

CURRICULUM VITAE



Dr. Olga Nanova

Born: 1983

PhD

Position: Researcher (2010 - 2015)

Section of Mammalogy, Zoological Museum, Faculty of Biology, M.V.Lomonosov Moscow State University (MSU), 125009 Moscow, ul. Bol'shaya Nikitskaya 6, Russian Federation (RF)

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RESEARCH LINES:

- **Historical and ecological determinants in tooth integration of extant and fossil Carnivores (Feliformia)**
- **Cranial biomechanics of Arctic fox (*Vulpes lagopus*) using finite element modelling: comparison between mainland and island populations**
- **Phylogeography of the midday jird *Meriones meridianus* (Rodentia: Muridae) complex: morphological and genetic variation**

EDUCATION

2009

Ph.D.: «Structure of morphological disparity in three species of extant Carnivora (MAMMALIA: *Alopex lagopus*, *Vulpes vulpes*, *V. corsac*)»

Institution:

Department of Vertebrate Zoology, Faculty of Biology, M.V. Lomonosov MSU, RF

2006

M.S. in biology; (GPA 4.65 out of 5)

Institution:

Faculty of Biology, M.V. Lomonosov MSU, RF

Master thesis:

«Food habits of arctic foxes (*Alopex lagopus semenovi* Ognev, 1931; MAMMALIA: Canidae) on Mednyi Island (Commander Islands)»

LABORATORY EXPERIENCE

Nov. 2010 – present **Position:** Researcher

Oct. 2006-Nov. 2010 **Position:** PhD student, Faculty of Biology, M.V. Lomonosov MSU

and

Technical assistant, Section of Mammalogy, Zoological Museum, MSU

Laboratory experience in other laboratories as guest researcher:

March-May 2013 Muséum national d'Histoire naturelle, Paris, France;

Sep.- Oct. 2011, 2012 Hull York Medical School The University of York, Centre for Anatomical and Human Sciences, UK;

Oct. 2009 Museum für Naturkunde of the Humboldt-University, Berlin, Germany;

TEACHING EXPERIENCE

Apr. 2011, May 2012 Advanced workshop «Morphological disparity investigation using geometric morphometric methods» Moscow, MSU and St. Petersburg, RAS. In collaboration with Dr. Evteev A.A., Prof. P. O'Higgins, Dr. L. Fitton, and Dr. I.Ya. Pavlinov;

Nov.-Dec. 2011, 2012 Workshop for students (5th grade) «Geometric morphometrics and finite element analysis (FEA) in biology». Department of Vertebrate Zoology, Faculty of Biology, MSU, RF.

FIELD EXPERIENCE:

June-Sept. 2010, May-Sept. 2005, May-Sept. 2004

Mednyi Island (Commander Islands, Kamchatka), studying of behavior and population dynamics of Mednyi arctic foxes

Aug. 2002

White Sea Biological station, training for zoological field methods

GRANTS AND AWARDS

2012-2013 Phylogenetic and ecological determinants in tooth integration of extant and fossil Carnivores (Feliformia) / Grant of Russian Found of Fundamental Research 12-04-31013 mol_a

2012-2013 Functional aspects of cranial evolution in isolated Commander Islands arctic foxes (*Vulpes lagopus semenovi*, *V.l.beringensis* Merriam, 1902) / Grant of President of RF MK- MK-1681.2012.4

2013, 3 month Historical and ecological determinants in tooth integration of extant and fossil Carnivores (Feliformia) / Muséum national d'Histoire naturelle, Paris, France, Scientific referent Dr. Stéphane Peigné and Dr. Philippe Gaubert; invited researcher

2010-2011 Participant of International Joint Project - 2010/R2 (inc CNRS and CSIR) Professor Paul O'Higgins / Mr Andrej Evteev Genetic, ecological, functional and historical factors shaping the human skull

2009, 1 month Quantitative analysis of the structure of morphological disparity defined by cranial and dental traits in the extant Canidae (Mammalia) / DAAD (German academic exchange service), ref. 325. Host Institute Museum für Naturkunde of the Humboldt-University in Berlin (Berlin Museum of Natural History), Zoological Collections of Mammals, Curator Dr. Fieder Mayer

SCIENTIFIC INTERESTS

My primary research interest is evolutionary morphology of mammals. My work focuses on interaction of morphological disparity and morphological modularity of skull and teeth with historical, ecological and ontogenetic factors. I am also interested in learning and helping to develop morphometric approaches and methods that relate form integration and disparity to phylogeny, ecology, and ontogeny.

My research interests involve phylogeography of mammals (Carnivora and Rodentia) as well.

LABORATORY SKILLS

Morphometric methodology. State of the art imaging, geometric morphometric approaches, finite element analysis (FEA), advanced statistical methods.

FIELD SKILLS

Trapping, collecting, tagging wild animals, GPS tracking, observation and accounting of wild animals

LANGUAGE

English: upper-intermediate

Russian: native

PUBLICATIONS

Currently I have published 19 full-text articles and 14 abstracts.

Principal publications

- Nanova O.* 2013. Geographical variation in the cranial measurements of the midday jird *Meriones meridianus* (Rodentia: Muridae) and its taxonomic implications. *Journal of Zoological Systematics and Evolutionary Research*. doi: 10.1111/jzs.12032
<http://onlinelibrary.wiley.com/doi/10.1111/jzs.12032/abstract>
- Evteev A.A., Nanova O.G.* 2013. Modularity and integration in ontogeny of the middle facial skeleton in two West African monkey species: collared mangabey (*Cercocebus torquatus*) and olive colobus (*Procolobus verus*) // *Russian Journal of Theriology*. 12(1). p. 1-18.
<http://zmmu.msu.ru/rjt/rus/articles/article.php?volume=12&issue=1&pages=01-18>
- Nanova O.G.* 2010. Age variability of morphometric features in skulls of the mainland arctic fox (*Alopex lagopus lagopus*) and the commander arctic fox (*A. l. beringensis*, *A. l. semenovi*) // *Zoological J (Moscow)* V.89 (7). p. 871-881. (In Russian, with English summary)
- Nanova O.G.* 2010. Correlation structure of cheek teeth in the bat-eared fox (*Otocyon megalotis*, Canidae) // *Zoological J (Moscow)* V.89 (6). p. 741-748. (In Russian, with English summary)
- Goltsman M. E., Nanova O.G., Sergeev S. N., Shienok A. N.* 2010. The Food Habits of Arctic Fox (*Alopex lagopus semenovi*) Reproductive Families on Mednyi Island (Commander Islands) // *Biology Bulletin*. V. 37 (9). p. 964–980. Pleiades Publishing Inc

Articles in prepare

- Nanova O., Prôa M., Fitton L.C., Evteev A., O'Higgins P.* Feeding adaptations and island isolation: comparison of cranial biomechanics between mainland and island populations of Arctic fox (*Vulpes lagopus*) using finite element modelling // *Functional Ecology*