#### SERGEI V. TURANOV

National Scientific Center of Marine Biology (A.V. Zhirmunsky Institute of Marine Biology) of the Far Eastern Branch of the Russian Academy of Sciences Laboratory of Deep Sea Research Palchevskogo Str., 17 Vladivostok, 690041, Russia Email: sturcoal@mail.ru Phone: 7 (950) 2803084 sturcoal.github.io

## **EDUCATION**

Candidate of Sciences (PhD), in Genetics and Ichthyology A.V. Zhirmunsky Institute of Marine Biology of the Far Eastern Branch of the Russian Academy of Sciences, Vladivostok

October 2010 - October 2013

Specialist, Ichthyology Far Eastern State Technical Fisheries University, Vladivostok

September 2005 - June 2010

## PROFESSIONAL EXPERIENCE

St Petersburg University, Saint Petersburg

Department of Ichthyology and Hydrobiology

• Senior Researcher (remotely)

April 2024 - present

A.V. Zhirmunsky National Scientific Centre of Marine Biology (Institute of Marine Biology) of the Far Eastern Branch of the Russian Academy of Sciences, Vladivostok

Laboratory of Deep Sea Research

• Senior Researcher

August 2023 - present

Laboratory of Molecular Systematics

Senior ResearcherResearch ScientistJunior Researcher

January 2019 - present June 2015 - December 2018 May 2012 - June 2015

Laboratory of Genetics

Junior Researcher Laboratory assistent

October 2010 - May 2012 June 2009 - October 2010

Korea Institute of Ocean Science and Technology, Ansan, Republic of Korea

Marine Molecular Genetics Lab

• Research Assistant

June, November 2012

#### RESEARCH

#### Research Interests

Molecular phylogenetics and systematics of aquatic organisms, species delimitation and delineation techniques, environmental DNA, metabarcoding, mitochondrial genomics, transcriptomics, ichthyology

#### Selected Publications

- Turanov S.V., Rutenko O.A., Kartavtsev Y.Ph., Masalkova N.A. A study of taxonomic and moleculargenetic characteristics of the western Chukchi Sea fish fauna. Polar Biology. – January, 2025.
- **Turanov S.V.**, Koltsova M.A., Rutenko O.A. Experimental evaluation of genetic variability based on DNA metabarcoding from the aquatic environment: Insights from the Leray COI fragment. Ecology and Evolution. July, 2024.
- **Turanov S.V.**, Smirnov A.V., Kartavtsev Yu.Ph. Taxonomic position of holothurian Eupentacta fraudatrix (Echinodermata, Holothuroidea). ZooKeys. April, 2024.
- Turanov S.V., Barabanshchikov E.I. Characterization of the Cambaroides wladiwostokiensis Birstein Vinogradov, 1934 (Decapoda: Astacidea) Mitochondrial Genome Using Genome Skimming and the Phylogenetic Implications within the Astacidea Infraorder. Frontiers in Bioscience-Scholar. December, 2023.
- Balanov A.A., Epur I.V., Shelekhov V.A., Turanov S.V. The first description of larvae and comments on the taxonomy of *Stichaeus ochriamkini* Taranetz, 1935 (Perciformes: Stichaeidae). Journal of Fish Biology. March, 2022.
- Turanov S.V., Kartavtsev Yu.Ph. A complement to DNA barcoding reference library for identification of fish from the Northeast Pacific. Genome. Vol. 64, No. 10, pp. 927–936. March, 2021.
- **Turanov S.V.**, Balanov A.A., Shelekhov V.A. Species of the genus *Ammodytes* (Ammodytidae) in the northwestern part of the Sea of Japan. Journal of Applied Ichthyology. Vol. 55, No. 6, pp. 1303–1306. December, 2019.
- **Turanov S.V.**, Rutenko O.A., Kartavtsev Yu.Ph. Complete mitochondrial genome of *Stichaeus nozawae* Jordan & Snyder 1902 (Zoarcales: Stichaeidae). Mitochondrial DNA Part B. Vol. 4, No. 1, pp. 1792-1793. May, 2019.
- **Turanov S.V.** The assembly and analysis of the reference nucleotide sequence data base of the mitochondrial *COI* gene for delimitation of sand lance species (Uranoscopiformes: Ammodytidae) from the Northern Hemisphere. Russian Journal of Marine Biology. Vol. 45, No. 1, pp. 40–46. February, 2019.
- Shevchenko O.G., Ponomareva A.A., **Turanov S.V.**, Dutova D.I. Morphological and Genetic Variability of *Skeletonema dohrnii* and *Skeletonema japonicum* (Bacillariophyta) from the Northwestern Sea of Japan. Phycologia. Vol. 58, No. 1, pp. 95–107. January, 2019.
- Turanov S.V., Lee Y.-H., Kartavtsev Yu.Ph. Structure, evolution and phylogenetic informativeness of eelpouts (Cottoidei: Zoarcales) mitochondrial control region sequences. Mitochondrial DNA Part A. Vol. 30, No. 2, pp. 264–272. January, 2019.
- **Turanov S.V.**, Kartavtsev Yu.Ph., Lee Y.-H., Jeong D. Molecular phylogenetic reconstruction and taxonomic investigation of eelpouts (Cottoidei: Zoarcales) based on *Co-1* and *Cyt-b* mitochondrial genes. Mitochondrial DNA Part A. Vol. 28, No. 4, pp. 547–557. December, 2017.
- Nedunoori A., **Turanov S.V.**, Kartavtsev Yu.Ph. Fish product mislabeling identified in the Russian far east using DNA barcoding. Gene Reports. July, 2017.

