# **MSc Palaeobiology Theses List**

## Class of 1997 (2)

- 1. Andrea Brookes. A reassessment of the small theropod material from the Wealden of southern England. Supervised by Mike Benton and David Unwin.
- 2. Andrew Empson. A morphometric and stable isotope study of a recently discovered genus of Miocene planktonic foraminifera. Supervised by Paul Pearson.

# Class of 1998 (7)

- 3. Byron Blessed. The taphonomy of the Cromhall palaeokarst deposits. Supervised by Mike Benton and Clive Trueman.
- 4. Huw Boulton. Evolution of the *Turborotalia cerroazulensis* lineage (planktonic foraminifera). Supervised by Paul Pearson.
- 5. Daniel Elvidge. A morphometric analysis of hindlimb proportions of flying vertebrates; implication for terrestrial locomotion in pterosaurs. Supervised by David Unwin.
- 6. Megan Harrison. A census and stable isotope study of globigerinathekid planktonic foraminifera in the Massignano section, Italy. Supervised by Paul Pearson.
- 7. Alistair McGowan. A.D.A.P.T.S. (Analysis of Diversity, Asymmetry of Phylogenetic Trees an Survivorship): A new software tool. Supervised by Paul Pearson.
- 8. Tamsin Rothery. A phylogeny for the Ichthyopterygia: characters and congruence. Supervised by Mike Benton.
- 9. Emma-Jane Tricket. Mineralisation of a decapod crustacean in a Jurassic metalliferous deposit. Supervised by Derek Briggs.

# Class of 1999 (11)

- 10. Leila Blankley. A study of the palaeoenvironment of the Chenini Formation, from the Cretaceous of South Tunisia, using palaeontological and sedimentological evidence. Supervised by Mike Benton and Clive Trueman.
- 11. Suzanne Bowie. Reconstructions of *Cloudina* and a new skeletonised fossil from the Precambrian of South Africa. Supervised by Simon Braddy and Derek Briggs.
- 12. Margaret Browne. Planktonic foraminifera of the London Clay Formation: occurrence and palaeoenvironmental significance. Supervised by Paul Pearson.
- 13. Gillian Harrison. Description of two new Kimmeridgian turtles: implications for marine modifications and phylogenetic position. Supervised by Mike Benton, Trevor Cotton and Kate Harcourt-Brown.
- 14. Phil Hopley. A new specimen of *?Plesiosaurus* sp. From the lower Lias (Sinemurian) of Lyme Regis: a palaeopathological and histological approach. Supervised by Mike Benton and Clive Trueman.
- 15. Simon Jackson. A reassessment of the theropod dinosaurs of the Upper Jurassic of Tendaguru, Tanzania. Supervised by Mike Benton.
- 16. Abigail Lane. The walking techniques of Burgess Shale arthropods: a functional and ichnological investigation. Supervised by Simon Braddy and Derek Briggs.
- 17. Brian Leigh. The functional morphology of the trinucleid (Trilobita) pitted cephalic fringe: testing for filter-chamber feeding. Supervised by Derek Briggs, Trevor Cotton and Richard Fortey.
- 18. Myles McCleod. Theropod ichnotaxonomy and new dinosaur tracks from the Yorkshire coast. Supervised by Simon Braddy.
- 19. Lucy Muir. A cladistic analysis of some Llandovery (Silurian) Monograptidae (Graptolithnia). Supervised by Paul Pearson and Sue Rigby.
- 20. Victoria White. The replacement of perissodactyls by artiodactyls in the Upper Tertiary: assessing the likelihood of competition as a determining factor. Supervised by Mike Benton.

# Class of 2000 (18)

- 21. Gareth Bartaby. The fossil 'pseudo-toothed' birds of the Lower Eocene London Clay of England. Supervised by Gareth Dyke and Mike Benton.
- 22. Matthew Carroll. The cladogenesis of *Turborotalia altispiroides* (planktonic foraminifera). Supervised by Paul Pearson.
- 23. Denver Fowler. Vertebrate taphonomy of the plant debris beds from the Isle of Wight, UK: palaeoenvironmental and palaeoecological implications. Supervised by Clive Trueman and David Martill.
- 24. Matthew Gordon. Maturational schedules in early hominids: implications for social behaviour. Supervised by Kate Robson-Brown and Patrick Quinney.
- 25. Jonathan Gregson. Microevolution and palaeoenvironment of the planktonic foraminifera lineage *Turborotalia cerroazulensis*. Supervised by Paul Pearson.
- 26. Susan Hammond. The taphonomy of some Westbury Formation bone beds: effects on the preservation of vertebrate faunal remains. Supervised by Clive Trueman and Gilles Cuny.
- 27. Aaron Hunter. The earliest representative of the stomatopod Superfamily Gonodactyloidea (Stomatopoda, Crustacea: Malacostraca), and its significance to the morphological diversity of stomatopods from the Eocene of Monte Bolca, northeast Italy. Supervised by Cees Hof.
- 28. Zena Kane. Assessing the use of oxygen isotope values in determining the thermoregulatory strategies of dinosaurs by theoretical computer modelling of bone diagenesis. Supervised by Clive Trueman.
- 29. Stewart Knott. Strato-biogeography of the *Turborotalia cerroazulensis* lineage. Supervised by Paul Pearson.
- 30. Rebecca Laver. The microstructure evolution of *Turborotalia*. Supervised by Clive Trueman.
- 31. Charlotte Mabey. A taxonomic analysis of vertebrate fauna through the Westbury Formation of southwest Britain. Supervised by Gillies Cuny.
- 32. Louisa New. Trace fossils and palaeoenvironment at Garden Cliff. Supervised by Clive Trueman and Simon Braddy.
- 33. Hannah Pritchard. Coprolites: a review. Supervised by Clive Trueman.
- 34. Stephen Rawlinson. The functional morphology of raptorial appendages in predatory fossil arthropods.
- 35. Jane Retter. Evolution of the *Turborotalia cerroazulensis* lineage from the type locality, Possangno, Italy. Supervised by Paul Pearson.
- 36. Andrew Smith. An Early Devonian ichnofauna from South Wales and producer diversity from functional analysis. Supervised by Simon Braddy.
- 37. Polly Snowdon. Description of three new Carboniferous cumaceans. Supervised by Cees Hof and Fred Schram.
- 38. Natalie Thomas. Crustacean palaeocommunities: taxonomic and ecological stability through time. Supervised by Cees Hof.

