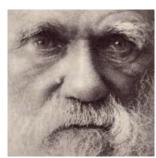


## VNIVERSITAT ( ) ICBIBE Institut Universitari Cavanilles de Biodiversitat i Biologia Evolutiva









## Seminar(i)\*

## Old fossils and sexy technologies: a real love story

## **Dr. Vincent Dupret**

**Australian National University** 

New investigation methodologies and visualisation technologies such as CTscanning and 3D modelling bloomed in the last decades. This technological development made possible the description of more and more internal structures of fossils which were not easily accessible previously without requiring destruction of the studied material. The gap between biology and palaeobiology is thus greatly reduced, and we are forced to reconsider many models. At the same time, new hypotheses can be proposed and tested.

After a quick description of computerised tomography methodologies illustrated with various examples, I will explain the importance of studying the origins of jaws and jawed vertebrates. I will introduce the newest hypothesis regarding the construction of our face originated some 415 million years ago. This hypothesis will put in the spotlight a 2cm long fossil, the skull of the placoderm Romundina, which will invite for a very complete discussion involving palaeontology, phylogeny, palaeogeography and palaeoclimatology, stratigraphy, Evo-Devo, cutting edge technologies, synchrotron scanning, 3D rendering...

WHERE?

Seminar room - Geology Department Biology-A building, 3<sup>rd</sup> floor Thursday **17/11/2016** - **13:00** h

\*(Seminari organitzat amb la col·laboració del Màster en Paleontologia Aplicada)