

Edgar E. Gonzalez Kozlova, PhD

Curriculum Vitae

PERSONAL DETAILS

<i>Address</i>	1295 5th Avenue Manhattan-NYC
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<i>Website</i>	https://eegk.github.io/

EDUCATION

PhD in Bioinformatics

2012-2016

Universidade Federal de Minas Gerais, Brazil.

Thesis on B-cell epitope pattern identification and experimental validation.

Bachelor's degree in Biological Sciences

2005-2012

Universidad Nacional Mayor de San Marcos, Perú.

Thesis on characterization of venom spreading factors from Bothrops snakes.

SKILLS

Development and Bioinformatics

<i>Analysis</i>	Transcriptomics and other OMIC's data modeling profiling and integration. RNAseq, scRNAseq, RRBS, Methyleseq, Microarrays, FACS and MS.
<i>DataMining</i>	Regression, Bayes, RF, GLM, SVM, SVD, SDA and Networks/graphs.
<i>Programming & Software</i>	R, Python, Shell/Bash, Perl, Matlab, Mr.Bayes, PVclust and L ^A T _E X, Gromacs, PyMol, Modeller, JMol, blast, clustal, Knime, Emboss, Star, Salmon, FastaQC, Trinity, Spades, Bismark, FeaturesCount and Jalview.
<i>Servers</i>	Remote SSH, FTP, SunFire, Altix, PBS and LSF.

Wet-lab

<i>Immunology</i>	ELISA, SPOT, Western Blot and bacterial cultures.
<i>Molecular Biology</i>	PCR, Plasmid purification, DNA-RNA extraction.
<i>Biochemical</i>	Electrophoresis and other Chromatographies (AKTA-FPLC, HPLC)

Animal handling

<i>Bioterium</i>	Immunization, keeping, mice, rats, rabbits, snakes, arthropods and horses
<i>Field</i>	Reptiles, arthropods and amphibians
<i>Surgery</i>	Mice, Snakes and venom extraction

Social

<i>Languages</i>	Russian (native speaker), Spanish (native speaker), English (fluent), Portuguese (fluent)
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EMPLOYMENT

Post-Doc.

2018-present

Icahn school of medicine - Mount Sinai, USA.

Department of Genetics and Genomics; Modeling sequencing data to profile molecular datasets. Leading and assisting epigenetic, transcriptomic and genomics projects by leveraging sequencing and clinical data.

Grantee. Post-Doc.

2016-2018

CAPES, LIDI, UFSC, Brazil.

Study of protein evolution, structure, and sequence of viral proteins (VLPs); Protein design and expression in bacterial systems; Proteomic, Genomic, Transcriptomic and Single cell data analysis.

Grantee - Researcher

2012-2016

CNPq - CAPES, Labimq, UFMG, Brazil.

Exclusive dedication as researcher. Tasks and Projects: Computational identification of B-cell epitopes; Bioinformatic transcriptome analysis; SSH server support; and responsible for disposal of toxic residues, biosecurity, and keeper of project related animals.

Undergrad - Researcher

2007-2012

Molecular Biology Laboratory, UNMSM, Perú

Exclusive dedication as a researcher. Main duties: Immunochemical and biochemical assays with enzymes from several venoms; Immunization on mice, rabbits and horses; and Isolation or purification of proteins from complex samples.

Undergrad - Researcher

2007-2012

UNMSM - Museum of Natural History. Perú

Venomous animals keeper, Venom extraction, surgery, feeding and health keeper for the animals. Main duties: Preparing the cages environment for the animals; Feeding and nursing; Venom extraction and surgery; and Guide for visits.

Consultant

2011-2011

ERM - International, Herpetology. Perú

On field sampling and identification of reptiles and amphibians. Main duties: Specialized sampling of animals; and Identification for the samples.

Researcher and Consultant

2009-2011

Department of Herpetology, Museum of Natural History. Perú

Performed identification and keeping the collection for the department. Main duties: Identification of samples; Cleaning and keeping of the collection; Consultant for external organizations; and Museum guide.

PUBLICATIONS

Elife, PMID:31637998

2019

Delgobo M, Mendes DA, **KOZLOVA, E. E. G.**, Rocha EL, Rodrigues-Luiz GF, ... , Mansur DS, Van Weyenbergh J, Báfica A. *An evolutionary recent IFN/IL-6/CEBP axis is linked to monocyte expansion and tuberculosis severity in humans.*

Pre Print bioRxiv, doi: <https://doi.org/10.1101/679886>

2019

Adrian Bubie, **KOZLOVA, E. E. G.**, Nicholas Akers, Augusto Villanueva, Bojan Losic. *Tumor fitness, immune exhaustion and clinical outcomes: impact of immune checkpoint inhibitors*

Biochimie, PMID:30946947

2019

Vivas-Ruiz DE, **KOZLOVA, E. E. G.**, Delgadillo J, Palermo PM, Sandoval GA, Lazo F, Rodríguez E, Chávez-Olórtegui C5, Yarlequé A, Sanchez EF. *Biochemical and molecular characterization of the hyaluronidase from Bothrops atrox Peruvian snake venom.*