- Chernyshev A.V., Polyakova N.E., **Turanov S.V.**, Kajihara H. Taxonomy and phylogeny of *Lineus torquatus* and allies (Nemertea, Lineidae) with descriptions of a new genus and a new cryptic species. Systematics and Biodiversity. May, 2017.
- Zvyaginysev A.Yu., Dautova T.N., **Turanov S.V.**, Kartavtsev Yu.Ph. Is jellyfish *Rhopilema esculenta* Kishinouye, 1891 the seasonal migrant in Peter the Great Bay of the Sea of Japan?. Vestnik SVNC FEB RAS (in Russian). No. 1, pp. 88–96. January, 2017.
- Turanov S.V., Kartavtsev Yu.Ph., Lipinsky V.V., Zemnukhov V.V., Balanov A.A., Lee Y.-H., Jeong D. DNA-barcoding of perch-like fishes (Actinopterygii: Perciformes) from far-eastern seas of Russia with taxonomic remarks for some groups. Mitochondrial DNA Part A. Vol. 27, No. 2, pp. 1188–1209. March, 2016.

## Conference Talks

- **Turanov S.V.** A pipeline for building mitochondrial genome supermatrices for partitioned phylogenetic analysis of fish / Selected abstracts of Bioinformatics: from Algorithms to Applications 2021 Conference. BMC Bioinformatics 22, 591 (2021).
- Turanov S.V. Development of a set of oligonucleotides for the identification of the Sakhalin sturgeon *Acipenser mikadoi* Hilgendorf, 1892 by PCR / ARPHA Conference Abstracts. Pensoft Publishers, 2021. Vol. 4. P. e65013.
- Turanov S.V., Redin A.D., Masalkova N.A. Species divergence and genetic differentiation of sand lances (Trachiniformes: *Ammodytes*) from the northwestern Pacific / Abstracts of the International Conference Unique Marine Ecosystems: Modern Technologies of Exploration and Conservation for Future Generations Vladivostok, Russia, August 4-7, 2016. Vladivostok, 2016. p. 111.
- Turanov S.V., Lee Y.-H., Kartavtsev Yu.Ph. Structural features and variation of mitochondrial control region among eelpouts (Cottoidei: Zoarcales) // Modern Achievements in Population, Evolutionary, and Ecological Genetics: International Symposium, Vladivostok Vostok Marine Biological Station, September 1-10, 2015: Program & Abstracts. Vladivostok, 2015. p. 77.
- Turanov S.V., Kartavtsev Yu.Ph., Lee Y.-H., Zemnukhov V.V., Balanov A.A. Molecular-phylogenetic reconstruction and taxonomic investigation of eelpouts (Cottoidei: Zoarcales) based on two mitochondrial genes. Genome. Vol. 58, No. 5, pp. 289-290. May, 2015.
- Turanov S.V., Kartavtsev Yu.Ph., Sharina S.N., Zemnukhov V.V., Balanov A.A., Lee Y.-H., Jeong D., Rozhkovan K.V.. DNA barcoding of fishes from Far East of Russia / Molecular Phylogenetics: Contributions to the 4th Moscow International Conference "Molecular Phylogenetics" (Moscow, Russia, September 23-26, 2014) / [Compiled by A. Troitsky, L. Rusin, and N. Petrov]. Moscow: TURUS PRESS, 2014. p. 70.