# Class of 2001 (12)

- 39. Bjorn Brooks. The colonisation of land by arthropods: a functional analysis and ichnological investigation. Supervised by Simon Braddy and Derek Briggs.
- 40. Benjamin Davies. Pelycosaur limb posture: implications for locomotion. Supervised by Simon Braddy.
- 41. Keith de Blanger. The effect of the Permian mass extinction on hybodont sharks. Supervised by Mike Benton.
- 42. Kate France. Diversity of Cretaceous birds. Supervised by Emmanuel Fara and Mike Benton.
- 43. Stefan Gabriel. The myology of the scapular girdle and forelimb of dinosaurs and the evolution of quadrupedalism in sauropodomorphs. Supervised by Max Langer and Mike Benton.

- 44. Caroline Milner. A cladistic analysis of chelicerate phylogeny. Supervised by Simon Braddy and Derek Briggs.
- 45. Lance Morrissey. The biological affinity of the enigmatic ichnotaxon *Beaconites* in association with a non-marine ichnofauna from the Early Devonian of southwest Wales. Supervised by Simon Braddy and Paul Pearson.
- 46. Steven O'Connor. New approaches to the evolutionary and phylogenetic analysis of the Homininae and other fossil apes (Hominioidea): rate metrics, survivorship and tree symmetry. Supervised by Kate Robson-Brown.
- 47. Xavier Panades Blas. Description of dinosaur eggshells from Suterranya (Spain). Supervised by Mike Benton.
- 48. Renate Ritchie. A new species of *Brachiosolaster* (Asteroidea) from the Middle Lias starfish bed of Dorset. Supervised by Simon Braddy.
- 49. Rebecca Smith. A description of a new steneosaur specimen, and the diversity of *Steneosaurus* from the Yorkshire Lias. Supervised by Mike Benton.
- 50. Gavin Thomas. A history of the Choristodera: macroevolution, phylogeny and the quality of the fossil record. Supervised by Mike Benton and Glenn Storrs.

# Class of 2002 (26)

- 51. David Allen. A new specimen of *Saltoposuchus*: synonymy with *Terrestrisuchus* and phylogenetic reassessment of the Sphenosuchia. Supervised by Mike Benton and Adam Yates.
- 52. Katherine Anderson. Tooth marks on the propodials of the plesiosauroid *Cryptoclidus eurymerus* (Reptilia Sauropterygia). Supervised by Mike Benton and Richard Twitchett.
- 53. Colin Barrass. The effects of the end-Triassic mass extinction on the ichnofossil record. Supervised by Richard Twitchett.
- 54. Mark Britten (P/T). Phylogeny of the Arachnomorpha. Supervised by Simon Braddy.
- 55. Neil Cartwright. A three-dimensionally preserved *Saurichthys* skull, from the Muschelkalk of Rudersdorf, near Berlin, Germany. Supervised by Juergen Kriwet and Mike Benton.
- 56. Colette Cherry. Bone histology of the primitive dinosaur *Thecodontosaurus antiquus*. Supervised by Adam Yates and Mike Benton.
- 57. Ian Corfe. Tritylodontids from an early Jurassic fissure fill, Glamorganshire. Supervised by Mike Benton and Pam Gill.
- 58. John Cunningham. Cenozoic stomatopod crustaceans from California and northern Italy. Supervised by Cees Hof and Simon Braddy.
- 59. Jeffrey Dawson. The ecomorphology of the lateral tooth row in mammalian carnivores. Supervised by Ian Jenkins and Mike Benton.
- 60. Craig Ellis. A palynodebris investigation of a mid-Devonian Chinese paper coal. Supervised by Chris Berry and Paul Pearson.
- 61. Daniel Fitton. The Writhlington phalangiotarbids: systematics and ontogeny. Supervised by Simon Braddy and Jason Dunlop.
- 62. Lindsay Hadfield. Early Triassic spiriferid brachiopods of Oman. Supervised by Richard Twitchett.
- 63. Derek Hill. The biomechanical implications of gigantism in stylonurid eurypterids. Supervised by Simon Braddy.
- 64. Deborah Hutchinson. Ichthyosaur body size through time. Supervised by Richard Twitchett.
- 65. Suzanne Lee. A morphometric analysis of *Thecodontosaurus antiquus*. Supervised by Adam Yates and Mike Benton.
- 66. Colin Mitchell. A new genus of rhynchonellid brachiopod from the Early Triassic of Oman. Supervised by Richard Twitchett.
- 67. Jonquil Norrie. The home range of *Proconsul*, a Miocene ape. Supervised by Kate Robson-Brown and Paul Pearson.

- 68. Claire Pepper. Gigantism and respiration in Carboniferous palaeoptera an evolutionary perspective. Supervised by Simon Braddy.
- 69. Jessica Politt. The morphology and phylogenetic position of the enigmatic, extinct arachnid Order Phalangiotarbida Haase, 1890. Supervised by Simon Braddy and Jason Dunlop.
- 70. Nathan Price-Lloyd. The Lilliput effect at the Permian-Triassic boundary of northern Italy: the first quantitative study. Supervised by Richard Twitchett.
- 71. James Renshaw. Micropalaeontology of the Upper Eocene of Granada, southern Spain. Supervised by Paul Pearson.
- 72. Laura Saila. The reptiles of Pant 4: a re-description of the reptilian fauna of a Lower Jurassic fissure fill, Glamorganshire, South Wales. Supervised by Mike Benton and Pam Gill,
- 73. David Waterhouse. A new shorebird from the Green river Formation of Wyoming and its implications for the phylogeny of the Order Charadriiformes. Supervised by Gareth Dyke and Mike Benton.
- 74. James Wheeley. Early Triassic silicified gastropods from Oman. Supervised by Richard Twitchett.
- 75. Emma Williams. Dental morphology of fossil and extant angel sharks (Neoselachii, Squatina). Supervised by Juergen Kriwet.
- 76. Jane Worral. Invertebrate ichnology of the Scalby Formation (Middle Jurassic, Yorkshire). Supervised by Richard Twitchett.

