Dmitry Mozzherin

Curriculum Vitae

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Education

2012–2015 **ENSTA Bretagne College - Telcommunications Major**.
French Graduate and Post Graduate Engineering School and Research Institute - GRANDE ECOLE
Graduation September 2015

1989–1993 **Graduate Student**, *Student*, Casablanca.
Intensive undergraduate-level preparation in advanced Mathematics and Science for competitive entrance examinations to French Graduate Engineering Schools

1979–1985 **Ural State University — Biology Major**, *Undergraduate Student*, Yekaterinburg, Russia, Department of Physiology and Biochemistry of Plants.
Speciality: Biologist, Teacher of Biology and Chemistry

Experience

March–September 2015 **Final Project Internship**, CGG (EX CGG VERITAS) *Massy, France*, ENSTA Bretagne.
Developping a "Control and Command System" demonstrator (Hardware and Software) for Land and marine acquisition surveys with special reference to communication infrastructure in remotes areas and Data Centric Publish Subscribe (DCPS) middleware. *Matlab/C++/Java/MOOS-IvP environments*

July–September 2014 **Assistant Engineer Internship**, LAB-STICC *UMR CNRS 6285*, ENSTA Bretagne.
Empirical Mode Decomposition and Blind Source Separation Methods for Antijamming. *Matlab/C environment*

October–June 2014 **Smart Wheelchair Control using EEG**, *ENSTA Bretagne*.
Developing a Low Cost EOG Signal Interface for a Smart Wheelchair with High Accuracy and Reliability. *Matlab/Python environment*

July–August 2013 **Industrial Placement**, *Hypios SAS*, Paris.
Database and Customer Relationship Management.

2012 **Supervised Personal Work**, Lycée Mohammed V.
Implementing a Best-Routing ADA Algorithm based on Paris Metro. *ADA environment*

Computer skills

Basic VHDL, UML

Intermediate ADS, LaTeX, OpenOffice, Linux, Microsoft Windows, OpenGL, OpenCV, ADA, HTML

Advanced JAVA, MATLAB, Python, C/C++

Languages

Russian **Native Speaker**

English **Fluent**

Interests

- Trecking
- Robotics (NAO Junior Developer)

Peer-reviewed Publications

1. Kripke, E., Mozzherin, D., Senft, S., Hanlon, R.: Visualizing Biological Complexity in Cephalopod Skin: A Synergy of Art and Science Technologies. Leonardo **48**(5), 486–487 (2015). doi:10.1162/LEON_a_01124

2. Fischer, A.H.L., Mozzherin, D., Eren, a.M., Lans, K.D., Wilson, N., Cosentino, C., Smith, J.: SeaBase: a multispecies transcriptomic resource and platform for gene network inference. Integrative and comparative biology **54**(2), 250–63 (2014). doi:10.1093/icb/icu065

3. Boyle, B., Hopkins, N., Lu, Z., Raygoza Garay, J.A., Mozzherin, D., Rees, T., Matasci, N., Narro, M.L., Piel, W.H., McKay, S.J., Lowry, S., Freeland, C., Peet, R.K., Enquist, B.J.: The taxonomic name resolution service: an online tool for automated standardization of plant names. BMC bioinformatics **14**(1), 16 (2013). doi:10.1186/1471-2105-14-16

4. Morris, R.a., Barve, V., Carausu, M., Chavan, V., Cuadra, J., Freeland, C., Hagedorn, G., Leary, P., Mozzherin, D., Olson, A., Riccardi, G., Teage, I., Whitbread, G.: Discovery and publishing of primary biodiversity data associated with multimedia resources: the audubon core strategies and approaches. Biodiversity Informatics (1), 185–197 (2013). doi:10.17161/bi.v8i2.4117

5. Thessen, A.E., Cui, H., Mozzherin, D.: Applications of natural language processing in biodiversity science. Advances in bioinformatics **2012**, 391574 (2012). doi:10.1155/2012/391574

6. Mozzherin, D.J., McConnell, M., Miller, H., Fisher, P.a.: Site-specific mutagenesis of Drosophila proliferating cell nuclear antigen enhances its effects on calf thymus DNA polymerase delta. BMC biochemistry **5**, 13 (2004). doi:10.1186/1471-2091-5-13

