

FUTURE WOOD

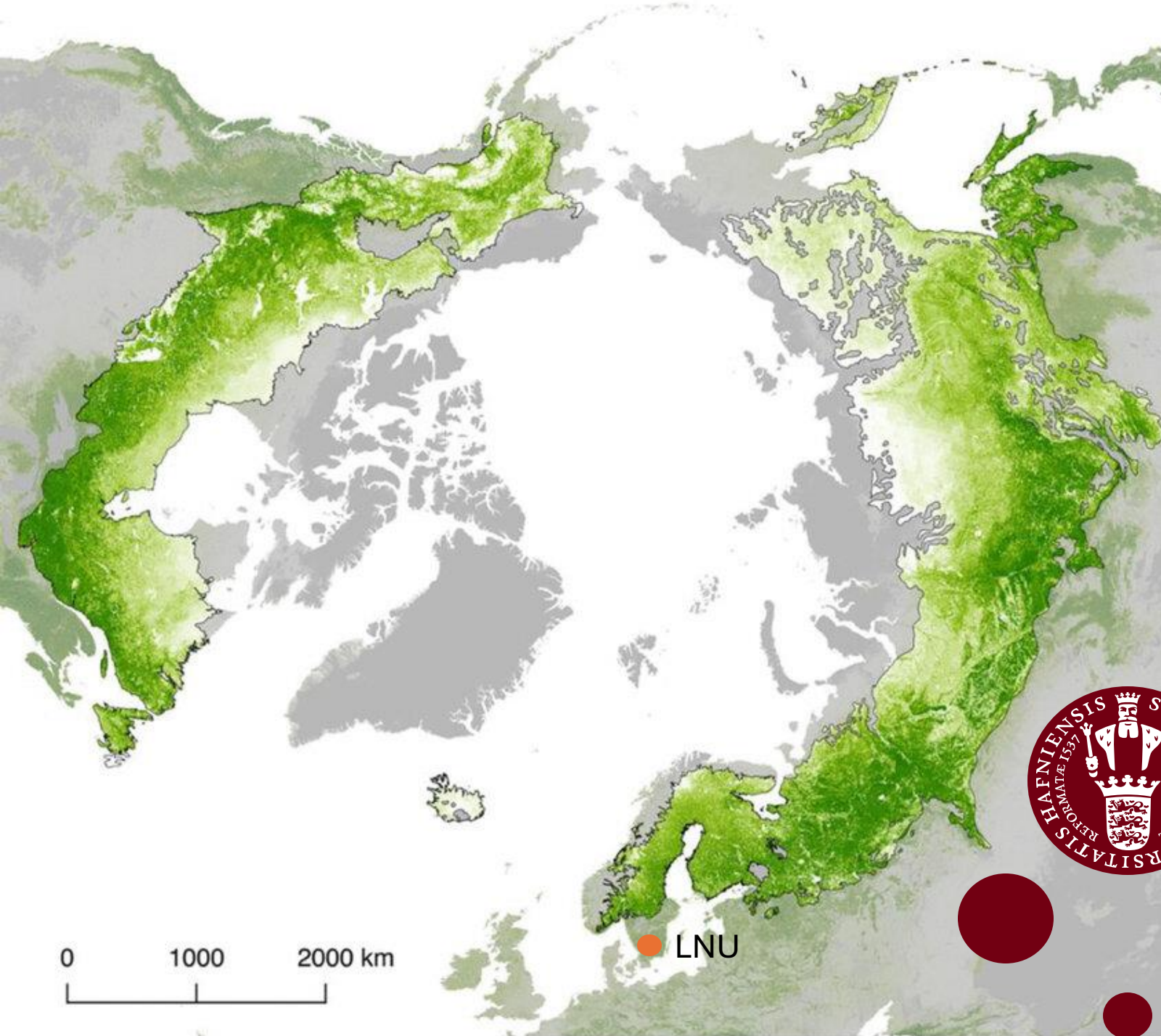
Wood properties in a warmer, high-CO₂, world



Former post-doc at SPRUCE

Some of my projects:

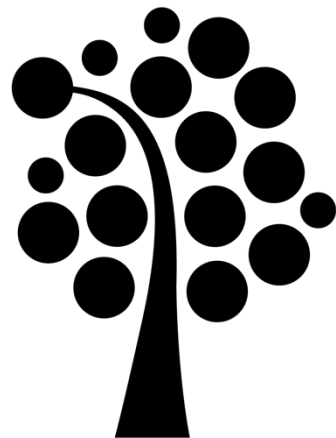
- **Can forest fertilization accelerate adaptation to a warmer climate?**
Nitrogen and photosynthetic temperature acclimation
- **Acorn reserves**
- **The Oak Project**
Landscape-level climate-resilience of oak ecosystems.
- **PlantEra**
Ancient plant survival strategies
Simulate prehistoric CO₂ levels (420, 1500, 3000 ppm)