## Class of 2003 (29)

- 77. Samantha Berry. Selectivity of reptilian genera across the Cretaceous Tertiaty boundary. Supervised by Mike Benton.
- 78. Mark Buckingham. Selectivity among tetrapods at the Permo-Triassic mass extinction. Supervised by Mike Benton.
- 79. Una Cassidy. Fire ecology of an Early Pennsylvanian (Langsettian) coastal plain/mire complex. Supervised by Howard Falcon-Lang.
- 80. Thomas Challands. Geochemical and physical taphonomy of microvertebrate remains from two Lower Jurassic fissure fills, Vale of Glamorgan, South Wales. Supervised by Mike Benton and Pam Gill.
- 81. Simon Clabby. Dinosaur footprints of the Wessex sub-basin and correlation with associated faunas. Supervised by Simon Braddy.
- 82. Timothy Coussens. The phylogeny of the anomalocaridids. Supervised by Simon Braddy.
- 83. Katie Davis. A supertree of birds. Supervised by Mike Benton, Mark Wilkinson and Gareth Dyke.
- 84. Adele Dodgson (Diploma). Evidence for the colonisations of low oxygen marine environments. Supervised by Richard Twitchett.
- 85. Toby Fountaine. Was there really a "bottleneck" in avian evolution at the K-T boundary? Supervised by Gareth Dyke and Mike Benton.
- 86. Sally Haseman. A diverse ichnofauna from the Lower Silurian of central China and its palaeoenvironmental implications. Supervised by Simon Braddy.
- 87. Sarah Joomun. The feeding mechanics and trophic structure of Late Jurassic fishes. Supervised by Juergen Kriwet and Mike Benton.
- 88. Christine Lipkin. Myology and biomechanics of the forelimbs of the Baryonychinae (Theropoda: Spinosauridae). Supervised by Mike Benton, Juergen Kriwet and Paul Sereno.
- 89. Graeme Lloyd. Selectivity of Triassic tetrapod extinctions. Supervised by Mike Benton.
- 90. Dimitrios Michalidis (P/T). The effects of a caudal shift on the vertebral trabecular orientations of *Homo neaderthalensis* and *Homo sapiens*. Supervised by Kate Robson-Brown and Mike Benton.
- 91. Elizabeth Nunn. Neoselachian assemblages from the early and mid-cretaceous of northeastern Spain. Supervised by Juergen Kriwet and Mike Benton.

- 92. Sheila Phillips. Taphonomy of the devil's toenails. Supervised by Richard Twitchett and Jon Radley.
- 93. Matthew Riley. Hybodont sharks from the Early to Mid-Cretaceous of northern Spain. Supervised by Juergen Kriwet.
- 94. Alexei Rivera. The length of the metazoan phylogenetic fuse: evolutionary and preservational constraints allow a late Neoproterozoic origin of the Metazoa. Supervised by Mike Benton and Simon Braddy.
- 95. Hector Rivera. Dinosaur from the Mixteca region in central Mexico. Supervised by Mike Benton and Simon Braddy.
- 96. Jonathan Ruffle. A description and reassessment of the Eocene genus of fish *Priscacara*. Supervised by Juergen Kriwet and Mike Benton.
- 97. Adam Smith. Cladistic analysis of the plesiosaurs (Reptilia: Sauropterygia). Supervised by Mike Benton.
- 98. Alex St John Wright. A species-level supertree of Cetacea. Supervised by Mike Benton.
- 99. Hannah Tibbs. The phylogenetic affinities of aglaspidid arthropods. Supervised by Simon Braddy.
- 100. Tristan Walters. A phylogenetic review and supertree for Eusuchia (Crocodylomorpha, Crocodyliformes). Supervised by Mike Benton.
- 101. John Wildsmith. Response of Late Carboniferous vegetation to glacial/interglacial rhythms: a megafloral and palynological approach. Supervised by Howard Falcon-Lang.
- 102. Matthew Williams. Ferruginous ooids from an Early Jurassic fissure fill, Pant 4, South Wales: their origin and its implications to the microvertebrate fauna of St Brides Island. Supervised by Mike Benton and Pam Gill.
- 103. Shaun Williams. A new ophiuroid taxon from the Lower Triassic of the USA. Supervised by Richard Twitchett.
- 104. Mark Woodger. Cretaceous ostracod and charophyte biostratigraphy of Northwest Spain. Supervised by Juergen Kriwet.
- 105. Kate Yarrington. Sexual dimorphism in anthracomartid arachnids: a reassessment. Supervised by Simon Braddy and Jason Dunlop.

## Class of 2004 (16)

- 106. James Adams (Diploma). Does Cope's rule apply to Pterosauria? Supervised by Mike Benton and David Hone.
- 107. Jacqueline Barber. Ontogeny in pterygotid eurypterids. Supervised by Simon Braddy and Erik Tetlie.
- 108. Andrea Cobbett. Microvertebrate remains of aquatic organisms from the Lower Cretaceous of Southern Tunisia, and their palaeoenvironmental implications. Supervised by Mike Benton and Gilles Cuny.
- 109. Michael Cooper. The geology and microscopic tetrapod (and other) remains from the Oum ed Diab and Chenini formations in the Cretaceous of southern Tunisia. Supervised by Mike Benton.
- 110. Tara Dillon. The stratigraphic value of *Cruziana* and *Rusohycus* in Gondwana. Supervised by Simon Braddy.
- 111. Charles Drew. Skeletal and soft tissue taphonomy of the Jarrow amphibians from southeast Ireland. Supervised by Mike Benton, Patrick Orr and Gareth Dyke.
- 112. Benjamin Grace (P/T). A demographic analysis of the Bleadon Cave cave lion and a systematic revision of the population. Supervised by Mike Benton.
- 113. Margaret Haden. Cope's rule in Mesozoic flying birds. Supervised by Mike Benton and David Hone.
- 114. Thomas Harvey. The cuticle structure and phylogenetic affinities of palaeoscolecids. Supervised by Phil Donoghue.
- 115. Tai Kubo. Locomotion of basal archosaurs. Supervised by Mike Benton.

- 116. Joanne Malcolm. Early Cretaceous charred woods from Nova Scotia: taxonomy, fire ecology and palaeoclimatology. Supervised by Howard Falcon-Lang.
- 117. Daniel Oakley. Composition and fire ecology of late Miocene peat mires in Vegora, northern Greece. Supervised by Howard Falcon-Lang.
- 118. Hannele Peltonen. Feeding guilds, diets, and niche separation in herbivorous dinosaurs. Supervised by Mike Benton.
- 119. Manabu Sakamoto. Bite force estimates and jaw mechanics of theropod dinosaurs. Supervised by Mike Benton.
- 120. Andrew Stubbs (Diploma). Fire ecology of early Carboniferous floodplains, eastern Canada. Supervised by Howard Falcon-Lang.
- 121. George Zhou. A redescription of the whipspider *Graeophonus anglicus*. Supervised by Jason Dunlop and Simon Braddy.

