Pepper Potts

Address | Phone number |Email Address

PhD Graduate studying mitochondrial mechanisms affecting PD using molecular biology, looking for a Post-doctoral role in mitochondrial research, able to start immediately

Molecular Biology and Neuroscience.

- Research scientist near the end of completing a 4-year PhD on the molecular mechanisms driving Parkinson's disease
- Experience running a very large range of bioassays and laboratory bench studies, in a number of disease models, writing scientific reports and oral presentations.

EDUCATION

October 2016 to Present PhD Research Scientist
Taylorollinson Institute of Medical Research

- Parkinson's disease and neurogenomics lab, Neuroscience Department.
- Studying the molecular mechanisms underlying Parkinson's disease.

Undertook a full-time PhD following a first class honours and completion of a bachelor's degree. Project involves looking into the molecular mechanisms behind Parkinson's disease including uncovering an integral relationship between two highly studied areas in the field, mitochondrial dysfunction and a protein of unknown function, alpha Synuclein.

Research Highlights:

- Performed wet-lab and molecular biology scientific research, using methods including flow cytometry, western blot, polymerase chain reaction (PCR), quantitative PCR (qPCR), RNA extraction and cDNA synthesis, Immunofluorescence microscopy, primary neuron harvesting, mouse handling and a number of *S.cerevisiae* techniques.
- Extensive experience in a number of different model organisms including, extensive tissue culture experience using (SHSY5Y, HEK and HELA cell lines), *S.cerevisiae*, mice (C57BL/6) and foetal primary neurons.
- Maintained standards in laboratory cleanliness, OH&S practices, safely disposing of waste and maintenance of laboratory equipment.

Laboratory Skills: Protein purification, enzyme-ligand affinity assays (isothermal titration calorimetry), Molecular biology techniques, Tissue culture, Human cancer cell culture, Primary cell culture, Cell viability testing of drug candidates, in vitro assays, in vivo assays, ex vivo assays, colorimetric assays (MTS and MTT). Microscope. Preclinical drug testing.

Sept 2013 - June 2016 BSc Molecular Biology *(1st class hons)*
University of Taylorollinson

Key Modules: Genetics, Immunology, molecular biology, Cell biology, Statistics for biologists, Medical microbiology

Dissertation: Anti-inflammatory gene expression in response to pro inflammatory stimulus.

Laboratory Skills: cloning, NGS, qPCR, ARMS PCR, and primer design, among others.

Sept 2005 - June 2013 The Kinglands School, Macclesfield
A-Levels: Chemistry, A Biology, A Maths, B
GCSE's: 10 GCSE's grade A-C including maths, English and Science

OTHER RELEVANT EXPERIENCE

2017-20119 Demonstrator for undergraduate students of biomedical sciences
Taylorollinson Institute of Medical Research

- Lead laboratory practical classes to 1-3rd year undergraduate Biomedical students
- Clear communication to teach best practise, used a variety of skills including demo, hand-outs and supervision to make sure learning styles were covered
- Received 100% feedback from module review surveys

2016-2017 Volunteer outreach
Taylorollinson Institute of Medical Research
- "Zombies in London", developing a fun way to educate children in biology
- Prostate cancer UK visit to TIMR, funders and sponsors visit to lab
- "Science in the Community", interact with general public

Conferences

2019	BSI Summer School, Manchester
2018	Parkinson's Research Symposium, Norway
2018	The Parkinson's Microenvironment, MRC, London
2016	Neurodegenerative Disease UK researchers day, Birmingham Presented "Roles of prostate stroma in anti-tumour immunity"

2011-2013 Secretary for the Biomedical Society, TIMR
- Point of contact for guest speakers and minute taking
- Winners of "Most Improved Society"
- Nominated or "Best Educational Society".
- Fundraising for Friends of the Cancer Centre and HIV awareness Centre.

WORK HISTORY

2014 – 2016 Bar Staff
Students' Union Bar, University of Taylorollinson
- Bar staff in Oct 2012, promoted to team leader in May 2014. This role involved training new staff and working as part of the team efficiently and professionally under busy working conditions
- Obtained award for Excellent Customer Service
- Hired new bar staff, and performance managed existing staff, successfully reducing waiting times.

2014-2016 Science student ambassador
Science Student Centre, University of Taylorollinson (UNTR)
Key duties in the marketing and promoting of Science at UNTR to prospective undergraduate students in the wider community.
Highlights
- Utilised a high level of interpersonal and verbal communication skills in delivering presentations and communicating my passion for learning in the filed of science in both professional and social contexts
- Represented UNTR on an international level by presenting at the National Youth Science Forum in Canberra
- Intricately involved in the running, recruiting and organisation of Science promotional events at UNTR including educational information and open days

INTERESTS

On the UNTR touch football team, I also enjoy running and swimming in my spare time. I love travel and have visited both North and South America, East Asia, and Europe.
Completed the UK 3 Peaks Challenge (2012) raising £5,000 for JacobsWell, a charity that supports vulnerable women in India giving them skills in tailoring and providing employment
Ran several marathons and ultramarathons including finishing 3rd in a 70 mile race across Hadrian's Wall and raised £4,000 for Kimbilio, a charity that supports street children in the DRC
Volunteer fundraiser, grant writer and marketeer for 2 charities (Kimbilio and JacobsWell)

PUBLICATIONS

Publication 1

Publication 2

Publication 3

References available on request