

# Open source science and making an impact (James Nightingale / Newcastle University)

*Wednesday, 17 July 2024 09:00 (1 hour)*

Open source science applies the principles of open source software development to scientific research, emphasizing transparency, collaboration, and accessibility to make scientific knowledge and data freely available. I will argue that adopting these practices to the highest standard is crucial for the advancement of science. Through case studies from the “reproducibility crisis”, I will highlight the potentially devastating consequences of not practicing open science. I will then demonstrate how projects like SciPy, NumPy, and Pandas have transformed the research landscape. Open source science requires significant time, effort, and energy, and may not always be rewarded by the current scientific funding landscape. Nevertheless, I will contend that it ultimately enhances your research output, productivity, and is a compelling means to build collaboration with commercial industry partners.

**Presenter:** NIGHTINGALE, James (Newcastle University)