# Class of 2005 (18)

- 122. Vivian Allen. Caudal geometry and the mechanical consequences of locomotion in the proximal tail of *Plateosaurus engelhardti*. Supervised by Mike Benton and Nicole Davies.
- 123. Claire Cordon. On the trial of swimming styles in extinct fish: a morpho-functional analysis of *Undichna*. Supervised by Simon Braddy, Nic Minter and Lance Morrissey.
- 124. Robert Crean. *Praearcturus gigas*: a re-diagnosis and palaeobiological re-evaluation of the largest scorpion to have lived. Supervised by Simon Braddy and Jason Dunlop.
- 125. Natasja den Ouden. Copes's Rule in the Proboscidea. Supervised by Mike Benton and David Hone.
- 126. Julien Divay. Scaling tibio-femoral cartilage thickness: implications for the general and biomechanical properties of cartilage. Supervised by Mike Benton and Nicole Davies.
- 127. Ross Elgin. Aerodynamic function of the cranial crest, pterosaurs of the Santana Formation, Brazil. Supervised by David Hone, Mike Benton, Douglas Greenwell and Colin Palmer.
- 128. Andrew Gillis. On the nature and evolution of chondrichthyan tooth enameloid: its functional significance and bearing on the homology of gnathostome teeth. Supervised by Phil Donoghue.
- 129. Carlos Grau. Aerodynamic function of the cranial crest of *Pteranodon*. Supervised by David Hone, Mike Benton and Douglas Greenwell.
- 130. Ryan Guest. Evolutionary history of calcification in planktic foraminifers and its relationship to atmospheric CO<sub>2</sub>. Supervised by Daniela Schmidt and Derek Vance.
- 131. Jeremy Martin. Palaeobiology of the short-snouted alligatoroid *Acynodon iberoccitanicus* from the Late Cretaceous of southern France. Supervised by Mike Benton and Eric Buffetaut.
- 132. Charlotte Miller. An analysis of claw mechanics in arboreal and terrestrial organisms. Supervised by Mike Benton and David Hone.
- 133. Anthony Rawson. The phylogeny of the trilobite Family Encrinuridae Angelin, 1854. Supervised by Jessica Pollitt and Simon Braddy.
- 134. Jenifer Saunders. A review of the turtle fauna of the Wealden Supergroup, southern England. Supervised by Mike Benton and Sarah Fielding.
- 135. Emma Schachner. Pectoral and forelimb musculature of the basal iguanodontid *Tenotosaurus tilletti* (Dinosauria: Ornithischia). Supervised by Mike Benton and Phil Manning.
- 136. Snorri Sigurdsson. Dietary niche partitioning in extant and extinct birds inferred from their beak morphology. Supervised by Mike Benton and David Hone.
- 137. James Tarver. Trilobite collector curves and their implications for Palaeozoic marine diversity. Collector curves and the completeness of the trilobite fossil record: stratigraphic, geographic and taxonomic comparisons. Supervised by Simon Braddy.
- 138. Matthew Vrazo. Testing the eurypterid "mass-moult-mate" hypothesis. Supervised by Simon Braddy.
- 139. Thomas Willatt. Palaeodietary reconstruction of Miocene faunas from Jebel Zelten, Libya using stable isotope analysis of herbivore fossil tooth enamel. Supervised by Phil Hopley.

### Class of 2006 (16)

- 140. André Butler. The evolutionary history of calcification in plankonic foraminifers and its influence on the global carbon cycle over the last 100 Myr. Supervised by Daniela Schmidt.
- 141. Robert Davis. The neoichnology of terrestrial arthropods. Supervised by Nicholas Minter and Simon Braddy.
- 142. Isla Gladstone. Testing Romer's hypothesis of eurypterid influence on vertebrate history. Supervised by Simon Braddy and Philip Donoghue.
- 143. Philip Hadland. Palaeobiology, palaeoecology and taphonomy of *Aptyxiella portlandiac* (the Portland Screw) from the roach beds of the Isle of Portland, Dorset. Supervised by Jon Radley and Simon Braddy.
- 144. Jennifer Hoyal Cuthill. Patterns in the distribution of homoplasy. Supervised by Philip Donoghue and Simon Braddy.
- 145. Phillip Jardine. The alpha diversity of ancient mammalian grassland communities. Supervised by Mike Benton and Sarda Sahney.
- 146. Rachel Jennings. A supermatrix of maniraptoran dinosaurs: maniraptoran interrelationships and the origin of flight. Supervised by Mike Benton, David Hone and Graeme Lloyd.
- 147. Benjamin Kotrc. Cenozoic evolution of radiolarian silica economy as a response to increasing biological control of the silica cycle. Supervised by Daniela Schmidt and David Lazarus.
- 148. Luke Mander. Palaeoecology of the late Triassic extinction event in southwest Britain. Supervised by Mike Benton and Richard Twitchett.
- 149. Emma-Louise Nicholls. Investigating the validity of supertree methods in comparison to supermatrices, by elucidating the phylogeny of the Crocodilia. Supervised by Mike Benton and Davide Pisani
- 150. John Orcutt. Tetrapod alpha-diversity across the Jurassic-Cretaceous boundary. Supervised by Sarda Sahney, Graeme Lloyd and Mike Benton.
- 151. Lara Shychoski. A geometric morphometric and finite element analysis investigating Tyrannosauroid Phylogeny and Ontogeny emphasizing the biomechanical implications of scale. Supervised by Emily Rayfield and Manabu Sakamoto.
- 152. Koen Stein. The aerodynamics of the British late Triassic Kuehneosauridae. Supervised by Mike Benton, Pam Gill and Colin Palmer.
- 153. Elizabeth Sweet. A biomechanical analysis of the biting performance in the sabre tooth cat *Smilodon fatalis*. Supervised by Manabu Sakamoto and Mike Benton.
- 154. Ceri-Wyn Thomas. Decoding the fossil record of embryology at the dawn of animal evolution. Supervised by Philip Donoghue and Neil Gostling.
- 155. Sarah Vinnell. Histology, apparatus architecture and homologies of *Coelocerodontus*: implications for conodont intrarelationships. Supervised by Philip Donoghue.

