

# Life, Earth & Environment Seminar Series

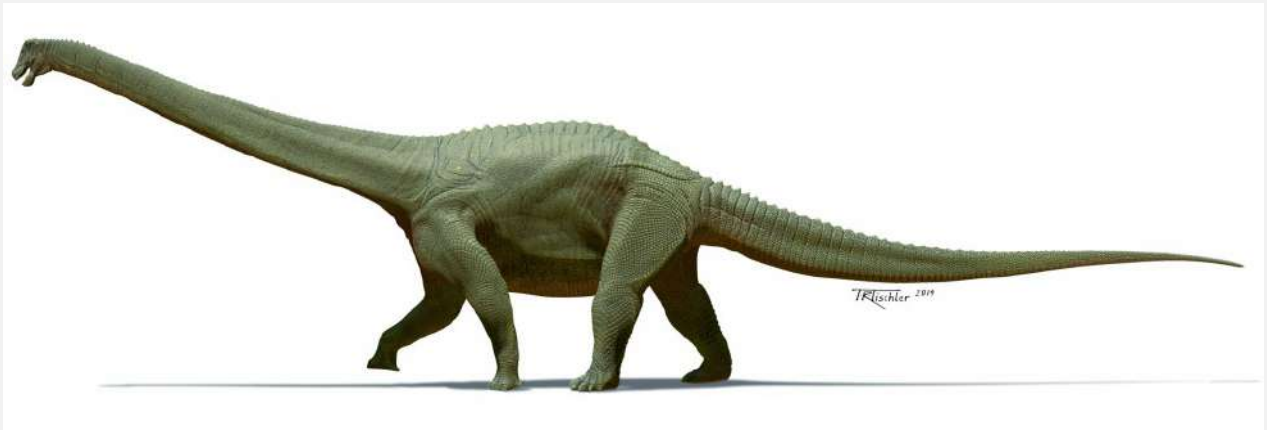
When: Friday July 20<sup>th</sup>, 12 noon – 1pm

Where: Natural Resources Building, Large Lecture Theatre (EM1)

## Walking with dinosaurs: investigating locomotion biomechanics in sauropods

Ada Klinkhamer

*University of New England, FEAR lab*



Sauropods represent the 'iconic' dinosaur because of their gigantic size and distinctive long neck and tail. Growing to masses exceeding 50 tonnes and lengths of over 30 meters, the way they moved around and supported their weight has long been a topic of discussion. With the development of many new computational modelling techniques we can now look at this area in a whole new way. Using musculoskeletal modelling and Finite Element Analysis I have investigated muscle function and mechanical performance in both the forelimb and hindlimb of sauropod dinosaurs, looking specifically at the effect of changes in posture over their evolutionary history.



### Biography

Ada is a vertebrate palaeontologist who has recently completed her PhD at UNE studying sauropod dinosaur biomechanics in the Function, Evolution and Anatomy Research (FEAR) lab. Her research involves digitally reconstructing dinosaur limbs in order to learn how they moved. Much of her research is done in conjunction with the Australian Age of Dinosaur Museum in Winton QLD.