7. Fisher, P.A., Moutsiakis, D.L., McConnell, M., Mozzherin, D.: A Single Amino Acid Change (E85K) in Human PCNA That Leads, Relative to Wild Type, to Enhanced DNA Synthesis by DNA Polymerase δ past Nucleotide Base Lesions (TLS) as Well as on Unmodified Templates. Biochemistry **43**(50), 15915–15921 (2004). doi:10.1021/bi048558x

8. Mozzherin, D.J., Tan, C.K., Downey, K.M., Fisher, P.A.: Architecture of the active DNA polymerase delta.proliferating cell nuclear antigen.template-primer complex. Journal of Biological Chemistry **274**(28), 19862–7 (1999)

9. Mozzherin, D.J., McConnell, M., Fisher, P.A.: Drosophila replication and repair proteins: proliferating cell nuclear antigen (PCNA). Methods **18**(3), 401–406 (1999). doi:10.1006/meth.1999.0798

10. Zaika, A., Mozzherin, D.J., Tan, C.K., Downey, K.M., Fisher, P.A.: A two-dimensional support for selective binding of polyhistidine-tagged proteins: identification of a proliferating cell nuclear antigen point mutant with altered function in vitro. Anal Biochem **268**(2), 193–200 (1999)

11. Mozzherin, D.J., Shibutani, S., Tan, C.K., Downey, K.M., Fisher, P.a.: Proliferating cell nuclear antigen promotes DNA synthesis past template lesions by mammalian DNA polymerase delta. Proceedings of the National Academy of Sciences of the United States of America **94**(12), 6126–31 (1997)

12. Mozzherin, D.J., McConnell, M., Jasko, M.V., Krayevsky, A.A., Tan, C.K., Downey, K.M., Fisher, P.A.: Proliferating cell nuclear antigen promotes misincorporation catalyzed by calf thymus DNA polymerase delta. J Biol Chem **271**(49), 31711–31717 (1996)

13. Mozzherin, D.J., Fisher, P.A.: Human DNA polymerase epsilon: enzymologic mechanism and gap-filling synthesis. Biochemistry **35**(11), 3572–3577 (1996)

14. McConnell, M., Miller, H., Mozzherin, D.J., Quamina, a., Tan, C.K., Downey, K.M., Fisher, P.a.: The mammalian DNA polymerase delta–proliferating cell nuclear antigen–template-primer complex: molecular characterization by direct binding. Biochemistry **35**(25), 8268–74 (1996). doi:10.1021/bi9530649

15. Jasko, M.V., Fedorov, I.I., Atrazhev, A.M., Mozzherin, D.Y., Novicov, N.A., Bochkarev, A.V., Gurskaya, G.V., Krayevsky, A.A.: Synthesis, Molecular and Crystal Structure of 3'-N-Alkylamino-3'-deoxythymidines and Some Biochemical Properties of Their Phosphorous Esters. Nucleosides and Nucleotides **14**(1-2), 23–37 (1995). doi:10.1080/15257779508014650

16. Jasko, M.V., Semizarov, D.G., Victorova, L.S., Mozzherin, D., Krayevsky, A.A., Kukhanova, M.K.: New modified substrates for discriminating between human DNA polymerases alpha and epsilon. FEBS Lett **357**(1), 23–26 (1995). doi:001457939401319V [pii]

17. Kukhanova, M., Liu, S.H., Mozzherin, D., Lin, T.S., Chu, C.K., Cheng, Y.C.: L- and D-enantiomers of 2',3'-dideoxycytidine 5'-triphosphate analogs as substrates for human DNA polymerases. Implications for the mechanism of toxicity. J Biol Chem **270**(39), 23055–9 (1995)

18. Viktorova, L.S., Rozovskaia, T.A., Mozzherin, D.J., Krayevsky, A.A.: [Acyclic analogs of 2',3'-dideoxy-2',3'-didehydronucleoside-5'-triphosphates–terminators of DNA synthesis, catalyzed by a broad set of DNA polymerases]. Molekuliarnaia Biologiia **27**(1), 143–152 (1992)

19. Mozzherin, D.J., Kukhanova, M.K., Atrazhev, A.M.: [A method of isolation and properties of DNA-dependent DNA-polymerase epsilon from human placenta]. Molekuliarnaia Biologiia **26**(5), 999–1010 (1991)