#### Class of 2007 (18)

- 156. Amirah Barri. Studying the inter- and intraspecific behaviours of *Lemur catta* and *Varecia variegata rubra* in relation to their evolution in Madagascar. Supervised by Kate Robson-Brown and Christophe Schwitzer.
- 157. Susan Beardmore. Eurypterid palaeoecology of the Welsh Boarderlands. Supervised by Simon Braddy.
- 158. Emma Bernard. How much remains to be discovered? Collector curves and the fossil record of early tetrapods. Supervised by Marcello Ruta, Michael Benton and James Tarver.
- 159. Terri Brittin. A supertree of spiders with diversity and divergence through time. Supervised by Simon Braddy, Graeme T Lloyd and Marcello Ruta.
- 160. Laurence Browning. Modelling the flexible wings of a large pterosaur. Supervised by Colin Palmer, Emily Rayfield, Michael Benton and Matthew Wilkinson.
- 161. Stephen Brusatte. The higher-level phylogeny of Archosauria (Tetrapoda: Diapsida). Supervised by Michael Benton, Marcello Ruta and Graeme Lloyd.

- 162. Joanne Caley. Dietary items available to Pliocene *Australopithecus afarensis*, from a palaeoenvironmental perspective. Supervised by Kate Robson-Brown.
- 163. Aude Caromel. The effect of the establishment of the Panamanian Isthmus on tropical planktic foraminiferal morphology. Supervised by Daniela Schmidt.
- 164. Owen Caulfield. Testing the tetrapod ichnofacies paradigm: a cluster analysis of dinosaur and pterosaur ichnoassemblages. Supervised by Simon Braddy.
- 165. Sarah Cottam. Population variance in the human maxilla and upper dentition implications for later hominin phylogeny. Supervised by Kate Robson-Brown.
- 166. Laurence Dale. The phylogeny of the trilobite Superfamily Cyclopygacea Raymond, 1925. Supervised by Mark Bell, Simon Braddy and Richard Fortey.
- 167. Kieran Hardman. Quantifying shape variation in the Osteostraci and testing for ontogenetic effects. Supervised by Philip Donoghue and Robert Sansom.
- 168. Sarah King. The Pennsylvanian Cumberland Basin of Nova Scotia: a synthesis of palaeoenvironments and palaeoecology with new insights. Supervised by Howard Falcon-Lang, Sarda Sahney and Simon Braddy.
- 169. Nicholas Loughlin. The ichnology and palaeoenvironment of the Lower Cambrian Caerfai Group, Pembrokeshire, Southwest Wales. Supervised by Simon Braddy, Brian PJ Williams and Lance B Morrissey.
- 170. Iain McIntyre. An assessment of the musculature and functional morphology of the lumbar spine in *Australopithecus africanus*, Sts 14. Supervised by Kate Robson-Brown.
- 171. Lorna O'Brien. A new arthropod resting trace from the Lower Jurassic of Warwickshire, with a review of arthropod resting traces. Supervised by Simon Braddy and Jonathan Radley.
- 172. Alan O'Connor. Cope's Rule in galeomorph sharks. Supervised by David Hone, Jürgen Kriwet and Michael Benton.
- 173. Abby Othman. Triassic fossil wood from New Brunswick, Canada: insights into climate and vegetation. Supervised by Howard Falcon-Lang.

## Class of 2008 (14)

- 174. Christopher Bell. Size changes in Cretaceous planktic Foraminifera. Supervised by Daniela Schmidt and Haydon Bailey.
- 175. Massimo Bernardi. Phylogenetic stability and temporal constraint with special reference to the phylogeny of early tetrapods. Supervised by Marcello Ruta, Simon Braddy and Kenneth Angielczyk.
- 176. Marie Bridgeman. Differential survival after mass extinctions: changes in foraminiferal accumulation rates related to environmental and biologic changes caused by the Cretaceous-Paleogene extinction. Supervised by Daniela Schmidt.
- 177. Lucy Georgiou. An assessment of palaeoenvironmental proxies using massive *Porites* coral from the Great Barrier Reef. Supervised by Erica Hendy and Gavin Foster.
- 178. Peter Heintzman. A species level compendium and supertree of the Perissodactyla (Mammalia): Interrelationships and investigation into the application of subset supertrees, plus a completeness and research bias assessment. Supervised by Michael Benton, Marcello Ruta and James Tarver.
- 179. Christophe Hendrickx. Diversity and disparity in sauropod dinosaurs. Supervised by Steve Brusatte, Mark Young, Emily Rayfield, Marcello Ruta and Paul Barrett.
- 180. Ellen Horner. Phylogenetic signal and noise in derived groups of temnospondyl amphibians: a revised cladistic analysis of dissorophoid interrelationships. Supervised by Marcello Ruta.
- 181. James Lamsdell. Redescription of *Drepanopterus abonensis* from the late Devonian of Portishead, and the phylogeny of stylonurid eurypterids. Supervised by Simon Braddy and Erik Tetlie.
- 182. Matthew Larvan. A combined geometric morphometrics and finite element analysis approach to comparative cranial mechanics of Sauropodomorph dinosaurs. Supervised by Mark Young, Manabu Sakamoto, Phil Anderson, Emily Rayfield and Paul Upchurch.

- 183. Chloe Marquart. The nature of Aspidin, the earliest skeletonising tissue. Supervised by Philip Donoghue.
- 184. David Marshall. The redescription of *'Eurypterus' stoermeri* Novojilov 1959 (Chelicerata: Chasmataspida) and *Borchgrevinkium taimyrensis* Novojilov 1959 (Chelicerata: Synziphosurina), from the Early Devonian of Norilsk, Russia, and the phylogeny of the chasmataspids. Supervised by Simon Braddy.
- 185. Matthew Pound. Evidence for predation among small tetrapods of the Early Jurassic. Supervised by Pam Gill and Mike Benton.
- 186. Christopher Rollason. Phylogenetic stability and temporal constraint. Supervised by Simon Braddy and Marcello Ruta.
- 187. Marc Williams. Inferring Mesozoic conifer diversity from analysis of cuticle under scanning electron microscopy and determining the family affinity of form genera. Supervised by Tim Ewin and Howard Falcon-Lang.