Biochimie, PMID:31476328

2019

Medina-Santos R, Guerra-Duarte C, ... , **KOZLOVA, E. E. G.**, Kalapothakis E, Chávez-Olórtegui C. *Diversity of astacin-like metalloproteases identified by transcriptomic analysis in Peruvian Loxosceles laeta spider venom and in vitro activity characterization.*

Pre Print bioRxiv, <https://doi.org/10.1101/784678>

2019

Constanza Eleonora Espada, Lummertz da Rocha, Adara Aurea dos Santos, Zamira Guerra Soares, Greicy Malaquias, Daniel Oliveira Patrício, **KOZLOVA, E. E. G.**, Paula Fernandes dos Santos, Juliano Bordignon, Thomas J. Sanford, Teodoro Fajardo, Trevor R. Sweeney, André Báfica, Daniel Santos Mansur *Flaviviruses exploit fine-tuning of the interferon response to promote replication*

Scientific Reports, PMID:30297733

2018

KOZLOVA, E. E. G.; Loïc Cerf; Francisco Santos Schneider; Benjamin Thomas Viart ; ... ;Ricardo Andrez Machado-de-Ávila; *Computational B-cell epitope identification and production of neutralizing murine antibodies against Atrochlysin-I.*

Toxicon, PMID:29024770

2017

Dan Vivas-Ruiz; Fanny E Lazo, Ph. D; Gustavo A Sandoval , ... , Msc; **KOZLOVA, E. E. G.** ; Eladio F Sánchez, Ph.D; Carlos Chávez-Olórtegui , Ph.D; Armando Yarlequé, Ph.D ; *Biochemical, biological and molecular characterization of a new L-Amino acid oxidase purified from Bothrops pictus Peruvian snake venom.*

Oxford Bioinformatics, PMID:26787662

2016

VIART, B. ; **KOZLOVA, E. E. G.** ; Neshich G ; Chávez -Olortegui C ; MOLINA, F. ; FELICORI, L; *EPI-Peptide Designer: a tool for designing specific peptide ligand libraries based on Epitope - Paratope Interactions. Bioinformatics (Oxford. Online)*

BMC Bioinformatics, PMID:26696329

2015

KOZLOVA, E. E. G. ; VIART, B. T. ; AVILA, R. A. M. ; FELICORI, L. ; Chávez -Olortegui C. *Classification epitopes in groups based on their protein family. BMC Bioinformatics, 2015.*

Revista de la Sociedad Química del Perú, ISSN:1810-634X 2014
 Delgadillo J. ; MERCEDES, P. ; F. Lazo ; RODRIGUEZ, E. ; KOZLOVA, E. E. G. ; SEVERINO, R. ; A. Yarleque. *Purificación y algunas propiedades de una hialuronidasa del veneno de la serpiente Bothrops brazili 'Jergon Shushupe'.* Revista de la Sociedad Química del Perú, v. 79, p. 348-458, 2014.

Revista de la Sociedad Química del Perú, ISSN:1810-634X 2013
 KOZLOVA, E. E. G. ; Ortiz Cesar ; SANDOVAL, G. ; F. Lazo ; Delgadillo J. ; RODRIGUEZ, E. ; SEVERINO, R. ; A. Yarleque. *PURIFICACIÓN Y CARACTERIZACIÓN BIOQUÍMICA DE UN FACTOR DE DIFUSIÓN PRESENTE EN EL VENENO DE LA SERPIENTE Bothrops atrox 'JERGON'.* Revista de la Sociedad Química del Perú, v. 79, p. 3 -12, 2013.

Rev. Peruana de Med. Exp. y Salud Pública, PMID:22858765 2012
 Ortiz Cesar ; Lazo Fanny ; Bellido Candy ; KOZLOVA, E. E. G. ; Yarleque Armando. *Variation of the enzymatic activity of Bothrops atrox.* Revista Peruana de Medicina Experimental y Salud Pública (Impresa), v. 29, p. 198-205, 2012.

TEACHING

Workshop 2014
 UFMG, Brazil.
 Introduction to data mining techniques - Grad. School

Professor assistant 2007-2012
 UNMSM, Perú.
 Theoretical and experimental class presentations for Undergrad.

COURSES & WORKSHOPS

Workshop 2015
 La Jolla Institute for Allergy and Immunology, California-USA.
 Workshop on Epitope Prediction and Databases - IEDB

Short course 2014
 Universidade Estadual Paulista Júlio da Mesquita Filho, Brazil.
 2nd School of Molecular Biophysics

Short course 2013
 IRV, Brazil.
 Environmental education with focus on venomous animals handling

Short course 2011
 Universidad Peruana Cayetano Heredia, Perú.
 Introduction to Neurosciences

Short course 2006
 In Vitro Perú, Perú.
 Instrumental implementation for a biotechnology laboratory

Course 2003
 IBERFOP, Perú.
 Training on informatics and computer assembly

REFERENCES

<i>Name</i>	Prof. Bojan Losic
<i>Address</i>	Icahn School of Medicine, NYC, USA
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<i>Name</i>	Prof. Daniel Santos Mansur
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