

ELIA CHARLES

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EDUCATION

University of Manchester MSc Data Science (Environmental Analytics)	<i>Sept 2020 - Sept 2021</i>
University of Manchester, School of Biological Sciences MSci Microbiology	<i>Sep 2014 - Jun 2018</i> 1st Class
Wallington Grammar School <i>A-levels</i> Biology, Mathematics, Chemistry	<i>Sep 2012 - Jun 2014</i> Grades Achieved: A, A, B
Whitgift School <i>GCSE</i> Overall	<i>Sep 2007 - Jun 2012</i> Grades Achieved: 4 A*s 6 A's

RESEARCH EXPERIENCE

University of Manchester, School of Earth & Environmental Sciences Sep 2018- Dec 2018
Research Assistant

- Investigated the ability of in *Shewanella oneidensis* to acclimate to copper stress under aerobic and anaerobic conditions.
- Analysed and presented data using Microsoft Office, Prism and Python 3.
- Research contributed to understanding whether copper tolerance pathways could be enhanced in *S.oneidensis*.

University of Manchester, School of Biological Sciences Sep 2017 - Jun 2018
Undergraduate Research

- **Published first author paper: doi.org/10.1016/j.algal.2018.11.00**
- Investigated the biochemical signatures of *Chlamydomonas reinhardtii* following exposure to ionic stressors representative of wastewater.
- Received introductory modules in Computational Theory, Python and Mathematica coding.
- Analysed and presented data using MATLAB, Microsoft Office and Prism 7 in reports and presentations.
- Analysis consisted of t-tests, Two-Way Anova, PCA and DFA.
- Researched trends in the biofuel energy market, information regarding governmental policy on biofuels and current limitations biofuel technology to contextualise my work.
- Research contributed to assessing the viability of wastewater as an algal feedstock and an understanding of how biochemical signatures change over the course of acclimation.

WORK EXPERIENCE

Poliglota Chile November 2019- June 2020
Language Coach

- Prepared lesson plans that allowed clients to learn English through speaking alone.
- Guided group conversations in English and Spanish for clients.
- Constantly received feedback from clients to tailor my methods to the group's learning preferences.

British Council English Language Assistant

September 2019- May 2020

Language Assistant

- Assisted students with grammar and pronunciation during classes.
- Held speaking and grammar workshops tailored to student levels.
- Provided students with cultural facts about the UK and draw attention to slang terminology and colloquialisms.

St. Thomas the Apostle Secondary School

January 2019 - July 2019

Science Teacher

- Taught KS3 and KS4 Science.
- Guided students safely through practicals and explained statistical analysis of results.
- Created my own lesson plans and class resources.
- Analysed student results data to provide progress reports to students and parents.
- Provided high quality pastoral care for students, making sure to be vigilant of stress and abuse.

VOLUNTEERING CERTIFICATES

Realimentation(Volunteer) - I volunteered with a charity based in Santiago called Realimentation. We recycle food waste from local markets as animal feed for local farmers who are effected by drought.

Harvard CS50 - Completed course using Vim text editor and used Python 3 mainly to complete tasks.

Kaggle - Completed Python, Intro and Intermediate Courses to Machine Learning, and Pandas Courses.

SKILLS / TECHNICAL STRENGTHS

Software & Tools	ArcGIS, Microsoft Office, LaTeX
Coding Languages	Python, R, SQL, NoSQL(MongoDB)
Languages	Spanish (B2)

REFERENCES

Dr. Jon Pittman: Programme Director Biotechnology, School of Earth and Environmental Sciences , University of Manchester, jon.pittman@manchester.ac.uk, 0161 275 5235

Dr.Richard Kimber, Post-Doctorate Researcher, School of Earth and Environmental Sciences, University of Manchester, richard.kimber@manchester.ac.uk.