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## Poster Session 2 – Taxonomy Genetics

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### **89 Is there subspecies structure of the common hamster (*Cricetus cricetus* Linnaeus, 1758) in Russia? Craniometric analysis**

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Genetic research on the common hamster has long been of interest and has generated a compelling picture of its evolutionary relationships and possible migration flows. However, despite the fact that most of the species range is located in Russia, the works devoted to the subspecies structure are still solitary. Most of the researchers adhere to the traditional notions of 7-10 subspecies inhabiting the territory of Russia, but there has been no substantiated confirmation to this. Recently provided analysis of sequences of an mtDNA control region and *cytb* gene revealed at least three phylogenetic lineages. Most of the species range (approximately 3 million km<sup>2</sup>), including central Russia, Crimea, the Ural region, and northern Kazakhstan, is inhabited by a single, well-supported phylogroup - E0. Phylogroup E1, previously reported from southeastern Poland and western Ukraine, was first found in Russia (Bryansk Province). Hamsters inhabiting Ciscaucasia represent a distant phylogenetic lineage, named "Caucasus". It is a sister to the phylogroup "North" from western Europe. However, the phylogeographical structure of the species may not coincide with the subspecies. The present study was carried out to perform a comparative analysis of the common hamster skulls belonging to the phylogeographical lineages «Caucasus» and E0. We studied 60 museum skulls from 3 Russian collections using 28 parameters. The analysis showed that the craniometric measurements of the Caucasian phylogroup significantly differ from E0 and coincide with the molecular-genetic data. Thus we confirmed that Caucasus is inhabited by separate subspecies described by S.I. Ognev as *Cricetus cricetus stavorolus*. The E0 phylogroup most likely corresponds to another subspecies of *Cricetus cricetus rufescens*. Here only the preliminary data are presented and the subspecies structure of this species in Russia requires further study. This study was supported by Russian Science Foundation №16-14- 10269 and Presidium of the Russian Academy of Sciences program "Biodiversity of Natural Systems and Biological Resources of Russia"

4 5 9

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Jens Jacob, Jana Eccard (Editors)

6<sup>th</sup> International Conference of Rodent  
Biology and Management  
and  
16<sup>th</sup> Rodens et Spatium

Potsdam, Germany, 3-7 September 2018

Book of Abstracts



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**Bibliografische Information der Deutschen Nationalbibliothek**

Die Deutsche Nationalbibliothek verzeichnet diese Publikation

In der Deutschen Nationalbibliografie: detaillierte bibliografische

Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.

ISSN 1868-9892

ISBN 978-3-95547-059-3

DOI 10.5073/jka.2018.459.000



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Printed in Germany by Arno Brynda GmbH, Berlin.