

Project ideas

Phylogenetics in palaeobiology

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Project aims

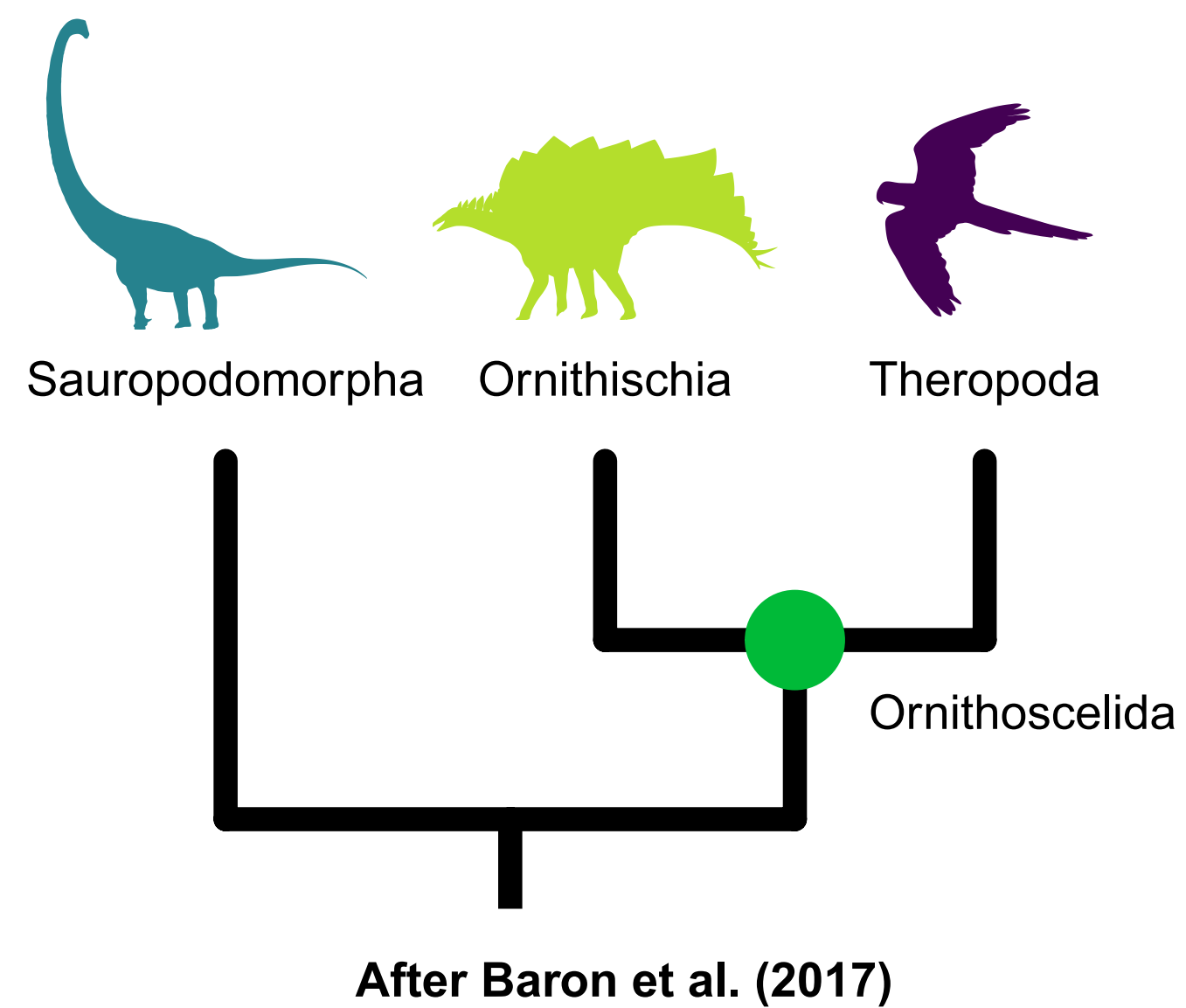
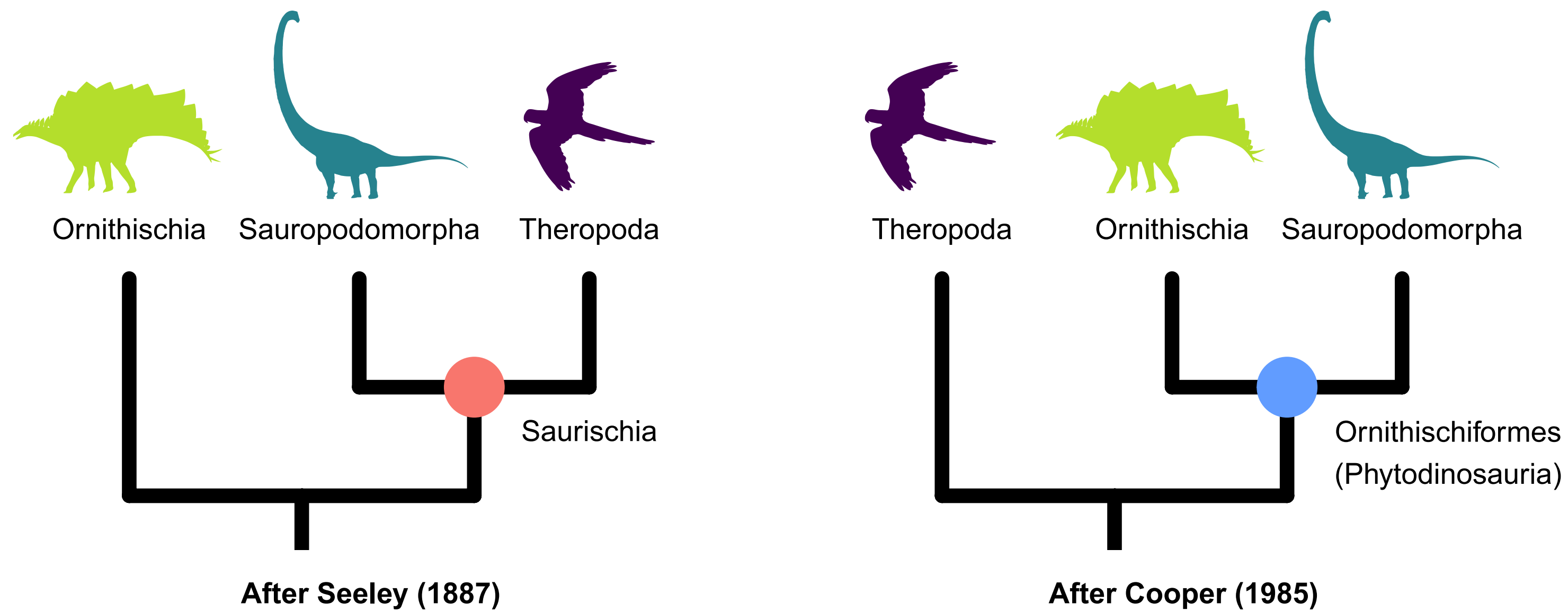
The general aim of each project should be to **build a tree using RevBayes** using a published matrix and **interpret your results**.

Optionally, you could investigate the impact of different models and parameter choices (e.g., morphological substitution, clock models) or you could infer a dated tree.

Data sources

Graeme Lloyd's database of character matrices.

Age info for many of these matrices can be found in this paper.



Statistical evaluation of character support reveals the instability of higher-level dinosaur phylogeny

Černý and Simonoff. 2023.

Different character matrices produce different trees – what about different models?

Assessment

Report

5 pages max, inc. references and figures

Focus mainly on the methods and results

+ brief intro & discussion (paragraph each)

Deadlines – **July 21** (for feedback) and **July 28** (final)

Invertebrates “booster” quiz – **July 18**

Some guiding questions

What is the main question / hypothesis that you aim to address in your project?

Describe the data, your model and all your parameter choices

Could someone else repeat your analysis based on the info you provide?

If applicable, how did you assess convergence?

Did you encounter any issues?

How do your results differ to previously published results?

What would you like to do?