans le cadre de la procédure de promotion

### Prof. David Hoogewjis

DepEMC, FacSciMed, University of Fribourg, Fribourg CH

[david.hoogewjis@unifr.ch](mailto:david.hoogewjis@unifr.ch)

**Jeudi, 24 novembre 2022, à 08h15**

**Auditoire 1.100, PER09** – Chemin du Musée 5, 1700 Fribourg  
<https://www.unifr.ch/map/fr/plans/perolles.html>

Faculté des Sciences et de Médecine de l'Université de Fribourg

---

### Diversity of globins: beyond hemoglobin and myoglobin

Oxygen-binding proteins are arguably among the most intensively studied of all proteins. Genomic information accrued over the last 20 years has greatly expanded the established repertory of metazoan globins far beyond hemoglobin and myoglobin. The post-genomic era revealed the presence of two major globin families present in all vertebrates, the neuroglobins expressed primarily in neurons and eye tissue and the cytoglobins, expressed mostly in fibroblasts. In the first part of the lecture, addressed to Bachelor students, principles of blood gas transport will be discussed with a focus on the physiological role of hemoglobin. In the second part of the seminar the identification and functional analysis will be reported of a novel highly conserved metazoan globin lineage, consisting of large chimeric proteins with an N-terminal protease domain and a central globin domain, termed androglobins, because of their specific expression in testis tissue.

Fribourg, le 18 novembre 2022

Prof. Ulrich Ultes-Nitsche, Doyen et  
Président de la Commission de promotion