

Professional Profile

PERSONAL INFORMATION

Name	Carlie Abbott-Imboden	
Position	Physiotherapy apprentice	
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PROFILE

My academic interests are neuroscience, physiology, and anatomy; I am intrigued as to how the correct form of exercise rehabilitation and certain life choices can influence the learning and progression of a patient recovering from injury or disorder and subsequently improving their quality of life. I completed a BSc in Sports and Exercise Sciences and MRes Sport and Exercise Rehabilitation both at the University of Leeds which sparked my desire to work in the clinical setting, helping people reach their individual goals. I am very keen to broaden my knowledge and understanding on neural and physiological mechanisms that can facilitate rehabilitation.

KEY SKILLS

- Adaptable and effective communication to a wide range of audiences and ages.
- Empathy and relentless positivity to help keep the people motivated to reach their individual goals.
- Always keen to improve my understanding.

AREAS OF EXPERTISE / OTHER USEFUL INFORMATION

Areas of Expertise

- Exercise prescription
- IT: I am always keen to learn about the newest forms of technology in the forever changing field of science, however I am extremely competent with all aspects of Microsoft Office, SPSS statistics, LabChart and MaxTraq.
- Mathematics: Advanced skills for laboratory work and statistical analysis.
- Practical skills: Laboratory work – Citrate Synthase and Western Blotting.

Professional Memberships:

- CSP Associate

Courses Attended (a selection):

- ITEC International Extended Level 3 Diploma in Sports Massage.

EDUCATION

2020-2021: MRes Sport, Exercise and Rehabilitation. University of Leeds. Distinction.

Key modules studied: Advanced Data Analysis Techniques (73%), Motor and Psychological Aspects of Rehabilitation (74%), Advanced Research Topics (77%), MRes Research Project (74%).

Dissertation: "Joint stabilisation is maintained despite a switch of neural drive".

I was responsible for carrying out laboratory procedures on human participants, which included surface EMG electrode placement, I performed in depth analysis, to isolate the controller mechanisms to provide an insight into the innervation of individual muscles of the upper limb, by descending tract. More specifically, I explored how the neural drive may facilitate the interaction of 2 muscles close in anatomical proximity. My findings illustrated the role of neural control in stabilisation. I also found extremely novel findings, which are being used for future research purposes.

Degree level experience in:

- **Data analysis:** Python software.
- **Practical skills:** Laboratory work – EMG application, Noraxon System, MATLAB, and following the correct Health and Safety Guidelines in the Laboratory.

2017- 2020: BSc Sports and Exercise Science, University of Leeds. Class II, Upper Division i (2:1).

Key modules studied: Neuroscience, Functional Anatomy, Sports and Exercise Psychology, Professional and Research Skills, Social and Applied Psychology of Sport, Supporting an Injured Athlete, Exercise Physiology Sport and Health, Motor Control and Neurorehabilitation, Exercise Prescription for Health and Disease and Sports Medicine, Health and Nutrition.

Dissertation: "Determining a relationship between cigarette smoke-induced cardiac and respiratory muscle dysfunction and the reversibility by exercise training". **Received First Class.**

I was responsible for the analysis of 41 mice's responses to exercise following exposure to a smoke or a non-smoke environment and then exercise or a sedentary lifestyle. I used my interest in the cardio-respiratory to assess if a correlation is present, but if exercise can reverse the damage caused. I found clear evidence to suggest that smoking causes severe cardio-respiratory damage however, exercise can reverse certain damages, which has made me more curious about how different lifestyle choices can impact individuals lives, but also how important exercise is for health.

Degree level experience in:

- **IT:** I am always keen to learn about the newest forms of technology in the forever changing field of science, however I am extremely competent with all aspects of Microsoft Office, SPSS statistics, LabChart and MaxTraq.
- **Mathematics:** Advanced skills for laboratory work and statistical analysis.
- **Practical skills:** Laboratory work – Citrate Synthase and Western Blotting.

2010-2017: St Martin's School

A level: Physical Education - A*; Psychology - A*; Biology – C.

GCSEs: 2 - A; 7 - B; 1 - C

EMPLOYMENT HISTORY

November 2022- November 2023 – Neurorehabilitation Trainer - Neurokinex

I was an exercise trainer at Neurokinex, where my aim was to reshape and reform post-hospital rehabilitation opportunities for those with a long-term neurological condition. My role included delivering specific exercise and rehab sessions to individuals with a broad spectrum of neurological presentations.

August 2022- November 2022- Research Assistant - University of Leeds

In this role, I was looking at the kinematics and physiological of the elderly in specific chairs that are produced by a top end company, which aims to produce individualized chairs based on the clients need. They aim to reduce the risk of poor posture which can compromise the spine. I was responsible for the data collection and data analysis. I also lead undergraduate students in data collection.

Key skills developed: Effective communication, and various qualitative and quantitative analysis using kinematic and physiological measurements.

January 2022- June 2022 - Research Assistant - University of Leeds

I worked on 2 projects:

1) I researched the effectiveness of MindLab Pro supplements with regards to memory in humans. For this, I used the Wechsler Memory Scale (WMS-IV UK). I collected the data, ran statistical analysis and produced a written paper that has been published in the *Journal of Human Psychopharmacology*.

Key skills developed: Effective time management, and qualitative and quantitative analysis skills.

2) I worked alongside ITECHO Health to produce a rehabilitation app, specifically for ovarian cancer patients. This aims to increase their physical and psychological prior to treatment and surgery, to help them improve their recovery rate. Duties for this included researching and implementing specific forms of rehabilitation for ovarian cancer patients for symptom management whilst retaining health lifestyle, qualitative data collection, data analysis and feedback to the IT group to produce the app.

Jan 2021 — Aug 2021 Research Assistant, University of Leeds

Helped in collecting pre and post results, assessing the impact of a novel supplement on reaction time and memory.

Completed the statistical analysis on the results and produced all figures, with the aim of the paper to be published soon.

Sep 2021 — Present Women's Basketball Coach, University of Leeds

Create training sessions for 1st team, 2nd team and development players weekly. Combine my knowledge I have learned in my degrees to help on and off court.

October 2018-October 2019 - Personal Assistant - Private family

Worked part-time as a personal assistant for a 12-year old boy with Duchenne muscular dystrophy. I was in charge of care including helping switch wheelchairs, standing frames, stretching, and general care such as playing games.

June 2018-June 2019 - Group Coordinator - Barracudas

Worked at children sports camp over the summer holidays, where duties were to be a positive role model and ensure several children's welfare and happiness. This included children with disorders such as autism and cerebral palsy.

Able to be trained in paediatric first aid which allowed me to respond to any injuries that occurred and provide the correct prognosis and treatment.

REFERENCES

Available upon request