# Class of 2009 (16)

- 188. Richard Bailey. Patterns of cranial morphospace occupation of the Ceratopsidae (Dinosauria: Ceratopsia). Supervised by Marcello Ruta, Mike Benton, and Peter Dodson (Philadelphia).
- 189. Aodhan Butler. Experimental taphonomy of *Artemia*: analysing microbial controls on the preservation of soft tissue. Supervised by Philip Donoghue and John Cunningham.
- 190. Hannah Caine. Reassessment of Ichthyosauria from the Upper Liassic of Strawberry Bank, England. Supervised by Mike Benton and Matt Williams (Bath).
- 191. Nick Crumpton. A quantitative microwear analysis of insectivorous bats. Supervised by Emily Rayfield, Pam Gill, and Gareth Jones.
- 192. Elena Johnson. The recovery of herbivorous guilds following the end-Permian mass extinction: macroevolutionary patterns and processes of aetosaurs (Diapsida, Archosauria) and rhynchosaurs (Diapsida, Archosauromorpha) through the Triassic. Supervised by Marcello Ruta, Marco Andrade and Mike Benton.
- 193. Patricia Kearney. The continental ichnology of the Early Devonian Farran Formation, Dingle Peninsula, Ireland. Supervised by Simon Braddy.
- 194. Sarah Keenan. Rare Earth Elements and rates of fossilisation in tetrapod bones. Supervied by Clive Trueman (Southampton) and Mike Benton.
- 195. David Legg. The problem with *Praearcturus*: resolving basal scorpion relationships. Supervised by Simon Braddy.
- 196. James Neenan. Feeding in the early tetrapod *Acanthostega gunnari*: a combined finite element analysis and geometric morphometric approach. Supervised by Emily Rayfield and Marcello Ruta.
- 197. Kate Olde. Ocean acidification and selective mass extinction at the Cretaceous-Palaeogene boundary. Supervised by Daniela Schmidt.
- 198. Javier Ortega. Revision of aglaspidid phylogeny. Towards a better understanding of 'arachnomorph' relationships. Supervised by Simon Braddy.
- 199. Matthew Porter. Disparity in sauropodomorphs. Supervised by Marcello Ruta, Mike Benton, and Paul Upchurch (UCL).
- 200. Kelly Richards. The postcranial skeleton of *Morganucodon watsoni*: biomechanics, phylogenetics and intra-population variation. Supervised by Pam Gill and Emily Rayfield.
- 201. Ben Slater. Description, taphonomy and cladistic analysis of a new Jurassic turtle specimen from Spain. Supervised by Mike Benton and Matias Reolid (Jaén).
- 202. Alexander Twiney. Changes in ocean chemistry across the Cretaceous-Palaeogene boundary: a study of trace elements and boron isotopes from benthic Foraminifera. Supervised by Dani Schmidt and Derek Vance.
- 203. Evelyn Unger. Cranial mechanics of the prosauropod dinosaur *Massospondylus* sp.: an investigation using finite-element analysis. Supervised by Emily Rayfield and Paul Barrett (natural History Museum).

# Class of 2010 (13)

- 204. Joseph Bonsor. A new enigmatic arachnid (?Trigonotarbida) from the early Devonian of Arctic Canada, and the phylogeny of the Trigonotarbida. Supervised by Simon Braddy.
- 205. David Carpenter. Taphonomy and palaeoecology of a new vertebrate fauna from Wabash County, Illinois. Supervised by Mike Benton and Howard Falcon-Lang (Royal Holloway).
- 206. John Clarke. Establishing a timescale for plant evolution: palaeontological evidence and calibration consistency. Supervised by Phil Donoghue and Rachel Warnock.
- 207. Nicola Heckeberg. Intraspecific variations in the beak morphology and beak size of the African seed-cracker *Pyrenestes ostrinus*. Supervised by Phil Anderson and Emily Rayfield.
- 208. Suzanne Jennions. Eocene thermal maximum 2; understanding changes in benthic and planktic assemblages during ocean acidification events. Supervised by Daniela Schmidt and Laura Foster.
- 209. Brian Machin. A re-evaluation of platyrrhine origins, their evolution and phylogeny. Supervised by Kate Robson-Brown.
- 210. Shona Mallinson. Xiphosuran resting trace fossils from the late Triassic of Westbury-on-Severn: implications for xiphosuran phylogeny. Supervised by Simon Braddy.
- 211. Steven Osborne. Skull biomechanics of *Isisfordia duncani* and the evolution of the crocodilian secondary palate. Supervised by Emily Rayfield and Phil Anderson.
- 212. Judyth Sassoon. Cranial anatomy and palaeo-pathology of an upper Jurassic (Kimmeridgian) pliosaur (Reptilia:Sauropterygia) from Westbury, Wiltshire. Supervised by Mike Benton and Leslie Noè (Cambridge).
- 213. Dan Sluckin. Vitamin D in desert locusts (*Schistocerca gergaria*) and field crickets (*Gryllus bimaculatus*). Supervised by Kate Robson-Brown.
- 214. Andrew Smith. The taxonomic diversity of the stem mammal *Morganucodon* (Morganucodonta: Morganucodontidae) from Late Triassic-Early Jurassic fissure deposits of Glamorganshire, South Wales. Supervised by Pam Gill and Emily Rayfield.
- 215. Philippa Thorne. Ichthyosaur phylogeny and morphological disparity: impact of the end-Triassic 'bottleneck'. Supervised by Marcello Ruta and Mike Benton.
- 216. Emily Woodruff. Disparity and evolutionary novelty in two Palaeogene primate relations. Supervised by Marcello Ruta, Mike Benton, and Jon Bloch (Gainesville).

### Class of 2011 (24)

- 217. William Adams: Ontogeny of *Crocodylus niloticus* cranial mechanics. Supervised by Emily Rayfield and Phil Anderson.
- 218. Naomi Apostolaki: Pneumatisation in ostrich necks and implications of air sacs in dinosaurs. Supervised by Emily Rayfield and Phil Anderson.
- 219. Matthew Bakewell: A finite element analysis of the mechanical properties of trabeculae within the pigeon humerus. Supervised by Emily Rayfield and Phil Anderson.
- 220. John Cawley: Taxonomic revision of the genus *Pachycormus* (Actinopterygii; Pachycormidae). Supervised by Stefanie Klug and Mike Benton.
- 221. Matthew Cobley: The flexibility and musculature of the ostrich neck: implications for the feeding ecology and reconstruction of the Sauropoda (Dinosauria: Saurischia). Supervised by Emily Rayfield and Phil Anderson.
- 222. Timothy Davies: Functional differences in genetically distinct inbred mouse strains. Supervised by Phil Anderson and Emily Rayfield.
- 223. Cate Davis: Foraminifera and coccolithphore response to Pliocene ocean acidity. Supervised by Marcus Badger and Dani Schmidt.
- 224. Claire Desbottes: The effects of ontology on a morphometric study of form and function on modern crocodilian jaws. Supervised by Emily Rayfield and Phil Anderson.

