**The Georgiev Primatology Lab is accepting applications for postgraduate research:**

**Self-funded MScRes in Biological Sciences at the School of Natural Sciences, Bangor University**

**2021/22**

**https://www.alexandergeorgiev.co.uk/lab-members**

**MScRes in Biological Sciences:**

**https://www.bangor.ac.uk/courses/postgraduate-research/biological-sciences-mscres**

I am currently accepting applications for a number of research projects to be carried out under my supervision at Bangor next academic year (starting September 2021) as part of the MScRes in Biological Sciences. Ideally, you already have some undergraduate-level background in primatology already (i.e., have taken modules focusing on primate behaviour, ecology and/or evolution). If you lack specific background in primatology, other relevant academic experience would also be useful for your application: e.g., coursework in in behavioural ecology, evolutionary biology, zoology. It is essential, however, that you are very much interested in and excited about studying primates for a postgraduate degree.

**Minimum qualifications:** You should hold or be expected to obtain at least a 2:1 degree in Biology, Zoology, Ecology, Anthropology (with specific background in Evolutionary/Biological Anthropology) or related disciplines.

Information on **tuition and bench fees for the MScRes degree in Biological Sciences** is available at: https://www.bangor.ac.uk/student-administration/fees/index

**Application process:**

Step 1: Get in touch (a.georgiev@bangor.ac.uk) to discuss your interests in pursuing a postgraduate qualification and potential project ideas (just a brief introductory email is OK; it would be helpful to also send a 2-page CV).

Step 2: In discussion with and with feedback from myself, develop a research project proposal (approx. 1,500 – 2,000 words). This proposal would be the basis for your formal application to the University.

Step 3: Make your formal application via admissions online (https://www.bangor.ac.uk/study/postgraduate/apply).

For a list of available projects see next page (I am also happy to discuss other ideas of your own so don't be put off if these don't sound like something you'd want to do; these are just my initial priorities for next year).

Given the current uncertainties re international travel projects involving fieldwork would need to be developed in tandem with non-field-based back-up research plans.

**Project 1. Male rhesus macaque reproductive effort and immune function**

You will work with existing data on rhesus macaque immune function to establish how male heath relates to age, dominance status and body condition. You will also examine if markers of immune function measured from blood samples before the start of the mating season predict subsequent susceptibility to infectious disease measured via parasitological analyses of faecal samples collected during and after the mating season. The type of questions you will be able to ask and answer with this work relate both to: (a) theoretical ideas about how male primates balance the competing demands of investment in reproduction vs. self-maintenance (immunity); and (b) methodological considerations for accurate assessment of primate health from non-invasive samples (e.g., faeces).

*This project can be completed entirely at Bangor.*

**Project 2. Health and immune function in wild Zanzibar red colobus**

You will be trained to carry out cutting-edge laboratory assays to measure immune function (neopterin and suPAR concentrations) in urine samples collected from colobus in the field. There are three main question we can address: (1) Do the commercially-available human-specific assay kits work for colobus (they has been shown to work for other monkeys, e.g, macaques, but nobody has tested them with colobus yet!)?; (2) If the kits work, then how does cellular immune activation and inflammation differ among female colobus at different reproductive stages (e.g., with infants vs. without infants)?; and (3) Do colobus that live in more remote parts of the forest show less signs of infection and inflammation than those living in anthropogenically-modified landscapes.

*This project can be completed entirely at Bangor but there may also be an opportunity for additional data collection in Zanzibar. Fieldwork would depend on the international travel situation in 2022, as well as on your successfully obtaining external research grants to cover costs (or on your ability to raise funds via alternative routes).*

**Project 3. Oxidative stress in wild Zanzibar red colobus**

Oxidative stress (a physiological imbalance that causes damage to cells) is linked to ageing and disease in many species. The potential to use markers of oxidative stress to examine the effects of anthropogenic disturbance on wild primates, however, remains unexamined. Using newly collected data from Zanzibar you will explore how female reproductive status and habitat disturbance affect physiological levels of oxidative damage and antioxidant protection in this endangered primate. You will work alongside Zoe Melvin, a PhD student at Bangor who is investigating these questions for her doctoral dissertation.

*This project can be completed entirely at Bangor but there may also be an opportunity for additional data collection in Zanzibar. Fieldwork would depend on the international travel situation in 2022, as well as on your successfully obtaining external research grants to cover costs (or on your ability to raise funds via alternative routes).*

More about my research: https://www.alexandergeorgiev.co.uk.
More about the colobus work: https://www.zanzibarredcolobusproject.org
If you'd like to discuss further please email me at a.georgiev@bangor.ac.uk.