

## Time & Place

Lecture hall of  
ICBM

W15-1-146

Campus  
Wechloy

University of  
Oldenburg

15.00-16.00

## Biodiversitäts- forschung

Die Universität Oldenburg hat einen Schwerpunkt in der Biodiversitätsforschung in Land- und Meeresökosystemen aufgebaut. Getragen durch die Institute für Biologie und Umweltwissenschaften (IBU) und für Chemie und Biologie des Meeres (ICBM) arbeiten > 20 Arbeitsgruppen an folgenden zentralen Fragestellungen zur biologischen Vielfalt:

- Welche ökologischen und evolutionären Prozesse beeinflussen die Biodiversität an Land und im Meer?
- Wie wird sich die Biodiversität im Rahmen des globalen Wandels verändern?
- Welche Konsequenzen haben diese Veränderungen der Biodiversität für die Funktion von Ökosystemen?

HIFMB Das Helmholtz-Institut für Funktionelle Marine Biodiversität (HIFMB) ist eine Kooperation des Bremerhavener Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung (AWI) und der Carl von Ossietzky Universität Oldenburg (UOL). Das HIFMB soll wissenschaftliche Grundlagen für den Meeresschutz und das marine Ökosystemmanagement entwickeln.

# Edward O. Wilson Lecture on Biodiversity

16. 5. 2018

## Toward a unified science of ecological change: advances and challenges in biodiversity and metabolic scaling

### Prof. Mary O' Connor

Associate Professor, Department of Zoology

Associate Director, Biodiversity Research Centre,  
University of British Columbia



Biodiversity change and ecological responses to climate change are topics of major concern, and we rely on ecological theory to guide how we relate observed or suspected changes to potential consequences for ecosystem functions and services. I will highlight recent advances in detecting biodiversity change across scales in coastal marine systems and potential implications for ecosystem functions and seafood derived nutritional benefits to humans. I will also present recent work that strengthens our understanding of how general temperature dependence of metabolism constrains population-level processes and fitness potential, providing a key link between temperature and ecological and evolutionary outcomes.

I am deeply interested in unifying our ecological science across scales, and hope to start a discussion about how we can continue to take steps in that direction.

### Biosketch

2017 - 2018	Visiting Scientist, Swiss Federal Institute for Aquatic Science & Technology (EAWAG)
2011 - now	Professor, Department of Zoology, Biodiversity Research Centre, University of British Columbia, Vancouver
2009 - 2010	Post Doc at National Center for Ecological Analysis and Synthesis (NCEAS)
2008	University of North Carolina, Chapel Hill, PH.D. Ecology
2000	Brown University, B.S. Aquatic Biolog

Further info <http://oconnorlab.weebly.com/index.html>

The Edward O Wilson Lecture is a special program inviting one excellent international researcher in biodiversity sciences to Oldenburg once per year. It is named after Prof. E.O. Wilson, honoring his fundamental work in biogeography, biodiversity and conservation.