Alexander G. Lucaci

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EDUCATION

Ph.D. Candidate in Bioinformatics 2018 - Present
Temple University
Institute for Genomics Evolutionary Medicine (iGEM)
Dissertation mentored by Dr. Sergei Pond

M.S. in Biology 2016 - 2018
New York University

B.S. in Biochemistry 2011
Stony Brook University

EXPERIENCE

Temple University Spring 2022 - Present
Graduate Research Assistant
- Development, validation, and application of statistical methods which evaluate the effects of mutational events on the inference of evolutionary rates.

Maxim Group Fall 2021 - Present
Intern - Biotechnology Equity Research
- Initiate coverage on companies with investment recommendations based on fundamental analysis. Modeling companies using a three-statement model and DCF valuation methods, and report on company earnings.

Temple University Fall 2021
Graduate Teaching Assistant - Genomics in Medicine
- Directed over one hundred and fifty students in a cross-listed (Graduate and Undergraduate) course in a virtual format. Responsible for teaching material, grading, quizzes and exams, holding office hours and guidance on assignments

ROTH Capital Partners Spring 2018
Intern - Healthcare Investment Banking
- Participated in the IPO process for a NASDAQ listed company. Responsible for current healthcare IPO market data, curating pitch decks for senior managers, and research for M&A deals.

SELECTED PUBLICATIONS

1. *Rapid epidemic expansion of the SARS-CoV-2 Omicron variant in southern Africa (Accepted at Nature)*
2. *The emergence and ongoing convergent evolution of the N501Y lineages coincides with a major global shift in the SARS-CoV-2 selective landscape (Accepted at Cell)*
3. *Extra base hits: widespread empirical support for instantaneous multiple-nucleotide changes (Accepted at PLOS One)*
4. *Human HspB1, HspB3, HspB5 and HspB8: Shaping these Disease Factors during Vertebrate Evolution (submitted)*
5. *RASCL: Rapid assessment of SARS-COV-2 clades enabled through molecular sequence analysis (manuscript in preparation)*