# Diego E. Kleiman

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#### **Education**

University of Illinois at Urbana-Champaign (UIUC)

Ph.D. in Biophysics and Quantitative Biology, GPA: 4.0/4.0

Concentration: Computational Science and Engineering

New York University in Abu Dhabi (NYUAD)

Bachelor of Science, Physics + CS (minor), GPA: 3.9/4.0

Honors: Magna Cum Laude, NYU Founders' Day Award, Member of Phi Beta Kappa

**Escuela Normal Juan Pascual Pringles** 

Secondary School Diploma, GPA: 9.8/10

Honors: Valedictorian

Urbana, IL, USA

Expected 2025

Abu Dhabi, UAE

May 2020

San Luis, Argentina

November 2014

#### **Publications**

o Kleiman, D. E., & Shukla, D. (2022). Multi-Agent Reinforcement Learning-based Adaptive Sampling for Conformational Sampling of Proteins. bioRxiv. https://doi.org/10.1101/2022.05.31.494208

- o He, W., Naleem, N., Kleiman, D. E., & Kirmizialtin, S. (2022). Refining the RNA Force Field with Small-Angle X-ray Scattering of Helix-Junction-Helix RNA. The journal of physical chemistry letters, 13(15), 3400-3408. https://doi.org/10.1021/acs.jpclett.2c00359
- o Zhao, C., Kleiman, D. E., & Shukla, D. (2021). Intriguing Role of Water in Plant Hormone Perception. bioRxiv. https://doi.org/10.1101/2021.10.04.462894

## **Academic Conferences & Symposia**

Oral Sessions.

o Multi-agent Reinforcement Learning Based Adaptive Sampling of Conformational Free Energy Landscapes of Proteins. American Chemical Society Fall 2022 Meeting. Chicago, IL, USA. August 21-25, 2022.

#### Poster Sessions.

- o Optimization of Hydration Sites in Plant Hormone Receptors for Agrochemical Design. 66th Annual Meeting of the Biophysical Society. San Francisco, CA, USA. February 19-23, 2022.
- o Exploring the Ion-Mediated RNA Interactions of a Helix-Junction-Helix RNA Model Through Well-Tempered Metadynamics Simulations. 64th Annual Meeting of the Biophysical Society. San Diego, CA, USA. February 16, 2020.
- o Manta Rover: an Automated System for Coral Reef Remediation. New York University 2018 Undergraduate Research Session. New York, NY, USA. August 3, 2018.
- o E. coLAMP: A portable device for rapid detection of Shiga toxin-producing Escherichia coli. International Genetically Engineered Machine (iGEM) Competition. Boston, MA, USA. November 9-13, 2017.

## Awards & Recognition

**New York University Tandon School of Engineering** 

Undergraduate Summer Research Program Fellowship

6th Annual UAE Undergraduate Research Competition

Finalist

International Genetically Engineered Machine (iGEM) Competition

Gold Medal

International Biology Olympiad

Representative of Argentina (second best in country). Bronze Medal (position 105/238).

New York, NY, USA

June 2018

Abu Dhabi, UAE

April 2018

Boston, MA, USA

November 2017

Bali, Indonesia

July 2014

## **Teaching**

University of Illinois at Urbana-Champaign (UIUC)

BIOP-401: Introduction to Biophysics

Teaching Assistant (confirmed appointment)

Urbana, IL

Fall 2022

**Short Courses & MOOCs** 

International School for Advanced Studies (SISSA)

Trieste, Italy
June 2019

Summer School

Classical Molecular Dynamics for Material Science, Nanotechnology, and Biophysics

Coursera

Remote

Online Coursework

2018

Deep Learning Specialization by deeplearning.ai

**Software Skills** 

**Programming languages** 

Python, C/C++, Matlab, Mathematica.

**Numerical computing** 

NumPy, SciPy.

**Data visualization** 

Matplotlib, Seaborn, gnuplot, xmgrace.

Machine learning

Scikit-Learn, TensorFlow, Keras, OpenCV.

Data mining

Beautiful soup, Pyppeteer.

**Operative systems** 

Unix, macOS, Windows.

Molecular dynamics and bioinformatics

OpenMM, GROMACS, VMD, BioPython.

Web development

HTML, CSS, Flask.

Database development

MongoDB, SQL, Pandas.

General

MS Office 365, Google Docs, Prezi, VLEs.

Other Work in Education & Outreach

University of Illinois at Urbana-Champaign

Urbana, IL

WYSE Camp Counselor, STEM outreach for underrepresented students in engineering

July 2021

International Biology Olympiad Group Challenge

Group Project Facilitator, team received Award of Excellence

Nagasaki, Japan (remote position)

July-October 2020

SAT Tutor

Addictest.com

Rabat, Morocco (remote position)

June–July 2020

Academic Enrichment Program at NYUAD

Mathematics Tutor

Abu Dhabi, UAE

November 2019–February 2020

Preparation Course for Medical School Admission Test at UNCuyo

Official Physics and Biology Tutor

Mendoza, Argentina

June 2015-January 2016

**Leadership & Community Engagement** 

The Anchorage Society: Student-Run LGBTQ+ Organization at NYUAD

Abu Dhabi, UAE

Treasurer

August 2019-May 2020

Languages

English fluent. Spanish: native fluency. French: fluent (written), intermediate (oral).