- 225. Naomi Diver: Morphological variation in the skulls of extant Felidae: the ocelot (*Leopardus pardalis*, Carnivora; Felidae) as a case study. Supervised by Manabu Sakamoto and Marcello Ruta.
- 226. Alberto Fernandez: Fossil record quality of Mesozoic Crocodyliformes: how complete is our knowledge? Supervised by Maco Andrade (São Paulo) and Mike Benton.
- 227. Eoin Gardiner: Morphology and function in the jaws of crocodylomorphs: patterns of disparity through the Late Cretaceous and Cenozoic. Supervised by Emily Rayfield and Phil Anderson.
- 228. Thomas Halliday: A re-evaluation of goniopholidid material from Central Asia: biogeographic and phylogenetic implications. Supervised by Mike Benton and Marco Andrade (São Paulo).
- 229. Anthony Hancy: Life and death in the first complex ecosystems: a study of the Mistaken Point Ediacara biota. Supervised by Jonathan Antcliffe and Phil Donoghue.
- 230. Magnus Lundqvist: The evolution of postcranial skeletal pneumaticity in theropod dinosaurs. Supervised by Mike Benton and Gavin Thomas.
- 231. Andrew Pierce The molecular clock: exploring the effect of node density on prior probabilities. Supervised by Phil Donoghue and Rachel Warnock.
- 232. Marilyn Potts: Morphological responses of calcifying plankton to climate change. Supervised by Dani Schmidt and Marcus Badger.
- 233. Alexandra Powell: Visualising the development of function. Supervised by Emily Rayfield and Pam Gill.
- 234. Sarah Shelley: The morphological disparity and biogeography of the Leopard Cat, *Prionailurus bengalensis* (Carnivora, Felidae). Supervised by Manabu Sakamoto and Marcello Ruta.
- 235. Sarah Stephens: Two *Dapedium* specimens from the Lower Jurassic and their place in the actinopterygian phylogeny. Supervised by Stefanie Klug and Mike Benton.
- 236. Nicola Stone: Does the trabecular architecture in vertebrae of primates reflect the postural behaviour of the living animal and hence offer the potential to disclose the postural behaviour of extinct taxa? Superised by Kate Robson-Brown and Emily Rayfield.
- 237. Thomas Stubbs: Form, function and disparity in the evolutionary radiation of Mesozoic crocodylomorph feeding ecologies. Supervised by Emily Rayfield and Phil Anderson.
- 238. Laura Timlin: Evolutionary convergence through time and character space. Supervised by Jennifer Hoyal-Cuthill and Mike Benton.
- 239. Tamara Van Den Berg: The Late Triassic microvertebrate fauna of Tytherington, UK. Supervised by David Whiteside, Remmert Schouten, Pedro Viegas, and Mike Benton.
- 240. Jolene Whalen: The Mg isotope composition of foraminifers: from biomineralisation to past oceans. Supervised by Philip Pogge van Strandmann and Dani Schmidt.

## Class of 2012 (14)

- 241. Peter Adamson: The Ediacaran skeletal organism Namacalathus and evidence for biomineralisation before the Cambrian radiation. Supervised by Jon Antcliffe, Martin Brasier, Phil Donoghue, Duncan Murdock and Richard Callow.
- 242. Gemma Benevento: The effects of sampling bias on diversity through time, and implications for the dinosaur decline hypothesis. Supervised by Graeme Lloyd and Mike Benton.
- 243. Wendy Den Boer: Unravelling the feeding morphologies of the early jawed vertebrates (Gnathostomata). Supervised by Martin Rücklin, Phil Anderson and Phil Donoghue.
- 244. Sophie Edwards: A finite element validation and sensitivity analysis of the buzzard beak and cranium. Supervised by Jen Bright, Emily Rayfield, Phil Anderson and Samuel Cobb.
- 245. Davide Foffa: Funcational anatomy and feeding biomechanics of a giant Upper Jurassic pliosaur (Reptilia: Sauropterygia) from Weymouth, Dorset, UK. Supervised by Judyth Sassoon, Andrew Cuff, Emily Rayfield and Mike Benton.

- 246. Samantha Hadfield: You are what you eat the functional consequences of phenotypic plasticity in the mouse mandible. Supervised by Emily Rayfield, Phil Anderson, Sabrina Renaud.
- 247. Giannis Kesidis: Functional analysis of a coniform conodont apparatus, a two and three-dimensional finite element approach. Supervised by Phil Donoghue and Duncan Murdock.
- 248. Robert Lemanis: Cranial functional morphology of the phytosaur *Ebrachosuchus*: implications for phytosaur ecology form comparative finite element analysis. Supervised by Richard Butler, Phil Anderson and Emily Rayfield.
- 249. James Maclaren: Herbivorous dinosaur jaw disparity: trends in form and function. Supervised by Phil Anderson and Emily Rayfield.
- 250. Elizabeth Martin: A novel approach to estimating pterosaur skeletal mass using computed tomography, and the implications for total mass estimates. Supervised by Colin Palmer and Phil Anderson.
- 251. Edine Pape: Evolution of the dermal skeleton: histology of basal actinopterygians. Supervised by Martin Rücklin and Phil Donoghue.
- 252. Mark Puttick: Latitude gradients, faster life history, and migration drive increased rates of diversification in Anseriformes. Supervised by Mike Benton and Gavin Thomas.
- 253. Christopher Rogers: Retreat and decline: Mesozoic patterns of hybodont diversity. Supervised by Stefanie Klug and Mike Benton
- 254. Anthony Veal: Trait evolution and diversity in the Australidelphia. Supervised by Mike Benton and Gavin Thomas.