Reza Hosseinpourpia



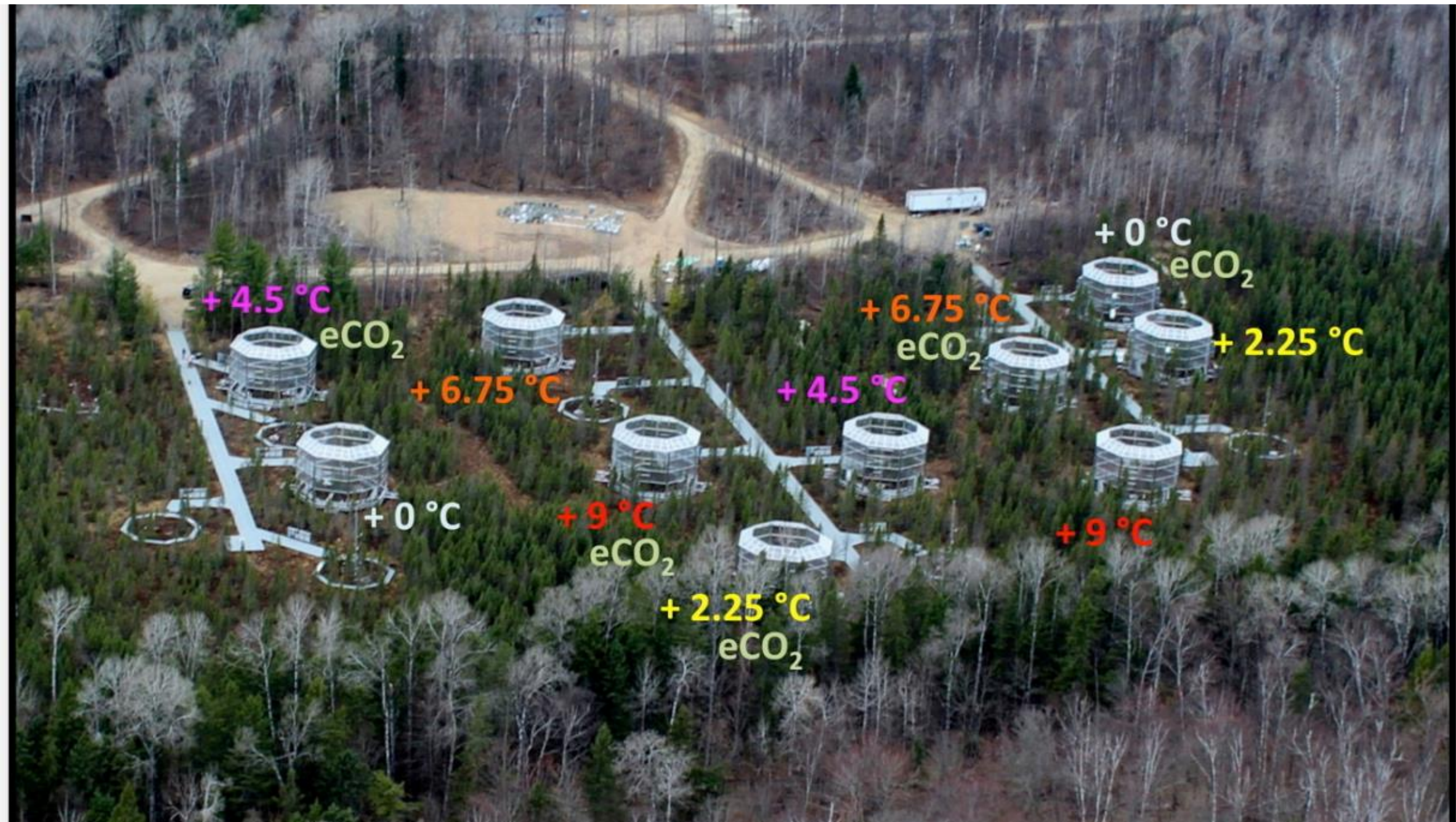
Helle Martens



This project aims to quantify and predict changes in wood properties that may occur in a warmer, high-CO₂ world.

Specific objectives:

- Macroanalysis – physical, mechanical, and durability properties
- Microanalysis – fiber properties
- Chemical analysis – wood and bark chemical properties



Winter 2026



Research focus

- Wood properties, modification & protection
- Wood/bark Composites – bioadhesives and additives
- Wood processing – sawmilling, drying and moisture
e.g. Itrax scanning densitometer, which combines microdensitometric measurements with multi-element analysis through X-ray fluorescence (XRF)

