

Unit Name

Evolutionary and Synthetic Biology Unit
Professor Fyodor Kondrashov

Research Personnel

Shingo Miyauchi, Staff Scientist
Anna Perederina, Staff Scientist
Namratha Raj Mohan Raju, Postdoctoral Scholar
Ivan Shepelev, Research Unit Technician
Maria Anastasina, Staff Scientist
Nikolai Iakushev, Staff Scientist
Masato Araragi, Postdoctoral Scholar
Miyuki Suenaga, Research Unit Technician
Maksym Marchenko, Research Intern
Elaheh Seifollahi, Postdoctoral Scholar
Michael Hennessey, Postdoctoral Scholar
Julia Sakharuk, Research Unit Technician
Fedor Gagarin, Research Unit Technician
Anna Puzyreva, Visiting Researcher
Olifirov Borys, Visiting Researcher
Rachel Davis, Research Intern
Kateryna Andriienkova, Research Intern
Anastasiia Golubeva, Research Intern
Olha Sur, PhD Student
Arina Mazurova, PhD Student
Bakhytzhan Akdavletov, PhD Student
Igor Dubanevics, PhD Student
Lada Isakova, PhD Student
Dominik Kopcak, PhD Student
Rachel Leigh Davis, Research Intern
Olga Danilova, Research Intern
Klara Thi Hang Le Svensson, Visiting Research Student

Scholarly Contributions and Creative Productions (by Faculty)

Journal Article

1. Palkina, K.; Karataeva, T.; Perfilov, M.; Fakhranurova, L.; Markina, N.; Somermeyer, L.; Garcia-Perez, E.; Vazquez-Vilar, M.; Rodriguez-Rodriguez, M.; Vazquez-Vilriales, V.; Shakhova, E.; Mitiouchkina, T.; Belozeroval, O.; Kovalchuk, S.; Alekberova, A.; Malyshevskaya, A.; Bugaeva, E.; Guglya, E.; Balakireva, A.; Sytov, N.; Bezlikhotnova, A.; Boldyreva, D.; Babenko, V.; Kondrashov, F.; Choob, V.; Orzaev, D.; Yampolsky, I.; Mishin, A.; Sarkisyan, K.
A Hybrid Pathway for Self-Sustained Luminescence. *Science Advances* 2024, 10.

Seminars

1. Kondrashov, F.
Fitness Landscape of Orthologous GFP Genes, 2025.03.24, Séminaire Programme Gradué Chimie PSL, PSL Paris. 2025.

Scholarly Contributions (by Unit Members)

Name of Unit Member	Type	Title	Outlet	Publisher	Year Pub
Shingo Miyauchi	Journal Article	Conserved immunomodulation and variation in host association by Xanthomonadales commensals in Arabidopsis root microbiota	Nature Plants	Nature	2025
Shingo Miyauchi	Journal Article	Pangeneric analyses reveal the divergent genome evolution and ecologies between morels and truffles in the Morchellaceae	Curr Biol	Elsevier	2025
Shingo Miyauchi	Journal Article	Three pairs of fungal Trametes strains isolated from distinct geographic origins show conserved genomic features and adaptive response to plant biomass	Bioresource Technology	Elsevier	2026
Shingo Miyauchi	Journal Article	Characterisation and comparative analysis of mitochondrial genomes of false, yellow, black and blushing morels provide insights on their structure and evolution	IMA Fungus	Pensoft	2025
Shingo Miyauchi	Journal Article	The large-scale analysis of Agaricales genomes shed light on the unique origin, evolution, development characteristics of subterranean mushroom Agaricus sinodeliciosus	Research Square	Springer Nature	2026
Shingo Miyauchi	Journal Article	Pangeneric analyses reveal the divergent genome evolution and ecologies between morels and truffles in the Morchellaceae	Current Biology	Cell perss	2025
Lada Isakova	Poster Presentation at Conference	What constrains the evolutionary exploration of protein sequence space?	Gordon Research Conference on Molecular Mechanisms in Evolution 2025		
Shingo Miyauchi	Presentation at Conference	Discoveries of genomic treasures in deep-sea fungi	European Conference on Fungal Genetics (ECFG17)		
Lada Isakova	Presentation at Conference	What constrains the evolutionary exploration of protein sequence space?	Japan PhD Student Meeting in		

Name of Unit Member	Type	Title	Outlet	Publisher	Year Pub
			Evolutionary Biology 2025		
Shingo Miyauchi	Seminars	Fungal Genomics and Visual Omics	Yunnan Academy of Agricultural Sciences, China		
Shingo Miyauchi	Seminars	Deep-sea fungal genomics	OIST x WPI-AIMEC (Tohoku U & JAMSTEC) Joint Workshop		
Shingo Miyauchi	Seminars	Fungal Genomics and Visual Omics	Iwate Biotechnology Research Center, Japan		
Shingo Miyauchi	Seminars	Fungal Genomics and Visual Omics	Kunming Institute of Botany, CAS, China		

Outreach Activities [For Unit Members Only]

Term 2 2026	Arina Mazurova, Feedback Session for Ishikawa prefectural Nanao High School Students [Fiscal Year: 2026-02-04]
Term 2 2026	Arina Mazurova, Feedback session and campus tour for Innovative Festa High School Students [Fiscal Year: 2026-01-27]
Term 1 2025	Arina Mazurova, Feedback and discussion session for Mie Prefectural Yokkaichi High School students [Fiscal Year: 2025-10-01]
Term 1 2025	Shingo Miyauchi, BMC Genomics Guest Editor, Springer Nature [Fiscal Year: 2025-04-01]
Term 1 2025	Arina Mazurova, Interview session with Kyoto Prefectural Momoyama High School Students [Fiscal Year: 2025-10-14]
Term 1 2025	Arina Mazurova, SEED Kyushu University feedback session [Fiscal Year: 2025-11-28]
Term 1 2025	Arina Mazurova, Feedback Session for Miyazaki Prefectural Miyakonojo Izumigaoka High School Students [Fiscal Year: 2025-12-18]
Term 3 2025	Arina Mazurova, Career talk and lab tour for Ibaraki High School Students [Fiscal Year: 2025-06-26]
Term 3 2025	Arina Mazurova, Feedback session for Dowango High School Students [Fiscal Year: 2025-08-06]
Term 2 2025	Dominik Kopčák, Science Festival, OIST [Fiscal Year: 2025-02-01]
Term 2 2025	Arina Mazurova, Career talk for Tokyo Ochanomizu High School Students [Fiscal Year: 2025-04-14]

Workshops and Seminars [Organized and Hosted by Faculty/Units]

Speaker Name(s)	Title	Location	Co-Organizers	Date
	Japan PhD Student Meeting in Evolutionary Biology 2025	OIST	SOKENDAI	2025-10-20
Dr. Andrey Parkhitko	Targeting Age-Dependent Metabolic Reprogramming for Life- and Healthspan Extension	Seminar room L4F01		2025-01-20