

# NATALIE GREFENSTETTE, PhD

## CONTACT INFORMATION

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Academic CV:  
<https://nataliegref.weebly.com/about.html>

## EDUCATION

PhD, Chemistry 2017  
University College  
London (UCL)  
NMR, Mass Spec,  
Analytical techniques

BsC, Biochemistry 2012  
UCL

## KEY SKILLS

Data analysis  
Coding  
Analytical thinking  
Problem solving  
Leadership  
Management  
Collaboration  
Communicating  
complex ideas

## SOFTWARE

Python  
★★★★★  
MS Office/Excel  
★★★★★  
Google docs  
★★★★★  
R  
★★★☆☆

## LANGUAGES

English  
★★★★★  
French  
★★★★★  
Spanish  
★★★☆☆

## KEY RESEARCH EXPERIENCE

JUNE 2019 - AUGUST 2022 **Santa Fe Institute, Santa Fe NM, USA**

*Postdoctoral researcher*

- Built computational models (Python, Gillespie algorithms, Monte Carlo sampling) to study signatures of evolution in large populations of polymers
- Developed theories and techniques to detect life in the universe, in the Laboratory for Agnostic Biosignatures funded by NASA, using computational models (Python) and Machine learning tools (regression, PCA, neural networks) to analyse large datasets and gain insights.
- Managed large scale collaborative efforts with early career researchers resulting in 2 published chapters
- Organised a successful workshop with 30+ early career attendees (budget: \$67.1k), along with multiple conference sessions at top conferences in the field
- Published 9 papers in top journals in the field, and was invited to talk and present at top conferences in the field, as well as top universities

MAY 2017 - JUNE 2017 **Earth and Life Science Institute, Tokyo, Japan**

*Visiting scholar*

- Studied the incorporation of amino acids in the genetic code using cheminformatics approaches (JChem, GenerateMD and CxCalc)
- Developed a program to analyse hypothetical earlier sets of canonical amino acids compared to potentially available non-canonical alpha amino acids (Python)

## INDUSTRY EXPERIENCE

NOV 2017 - June 2020 **Encelo laboratories, London, UK**

*CEO and co-founder*

- Top 3% of companies selected for the Rebelbio accelerator (SOSV-backed)
- Obtained 7 letters of intent from potential clients and letters of support from top pharmaceutical and biotech companies.
- Lead a team in the development of the business from inception through management, financial planning, and clear communication
- Developed a deep understanding of the drug development process and its pitfalls
- Wrote all marketing and communication material including website, white papers, and fundraising materials

JUNE 2017 - OCT 2017 **Deep Science Ventures, London, UK**

*Entrepreneur in residence*

- Top 3% of candidates selected for the program
- Developed a deep understanding of the biotech ecosystem
- Worked on multidisciplinary projects while developing a strong understanding of dozens of biotech research areas
- Learned about building a business from a position of fulfilling a need/problem observed in the world

SEPT 2013 - OCT 2019 **More Ice and Honey, London, UK**

*Band leader*

- Lead a successful Kickstarter campaign, raising +£4000 to record an album
- Ran weekly rehearsals, and regular performances in top indie venues across London and the UK
- Created a website, all marketing material and managed the finances of the band