Ivan V Grishagin PhD

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EXPERIENCE

2015-present   *Principal Scientist / Data Engineering Team Leader*
Rancho BioSciences   **Remote**

- Multi-omic (microarray, protein array, sequencing, RNA-Seq), biosensor, viability assay data analysis, interpretation, formatting, and visualization.
- Co-developed Inxight Drugs, a comprehensive drug discovery and development portal with information on disease biology, drug targets, mechanism of action, pharmacokinetics, and toxicity.
- Code refactoring, debugging, and optimization; building R packages; Excel macros/add-ins.
- Data scraping, parsing, modeling, cleanup, harmonization, and alignment with ontologies.
- Project management, architecture, and specifications; proposal preparation.
- Line management: leading a team of 5 junior and senior data scientists and engineers.
- Identified capability gaps and proposed innovative remediation strategies for pharma clients and NIH.
- Management of some external collaborations with academic and contract organizations.
- Liaison and bioinformatics scientist at NIH NCATS.

2014-2015   *Research Fellow*
Queen's University Belfast, CCRCB   **Belfast, Northern Ireland**

- Main project: repurposing FDA-approved drugs for blood cancer therapies.
- Developed a complete solution for automatic data processing of Illumina BeadArray output with R.
- Used connectivity mapping to identify approved drugs efficacious against drivers of leukemia.
- Designed and completed a comprehensive screen of a 760 FDA-approved drugs.

2010-2014   *Research Assistant*
University of Southern California, School of Pharmacy   **Los Angeles, CA**

- Determined high in vitro and in vivo anticancer efficacy of topographical mimetics of HIF1α.
- Investigated uptake, toxicity, and in vivo anticancer efficacy of rhomboidal Pt(II) metallacycles.
- Designed and completed a screen of 105 compounds in breast cancer cell line.
- Designed and developed a robust method to count live mammalian cells automatically.
- Supervised, mentored, and taught undergraduate and junior graduate students.

SKILLS

- **Data Science and Engineering:** R, Python, VBA, Java, ImageJ Macro Language, MS Power Query, Neo4j, RDBMS (MySQL, Oracle, PostgreSQL), JavaScript, HTML5/CSS3, Markdown, Git, bash, Cypher, SQL, Docker, data mining and organization, database design and data modeling, data harmonization.
- **Cell biology:** viability assays, gene expression analysis, PCR, qRT-PCR, western blot, protein array analysis, microscopy, flow cytometry, molecular cloning, reporter assays, screening.
- **In vivo testing:** xenografts, IP/IV injections, in vivo imaging, histology.
- **Chemistry:** organic synthesis, NMR, HPLC, LC-MS, IR, UV-Vis, dynamic/static light scattering.
- **Languages:** English (Fluent), Russian (Native), German (Intermediate), French (Intermediate).

EDUCATION

University of Southern California, School of Pharmacy   **Los Angeles, CA**

PhD in Pharmaceutical Sciences (**GPA 3.91**), 2014.
Dissertation: "Small Molecule Modulators of HIF1α Signaling."

Lomonosov Moscow State University, Department of Chemistry   **Moscow, Russia**

Diploma in Polymer Chemistry (**Summa cum Laude**, Gold Medal), 2008.
Thesis: "Formation of Interpolyelectrolyte Complexes in Organic Media of Low Polarity."