



ANUNT

Universitatea Babeș-Bolyai, anunță organizarea concursului pentru ocuparea postului de **asistent cercetare**, vacant în cadrul proiectului cu titlul “O abordare computațională spre descifrarea sarcinii structurii aripilor la păsări: implicații pentru evoluția zborului și biomimetică, cod PN-III-P4-ID-PCE-2016-0572, nr. contract 182/2017:

Asistent cercetare (doctorand)¹ - 1 post

Norma de lucru: (8 ore/zi),

Perioada angajării : determinata (02.10.2017– 31.12.2019)

Data la care are loc selecția: 26.09.2017

Ora: 12:00

Locul desfasurarii concursului: Facultatea Biologie și Geologie, Departamentul de Geologie (sala se va anunța ulterior)

I. Dosarele de concurs se vor depune până la data de 25.09.2017, ora: 14:00 la *Biroul Structuri Didactice* (Str. M. Kogălniceanu nr. 1), persoana de contact: Teodora Capota (tel +40264405300 int. 5102);

II. 1. Conținutul dosarului de candidatura :

- cerere de înscriere la concurs
- curriculum vitae;
- copia diplomei de masterat;
- dovada înscrierii la doctorat;
- lista lucrărilor publicate

2. Condiții specifice necesare pentru ocuparea postului de **asistent cercetare**:

- 2 ani de experiență în cercetare

¹ Descriere Euraxess Jobs: This PhD student project aims to consider the outline of bird wing shapes, including aspect ratio, and how they relate to flight styles across broad phylogeny. This will be accomplished via data collection in museums and by accessing bird carcasses from ornithological societies and collectors. In order to perform this role experience in anatomy, ornithology, biomechanics, and the use of imaging and measuring techniques will be required. The goal of this research project are to: (1) collect a comprehensive data series that encompasses the wing shapes of living birds in two-dimensions (from museum collections and other sources); (2) refine currently available definitions for flight styles in birds; (3) present an analysis of these data in a phylogenetic context, including aspects of the fossil record. The PhD student will also be responsible for presenting project outputs at conferences and assisting with writing papers and reports



- diplomă de masterat într-o disciplină relevantă

3) Probe de selecție:

- Analiza dosarului candidatului (eliminatoire);

- Interviu;

III. Alte condiții de selecție și condiții de desfășurare a selecției:

Nota minima la fiecare probă: 7

Modul de calcul al notei finale: media notelor la probele 1 și 2

Ierarhizarea candidaților: conform mediei la probele 1 și 2

V. Tematica: Paleobiologie, Biologie evolutivă, Biomecanică

Bibliografia:

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Bruderer, B., Peter, D., Boldt, A., & Liechti, F. (2010). Wing-beat characteristics of birds recorded with tracking radar and cine camera. *Ibis*, 152, 272-291.

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Laurent, C., Palmer, C., Boardman, R.P., Dyke, G. & Cook, R. (2014). Nanomechanical properties of bird feather rachises: exploring naturally occurring fibre reinforced laminar composites. *Journal of The Royal Society Interface*, 11, 20140961.

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Newton, I. (2008). *The Ecology of Bird Migration*. Academic Press, London, UK.

Norberg, U. M. (1990). *Vertebrate Flight: Mechanisms, Physiology, Morphology, Ecology and Evolution*. Berlin, Germany: Springer-Verlag.

Osváth G., Sándor K., Vincze O., Bărbos L., Marton A., Nudds R.L., & Vágási C.I. (2015). Interspecific variation in the structural properties of flight feathers in birds indicates adaptation to flight requirements and habitat. *Functional Ecology*, 29, 746-757.

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Rayner, J. M. V. (1988). Form and function in avian flight. In R. F. Johnston (Ed.), *Current Ornithology*, volume 5, pp 1–66). New York, NY: Plenum Press.

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Vágási, C.I., Pap, P.L., Vincze, O., Osváth, G., Erritzøe, J., & Møller, A.P. (2015). Morphological adaptations to migration in birds. *Evolutionary Biology*, 43, 48-59.

Wang, X., Nudds, R.L., Palmer, C., & Dyke, G. (2012). Size scaling and stiffness of avian primary feathers: implications for the flight of Mesozoic birds. *Journal of Evolutionary Biology*, 25, 547-555.

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