
BIOGRAPHICAL SKETCH

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NAME Shcheglovitov, Oleksandr	POSITION TITLE Research Associate		
eRA COMMONS USER NAME			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
National Technical University of Ukraine "KPI"	BA	2000	Physics
National Technical University of Ukraine "KPI"	M.Sc.	2002	Biophysics
Bogomoletz Institute of Physiology	Ph.D.	2006	Biophysics

A. Positions and Honors.

Positions and Employment

06/2004 – 09/2004	Research Assistant, Department of Pharmacology, University of Virginia, VA, USA
2005 – 2006	Junior Research Associate, Department of General Physiology of Nervous System, Bogomoletz Institute of Physiology, Kiev, Ukraine.
02/2007 – present	Research Associate, Department of Pharmacology, University of Virginia, VA, USA

Honors

2003 – 2005	President of Ukraine Fellowship.
2004	Biophysical Society International Travel Grant.
2004	Biophysical Society travel grant for non-US graduate students to visit US lab.
2005	2 nd prize in the poster competition of the IBRO CEERC Summer School, Debrecen, Hungary, 11 – 22 July 2005.
2006 – 2008	President of Ukraine Fellowship, 2006 – 2008

B. Selected peer-reviewed publications (in chronological order).

1. Shcheglovitov, A.K., T. I. Zhelay, A. P. Kondratyuk, V.G. Najdenov and Y.M. Shuba. Comparative Analysis of the Mechanisms Underlying Nifedipine-Induced Blockade of Three Subtypes of T-Type Ca²⁺ Channels. *Neurophysiology (Kiev)* 2004; 36(2):101 – 110.
2. Zhelay, T.I., A. Shcheglovitov. Effects of nifedipine on voltage-regulated low-threshold Ca²⁺-channels in rat thalamic neurons. *Neurophysiology (Kiev)* 2004; 36(3):193 – 203.
3. Shcheglovitov A., Zhelay T., Vitko Y., Osipenko V., Perez-Reyes E., Kostyuk P. and Shuba Y. Contrasting the effects of nifedipine on subtypes of endogenous and recombinant T-type Ca²⁺ channels. *Biochem Pharmacol.* 2005; 69(5):841 – 854.
4. Dosenko, V.E., O.P. Lyubanova, A.K. Shcheglovitov, O.I. Boldyrev, Y.M. Shuba. Expression of low-voltage-activated (T-type) calcium channel genes in rat thalamic dorsolateral nucleus: ontogenetic aspect. *Neurophysiology (Kiev)* 2005; 37(3):201 – 206.
5. Shcheglovitov, A.K., O.I. Boldyrev, O.P. Lyubanova, Y.M. Shuba. Peculiarity of recombinant T-type calcium channel selectivity for divalent cations. *Neurophysiology (Kiev)* 2005; 37(4):319 – 329.
6. Shcheglovitov, A.K., and Shuba, Y.M.. Sodium-calcium selectivity of cloned T-type calcium channels. *Neurophysiology (Kiev)* 2006; 38(3):183 – 192

7. Shcheglovitov, A., P. Kostyuk, and Y. Shuba, *Selectivity signatures of three isoforms of recombinant T-type Ca²⁺ channels*. *Biochimica et Biophysica Acta (BBA) - Biomembranes*, 2007. 1768: p. 1406-1419.

C. Research Support

R01 NS038691, Perez-Reyes (PI) 7/5/99-5/31/08

NIH/NINDS

Molecular Analysis of Neuronal T-type Ca Channels

The specific aims of this project are to: 1) determine how mutations in Childhood Absence Epilepsy patients alter Ca_v3.2 channel activity; 2) since many of these mutations are in the cytoplasmic loop connecting repeat I to II, we plan on studying the structure-function relationships of this loop; 3) to determine if current antiepileptic drugs block recombinant T-currents, 4) to use a fluorescent dye based assay to map the chemical space of T channels using known channel blockers, and 5) to synthesize and test novel antiepileptic compounds.

Role on project: Investigator