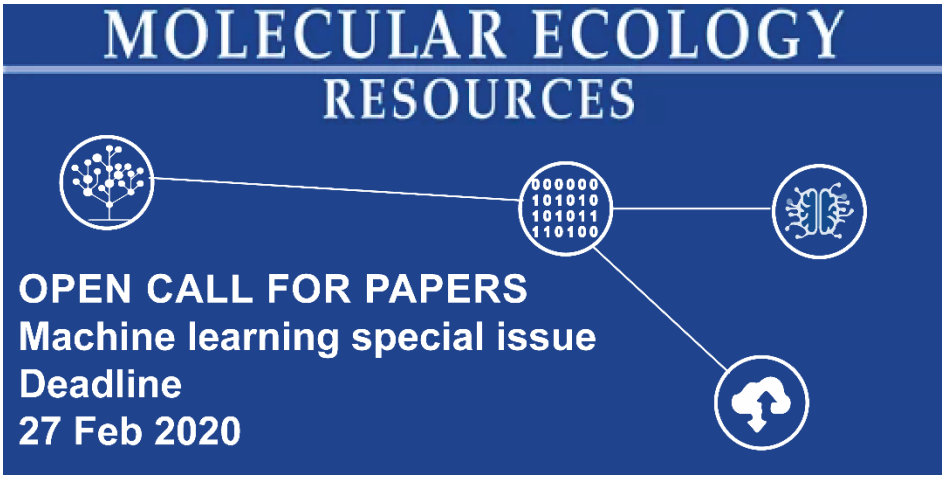
MOLECULAR ECOLOGY
RESOURCES

Machine Learning in Molecular Ecology

As genomic and ecological datasets grow larger in size, researchers are flooded with far more information than was available when many conventional model-based approaches were designed. To deal with these massive amounts of data, many researchers have turned to machine learning techniques, which promise the ability to help find signals within the noise of the complex datasets generated by modern sequencing approaches. Applications for machine learning in molecular ecology are broad and include global studies of biodiversity patterns, species delimitation studies, and studies of the genomic architecture of adaptation, amongst many others. Here at Molecular Ecology Resources, we are excited to highlight research that applies supervised and unsupervised machine learning algorithms to answer questions of interest to the readership of molecular ecology. This special issue will also highlight the nuances and limitations of machine-learning techniques. Rather than focusing on the supposed differences between machine-learning and model-based approaches, this issue would aim to highlight the broad spectrum of machine-learning approaches, many of which can incorporate model-based expectations and predictions.

We are soliciting original research that applies novel robust applications of machine learning methods on molecular data to address questions across ecological disciplines.



Details

Manuscripts should be submitted in the usual way through the **Molecular Ecology Resources website**. Submissions should clearly state in the cover letter accompanying the submission that you wish the manuscript to be considered for publication as part of this special issue. Pre-submission enquiries are not necessary, but any questions can be directed to **manager.molecol@wiley.com**