

Elvira NIKALAYEVICH

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Date of birth: 14/10/1987

RESEARCH EXPERIENCE

- Oct 2019 – present** Postdoctoral researcher in Center for Interdisciplinary Research in Biology (CIRB) CNRS UMR 7241 - INSERM U1050. Group of Dr. Marie-Hélène Verlhac and Dr. Marie-Emilie Terret
- 2014 –2019** Postdoctoral researcher in Institut de Biologie Paris-Seine, Laboratory of Developmental Biology, CNRS UMR 7622. Group of Dr. Katja Wassmann
- Nov 2015 - Jan 2016** Collaboration project in Stemmann Lab University of Bayreuth, Genetics Department.
- 2010-2014** PhD project in Wellcome Trust Centre for Cell Biology, the University of Edinburgh. Group of Professor Hiro Ohkura. Thesis title: *Chromatin condensation and meiotic spindle organization in Drosophila oocytes*.
- 2003-2005** Honours project and course projects, Belarusian State University, group of Dr. Vasily Grinev.

EDUCATION

- 2010 – 2014** PhD in Cell and Molecular Biology, University of Edinburgh, UK. Supervisor: Professor Hiro Ohkura
- 2005-2010** BSc (Honorary) in Biology and Biotechnology, Belarusian State University

GRANTS AND FELLOWSHIPS

- Fondation Recherche Médicale Postdoctoral fellowship (Feb 2016 - Jan 2018)
- EMBO Short Term Fellowship (Nov 2015 - Jan 2016)
- Junior Scientist Travel Grant from the Genetics Society (Oct 2013)
- The Darwin Trust of Edinburgh 3-year scholarship for PhD studies (2010-2013)

PUBLICATIONS

- **Nikalayevich E**, Letort G, de Labbey G, Todisco E, Shihabi A, Turlier H, Voituriez R, Yahiatene M, Pollet-Villard X, Innocenti M, Schuh M, Terret M-E, and Verlhac M-H. (2024) *Aberrant cortex contractions impact mammalian oocyte quality. **Developmental Cell**, S1534580724000479.*
- **Nikalayevich E***, Terret M-E. (2023) *Meiosis: Actin and microtubule networks drive chromosome clustering in oocytes. **Current Biology**, 33(7): R272-R274 (* corresponding author)*

- Friocourt G, Perrin A, Saunders PA, **Nikalayevich E**, Voisset C, Coutton C, Martinez G, Morel F. (2023) *Bypassing Mendel's First Law: Transmission Ratio Distortion in Mammals*. **Int. J. Mol. Sci.**, 24(2), 1600
- **Nikalayevich E**, Wassmann K. (2022) *A biosensor to measure cleavage efficiency of the meiotic cohesin subunit Rec8 by Separase in mouse oocytes*. **STAR Protocols** 3, 101714
- Letort G, Eichmuller A, Da Silva C, **Nikalayevich E**, Crozet F, Salle J, Minc N, Labrune E, Wolf J-P, Terret M-E and Verlhac M-H. (2022) *An interpretable and versatile machine learning approach for oocyte phenotyping*. **JCS**, 135: jcs260281.
- **Nikalayevich E**, El Jailani S, Dupré A, Cladière D, Gryaznova Y, Fosse C, Buffin E, Touati S A, Wassmann K. (2022) *Aurora B/C-dependent phosphorylation promotes Rec8 cleavage in mammalian oocytes*. **Current Biology**, 32(10) :2281-2290.e4
- **Nikalayevich E***, Verlhac M-H (2021) *Selfish centromeres, selfless heterochromatin*. **Cell**, 184(19): 4843-4844 (* corresponding author)
- Bennabi I, Crozet F, **Nikalayevich E**, Chaigne A, Letort G, Manil-Ségalen M, Campillo C, Cadart C, Othmani A, Attia R, Genovesio A, Verlhac M-H, Terret M-E. (2020) *Artificially decreasing cortical tension generates aneuploidy in mouse oocytes*. **Nat Comm**, 11(1659):1-14
- **Nikalayevich E***, Bouftas N and Wassmann K* (2018) *Detection of Separase activity using a cleavage sensor in live mouse oocytes*. Book chapter in **Methods in Molecular Biology** series "On mouse oocyte development" (* corresponding authors)
- **Nikalayevich E**, Ohkura H (2015) *The NURD nucleosome remodelling complex and NHK-1 kinase are required for chromosome condensation in oocytes*. **J. Cell Sci.** 128: 566-575.

SUPERVISION/TEACHING

2021	Teaching a unit in Cell Dynamics and Communication M2 course, Université Paris-Saclay
2021	Supervision of Erasmus M2 student, Despoina Kyriazi (9 months).
2020	Supervision of M2 student, Morgane Verbrugghe (5 months).
2018	Supervision of an Erasmus M2 student, Eileen Breunig, (3 months).
2018	Supervision of a school student (14 y.o.), Ivan Murenko, during his "Observation in the workplace for students in fourth grade" (1 week), IBPS, France
2016-2017	Practical course teaching/lab assistance in training unit "Developmental Biology from Stem Cells to Morphogenesis" (2 days/year), IBPS, France
2013	Outreach volunteer for "Life Through a Lens" microscopy demonstration for primary school classes, Wellcome Trust Centre for Cell Biology, UK (1 day)
2010-2013	Demonstrator in Kickstart Biology workshop for high school students, The University of Edinburgh, UK (1 day/year)
2009	Biology teacher trainee in High School #138, Minsk, Belarus. As part of Belarusian State University programme, I planned and conducted two classes per week in groups of 18-20 students and marked student assignments (4 weeks)

COMPETENCES/OTHER

- Qualification in the Animal Experimentation Course (completed a certified course on Project Designer level for rodents, 2018), France.
- Languages: English (fluent oral and written), Russian (native), Belarusian (native), French (B2).
- Experienced with ImageJ, GraphPad Prism, MS Office; familiar with Adobe Photoshop and Illustrator; programming in Python.
- Involved in upgrading the confocal spinning disc microscope in the Wassmann lab, including testing new tools and troubleshooting the conditions for extended time-lapse imaging of mouse oocytes and early mouse embryos.
- Organised lab retreats, trained members of the lab in specific techniques (Ohkura, Wassmann and Terret/Verlhac lab).
- Developed a set of macros for ImageJ software to streamline the routine image processing and measurement (Wassmann and Terret/Verlhac labs).