

Svetlana Khakhina, PhD

Curriculum Vitae

Drexel University
College of Arts and Sciences
Department of Biology
PISB, 3245 Chestnut Street,
Philadelphia, PA, 19104

EDUCATION

- **Ph.D.** in Cell and Molecular Biology, Rowan University GSBS, Stratford, NJ, USA, **2013**. Thesis: "Cells death and mitochondrial fragmentation"
- **Engineering degree** (equivalent of MS) in Standardization and Certification of Chemical-Pharmaceutical and Biotechnology Products, M.V. Lomonosov Moscow State Academy of Fine Chemical Technology, Russia, **2005**.

PROFESSIONAL EXPERIENCE

1. **Assistant Teaching Professor** in Drexel University, College of Arts and Sciences, Department of Biology (Philadelphia PA), Fall 2018 - present
2. **Adjunct SEA-PHAGES instructor** in University of the Sciences (Philadelphia PA), Fall 2017 – Spring 2018.
3. **Postdoctoral Fellow** in Dr. Zachary Klase's lab (University of the Sciences in Philadelphia, Philadelphia, PA), Jan 2016 to present. Project: "Modeling HIV resistance in human cells".
4. **Postdoctoral Scholar** in Dr. Scott Moyer-Rowley's lab (University of Iowa, Iowa City, Iowa), Feb 2014 to Dec 2015. Project: "Drug resistance in opportunistic pathogen, *Candida glabrata*"
5. **Intern** in ChemBridge Corporation (Moscow, Russia), Laboratory of combinatorial chemistry screening, Oct 2005 to Jul 2006 (Development of 96 well plate with human tyrosine kinases for anticancer drug discovery).
6. **Intern** in ChemBridge Corporation (Moscow, Russia), Laboratory of combinatorial chemistry screening, Summer 2003 (Synthesis and purification of a heterocyclic compound with different side chains).

PROFESSIONAL MEMBERSHIPS

- UPENN Institutional Biosafety Committee (IBC) member since Oct 2016.
- American Society of Microbiology (ASM) member since 2016

RESEARCH SKILLS

Proficient in RT-PCR, RNA isolation, Flow cytometry, Fluorescence microscopy, large-scale protein purification, genetic manipulations (gene cloning, cell transformation/transfection, gene knockout, mutagenesis and genetic screening), Western blot, Northern blot, Cell-Based Assays, mammalian tissue culture, work with HIV-1 virus, Lymphocyte isolation from human blood.

AREAS OF EXPERTISE

- Cell and Molecular biology
- Cell signaling (cell response to drug treatments)
- Genetics (cloning, high-throughput screening)
- Immunology (HIV infection; characterization of T-cell response)
- Cell death (apoptosis, necrosis, pyroptosis)

COMMUNICATION SKILLS

- Work in large, interdisciplinary laboratory.
- Have a proven laboratory management and student training skills.
- Was actively involved in student body administration as a president of Graduate School Association for three consecutive years (2009-2012).
- Actively involved in grant manuscript preparation and scientific paper writing.

ORAL PRESENTATIONS

- Oral presentation "Suppression of HIV infection in Long-Term Nonprogressors require a concurrent viral load" at the 2018 Palm Springs Symposium on HIV/AIDS (March 1-3rd 2018)
- Invited speaker at the Research Retreat hosted by University of the Sciences "What is right with Elite Controllers?" (September 11th 2016).
- Invited speaker at the Research Retreat hosted by Rowan University (October 2013)
- Presented at departmental seminars annually (2007 – 2013).

POSTER PRESENTATIONS

- Two posters on bacteriophage biology, University of the Sciences Research day, April 5th, 2018
- Poster presentation "Med13p anchors cyclin C in the nucleus to prevent stress-independent mitochondrial hyperfission" at the Yeast genetics and Molecular Biology international conference, July 31st -August 5th 2012.

PUBLICATIONS

1. **Khakhina S**, Simonicova L, Moye-Rowley WS. **Positive autoregulation and repression of transactivation are key regulatory features of the Candida glabrata Pdr1 transcription factor.** Mol Microbiol. 2018 Jan 24. [Epub ahead of print]
2. Sardo L, Lin A, **Khakhina S**, Beckman L, Ricon L, Elbezanti W, Jaison T, Vishwasrao H, Shroff H, Janetopoulos C, Klase ZA. **Real-time visualization of chromatin modification in isolated nuclei.** J Cell Sci. 2017 Sep 1;130(17):2926-2940.
3. Klase ZA, **Khakhina S**, Schneider Ade B, Callahan MV, Glasspool-Malone J, Malone R. **Zika Fetal Neuropathogenesis: Etiology of a Viral Syndrome.** PLoS Negl Trop Dis. 2016 Aug 25;10(8):e0004877.
4. **Svetlana Khakhina**, Soraya S. Johnson, Raman Manoharlal, Sarah B. Russo, Corinne Blugeon, Sophie Lemoine, Anna B. Sunshine, Maitreya Dunham, L. Ashley Cowart, Frédéric Devaux and W. Scott Moye-Rowley. **Control of plasma membrane permeability by ABC transporters.** Eukaryot Cell. 2015 May;14(5):442-53.
5. **Svetlana Khakhina**, Cooper K.F. and Randy Strich. **Med13p prevents mitochondrial fission and programmed cell death in yeast through nuclear retention of cyclin C.** Mol Bio of the Cell, 2014 Sep 15; 25(18):2807-16.
6. Cooper KF, **Khakhina S**, Kim SK, Strich R. **Stress-Induced Nuclear-to-Cytoplasmic Translocation of Cyclin C Promotes Mitochondrial Fission in Yeast.** Dev Cell, 2014 Jan 27; 28(2):161-73.
7. R. Strich, **S. Khakhina**, M.J. Mallory. **Ume6p is required for germination and early colony development of yeast ascospores.** FEMS yeast research, 2011 Feb; 11(1):104-13.