Palaeobiology

The palaeobiology research theme at Birmingham spans an extraordinary range of biological, temporal and spatial scales.

Our research theme includes world-leading systematists and palaeoecologists specializing in organisms ranging from single-celled algae to the largest vertebrates to have walked the Earth (as well as the plants they ate). Researchers have made fundamental contributions to understanding the evolution and diversity of life on Earth, such as the radiation of the earliest fish, the origins of terrestrial vegetation, patterns of dinosaur diversity and the long-term evolution of marine phytoplankton. We have strong synergies and overlap with palaeoenvironmental geochemists and paleoclimatologists with in the Geosystems research group and are actively pursuing research into the complex inter-relationships between the Earth's biosphere, climate and environment.

Projects

- Marine ecosystem response to the Eocene/Oligocene transition
- **Plant community response to the PETM (/research/activity/geosystems/projects/plant-community-response-to-petm.aspx)**
- Novel climate proxies from coccolith calcite
- **Origin of the conifers (/research/activity/geosystems/projects/conifer-families/index.aspx)**
- Amazon plant diversity in the Neogene
- Environmental controls on temporal and spatial trends in diversity
- **Dawn of the Dinosaurs: Archosauromorph Evolution in the Terrestrial Triassic (/research/activity/geosystems/projects/dawn-dinosaurs.aspx)**
- **Vertebrate Isotopes and the Environment (VISE) (http://www.birmingham.ac.uk/research/activity/geosystems/projects/vise.aspx)**