We are currently accepting applications for a fully-funded 4-year PhD studentship on morphological evolution and modularity in tetrapods in the Goswami lab at University College London Further details about the lab at www.goswamilab.com Project Description: Morphological variation is the foundation of evolutionary theory, but the basic influences on morphological variation are still poorly understood. Developmental interactions are often discussed as a major control on variation, but direct analysis of this hypothesis has been hindered by the lack of quantitative comparative data. Similarly, robust analyses analysing both extrinsic and intrinsic influences on morphological evolution are often limited by data availability. Using advanced biological imaging techniques (CT- and laser scanning) combined with surface-based 3-D morphometrics, this study will build on existing work in mammals by providing the first broad comparative data on modularity and disparity of skulls, jaws and limbs for living and fossil tetrapods. The PhD studentship will focus on one of the major non-mammalian clades, such as lissamphibians or reptiles, clades with incredible diversity in reproductive strategies, ecology and morphology. This project will require extensive international travel for data collection, as well as running analyses and possibly writing new code in R. In combination with existing data from an ontogenetic sequence of Xenopus, and juvenile and adult neontological and paleontological specimens of mammals, this project will produce a robust analysis of the relationships among modularity, morphological disparity, evolutionary rates and how each of these responds to major life history and ecological transitions as well as large-scale biotic and environmental events. In addition to training in biological imaging and quantitative analyses, there will be opportunities for international palaeontological fieldwork during the course of this project. This project is part of a larger European Research Council grant that will fund a total of 5 team members, including this studentship. Research relating to this project: A. Goswami, J.B. Smaers, C. Soligo, and P.D. Polly. 2014. The macroevolutionary consequences of phenotypic integration < http://media.wix.com/ugd/6b49fb_86e1fa2f88cd4fd1859b44a7e8b71318.pdf >. Philosophical Transactions of the Royal Society of London, B, 369: 20130254. A. Goswami and P.D. Polly. 2010. The influence of modularity on cranial morphological disparity in Carnivora and Primates (Mammalia) < https://docs.google.com/fileview?id=0B5qBRdl6ZwRjNDY2MDcyYmEtMWVjOS00ZTFlLWE4N2YtMzQ1YzgwOWExNWI4&hl=en >. PLoSOne, 5(3):e9517. A. Goswami, V. Weisbecker, and M. R. Sánchez-Villagra. 2009. Developmental modularity and the marsupial-placental dichotomy < https://sites.google.com/site/anjgoswami/GoswamietalJEZb2009.pdf?attredirects=0 >. Journal of Experimental Zoology B, 312B: 186â□□195. A. Goswami. 2006. Cranial modularity shifts during mammalian evolution < https://sites.google.com/site/anjgoswami/Goswami-MammalianCranialModularityAm.pdf?attredirects=0 >. American Naturalist, 168:170-180. To Apply for this PhD studentship: a) Apply online via the UCL Admissions site: http://www.ucl.ac.uk/prospective-students/graduate/research/application(the apply button is at the bottom of the page). Enter Keyword: Genetics; Department: Division of Biosciences; Programme Group: Postgraduate Research Select Division of Biosciences and Research Degree in Genetics, Evolution & Environment and detail Dr. Goswami as the prospective supervisor in the appropriate places in the application form. Please also include/upload a copy of your CV and a

covering letter. b) In addition, please send a copy of your CV together with the covering letter directly to Dr. Anjali Goswami at
a.goswami@ucl.ac.uk
. The
application deadline is January 30
and interviews will be conducted in mid February. For any issues with the UCL application system, please contact Manu Davies,
manu.davies@ucl.ac.uk
Funding Notes: Funding will cover full fees and stipend (stipend, with London allowance, approximately ÂŁ15,900) for EU students only. Non-EU students may apply only if additional sources of funding to cover international student fees have been obtained by the application deadline. "Goswami, Anjali" <
a.goswami@ucl.ac.uk
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