# Class of 2013 (12)

- 255. Lewis Bassett-Butt: Growth dynamics and the development of charnia. Supervised by Phil Donoghue
- 256. Terri Cleary: Completeness metrics, sampling biases and the fossil record of ichthyosaurs. Supervised by Mike Benton, Benjamin Moon, Alex Dunhill
- 257. Tom Clements: Taphonomic biases in the preservation of coleoid cephalopod soft tissues in Mesozoic Lagerstätten. Supervised by Jakob Vinther
- 258. Caitlin Colleary: A statistical and mass spectrometric characterisation of the molecular preservation of melanin. Supervised by Jakob Vinther
- 259. Jon Forth: Interpreting the heterochronic and phylogenetic position of the Bristol Dinosaur. Supervised by Mike Benton
- 260. Emma Jarvis: Cranial functional morphology and feeding biomechanics of an extant parrot (*Ara ararauna*) using finite element analysis. Supervised by Jen Bright, Emily Rayfield
- 261. Kara Ludwig: Unearthing the roots of mammalian diversity: the quality of the cynodont fossil record. Supervised by Mike Benton, Marcello Ruta, Alex Dunhill
- 262. Claire Morley: Evaluating the effect of ocean acidification on Antarctic bivalves: a biomechanical approach using finite-element analysis. Supervised by Emily Rayfield, Suzanne Jennions, Jen Bright
- 263. Charlie Navarro: Evolution of pterosaur feeding systems. Supervised by Emily Rayfield, Tom Stubbs.
- 264. Jonathan Ody: Impacts of climate change on *Globocassidulina* from the Antarctica Peninsula. Supervised by Dani Schmidt
- 265. Alexandros Pantelides: A supertree for the entire turtle clan. Supervised by Davide Pisani
- 266. Victor Selles de Lucas: A comparison of cranial morphology and musculoskeletal efficiency in accipters and falcons (*A. nisus* and *F. tinnunculus*)

### Class of 2014 (16)

267. Nidia Alvarez Armada (Spain): Testing the evidence for gill slits in early echinoderms

- 268. Amy-Louise Ball (UK): An x-ray look at loss of morphological diversity associated with mass extinctions.
- 269. Rory Browne (UK): Faunal and ecological diversity of herbivorous theropod dinosaurs in the Cretaceous
- 270. Richard Dearden (UK): Building a tree for the first fish with skeletons
- 271. Cesar Espinoza Campuzano (Mexico): Reconstructing the evolution of animal feeding modes
- 272. Matteo Fabbri (Italy): Dinosaurian dental evolution (Saurischian)
- 273. Timo Gerling (Germany): The future of calcifying benthos on the UK shelf in a warmer more acidic ocean
- 274. Emma Hambling (UK): Macroevolutionary patterns in Cambrian trilobites
- 275. Andrew Jones (UK): Functional mechanics of Effigia okeeffae
- 276. Brynley Jones (UK): Dinosaurian dental evolution (Ornithischian)
- 277. Meena Madan (USA): Evolutionary anatomy and functional morphology of Strigiformes
- 278. Rachael Moore (USA): Stromatolites: 3D insights into a past long gone
- 279. Guillermo Navalón (Spain): Reconstructing the palaeobiology of Confuciusornis and other Confuciusornithiformes
- 280. Sean Parker (UK): Does phylogenetic uncertainty affect our ability to understand placental evolution?
- 281. Ian Richards (UK): The ontogeny of postcranial cortical bone thickness: maturational schedules in neanderthals and modern humans
- 282. Paul Wilson (UK): Taphonomy and myoanatomy of a fossil polychaete

# Class of 2015 (17)

- 283. Alison Brimacombe (UK): Functional morphological trends in ichthyosaurs
- 284. Robert Brocklehurst (UK): Comparative biomechanics of biting versus suction-feeding fish
- 285. Jack Cunningham (UK): Evolutionary patterns of Cenozoic carnivores of the United Kingdom and the New and Old Worlds (NOW) fossil mammal database
- 286. Jack Daniell (UK): Taphonomy of scolecodonts
- 287. Joanna Gooding (UK): Hominin within-species variation
- 288. Ashley Hall (UK): Did LUCA like it hot?
- 289. Eleanor Holder (UK): The response of planktic foraminiferal body size to an abrupt ancient global warming event ~40 million years ago
- 290. Lucy Holloway (UK): Comparing evolutionary trends within Testudines
- 291. Giuseppe Mennella (Italy): Evolution and development of early vertebrate skeletons
- 292. Shay Mullineaux (UK): Limiting the negative effect of homoplasy in morphological phylogenetics: an applied approach
- 293. Aodhán O'Gogain (Ireland): Carboniferous fish communities from New Brunswick (Canada) and their implications for understanding the marine to freshwater ecological transition
- 294. Elsa Panciroli (UK): Correlates of behaviour in extant and extinct carnivorous mammals: an analysis of calcaneal morphology
- 295. Christos Psarras (Greece-Cyprus): Three-dimensonal characterisation of the oldest bioturbation on Earth
- 296. Evan Saitta (USA): Taphonomy of archosaur keratin
- 297. Edward Strickson (UK): Dental character analysis and evolution in ornithopod dinosaurs
- 298. Adam Taylor (UK): Testing the convergent cranial function and beak usage between psittaciform birds and psittacosaurs
- 299. Jalil Vargas Cabrera (Mexico): Mollusc archives: consequences of climate change in the Antarctic

### Class of 2016 (15)

- 300. Tom Burgess (UK): How accurately can two-dimensional finite element analysis predict three-dimensional mechanical behaviour?
- 301. Giacinto De Vivo (Italy): Reconstructing anomalocaridid feeding appendage dexterity shed light on radiodontan ecology.
- 302. Elena Ghirardello (UK): Reconstructing the function of early mammals: a novel, material-sensitive validation of *Morganucodon*, and its implications for palaeobiological finite element analyses.
- 303. Charlotte L. Gurr (UK): Fossils plus phylogeny reveal slow turtle diversification in Cenozoic.
- 304. Ashley K. Moore (USA): Re-evaluating the root to the Tree of Life.
- 305. Nuria Melisa Morales García (Mexico): Ungulate community dynamics in North America: a study of the radiation of North American camelids.
- 306. Jake Morton (UK): Biostratigraphy and geometric morphometrics of conchostracans (Crustacea, Branchiopoda) from the Late Triassic fissure deposits of Cromhall Quarry.
- 307. Shay Mullineaux (UK): Morphological phylogenetics: methodology and data.
- 308. Ben Otoo (USA): Anatomy and function of the rhizodont skull.
- 309. Luis Porras Ordieres (Spain): Filling the gaps: the role of ctenophores and cnidarians in the reconstruction of the earliest evolution of animals.
- 310. Jane Reeves (UK): Evolution of ecospace occupancy by marine tetrapods through the Mesozoic.
- 311. Arindam Roy (India): To be palaeo-melanosomes, or not to be?
- 312. Stephanie Sang (USA): CLAVATA is an ancient, conserved pathway for shoot apical meristem function.
- 313. Dale L. Thompson (UK): Environmental impacts on foraminiferal calcification.
- 314. Karina Vanadzina (Latvia): The complex interplay of ontogeny and environmental factors during a transition in *Globorotalia plesiotumida–tumida* lineage of planktic foraminifera.