- Turanov S.V., Kartavtsev Y.Ph., Zemnukhov V.V., Balanov A.A. Molecular delimitation and phylogeny of perch-like fish species from Russia Far East // Fish Barcode of Life World Conference., Yeosu, Korea, 12-14 June, 2012: Proceedings. Yeosu: 2012. P. 35.

#### Dissertation

• Turanov S.V. Species Barcoding and Molecular Phylogenetics of Pricklebacks Fishes (Perciformes: Stichaeidae) from Far Eastern Seas of Russia. Candidate of Sciences Dissertation. A.V. Zhirmunsky Institute of Marine Biology. Vladivostok, Russia. 2013. (In Russian)

## Software

• **Turanov S.V.** FishMitoPipe. The the pipeline for fish mitochondrial genome manipulation before phylogenetic analysis. 2021. https://github.com/Sturcoal/FishMitoPipe

### **TEACHING**

Far Eastent Technical Fisheries University, Vladivostok

**Associate Professor** 

Population Ecology of Fishes Spring 2021 - present

**Associate Professor** 

Molecular Genetics Techniques in Aquaculture, Biodiversity and Phylogeny

Autumn 2015 - present

 $Far\ Eastent\ Federal\ University,\ Vladivostok$ 

Teaching assistant

Basic and Population Genetics

Spring 2011, 2012, 2013

#### **GRANTS & AWARDS**

Departmental award of the Ministry of Education and Science of Russia - the medal "Young Scientist", 2021.

Grant for young scientists from the President of Russian Federation, 2019.

Grant for young scientists from Russian Foundation For Basic Research, 2016-2019.

Expedition Grant from Far Eastern Branch of the Russian Academy of Sciences, 2016.

Travel Award for 6<sup>th</sup> International Barcode of Life Conference, 2015.

Grant for young scientists from Far Eastern Branch of the Russian Academy of Sciences, 2015.

Grant for young scientists from Far Eastern Branch of the Russian Academy of Sciences, 2014.

Grant for young scientists from Far Eastern Branch of the Russian Academy of Sciences, 2013.

Best oral presentation on the annual conference of young scientists in the IMB FEB RAS, 2013.

Second place oral presentation at MAPEEG-2013 (Modern Achievements in Population, Evolutionary and Ecological Genetics, International Symposium, Vladivostok).

Grant for young scientists from Far Eastern Branch of the Russian Academy of Sciences, 2011. Fellow of the governor of the Primorskii Kray, 2010.

# MEMBERSHIP OF EDITORIAL BOARDS, SCIENTIFIC COMMITEES AND NETWORKS

Fisheries Society of the British Isles: Liverpool, Liverpool, GB. Member of the *Fishes* journal Reviewer Board Member of the eDNA Society of Japan

#### **SKILLS**

Nucleic asids sequencing methods: Sanger and Illunima platforms. Bioinformatics.
Comparative Phylogenetics Analysis.
R, Shell, Python programming.
Machine learning techniques in biomedicine.

Last update: March 17, 2025