

18 October 2023

Dear Lownds family,

I would like to thank you for gifting me the Harry Lownds Memorial Scholarship, I deeply appreciate it. I will use it to help me with my travel expenses, commuting from Kent to Sussex, and other expenses to support my success in my MSc in Genetic Manipulation and Molecular Cell Biology, and which I will acknowledge in my final thesis. So far during my first few weeks I am settling in well, making friends and getting free drinks and pizzas at the social (which went down very well). I have attended my lectures meeting my new lecturers and learning many new and interesting topics. I also have tried the cafeteria food, which was very nice, better than my old university.

A little bit about me. I was born missing my left hand due to amniotic band syndrome which is a rare condition that happens by chance. However, this has never held me back as seen from my experiences. I have always persevered, finding my own way to independently carry out activities and actions, gaining the same results as my peers in the process. I continue to use this perseverance and adaptability to carry out my further research into genetic diseases to aid those who are in less fortunate conditions than myself, getting the research they deserve.

I also have grown up surrounded by animals, having cats, guinea pigs, rabbits and cockatiels, and family members and friends having dogs and lizards. I currently have one cat called Mikasa and one bird left from our flock called Piper. I often walk my friend's dog with her in our local parks and woods. In my free time, I read quite often and am currently reading *The Secret History* by Donna Tart. I also like to play games with my sister such as Mario Kart, Animal Crossing, and Super Smash Bros.

Personally, I have many different diseases that are genetic within my family, one being Sticklers disease which affects your eyesight, hearing, and joints, and many of my family members have been tested and studied. There are also many different cancers that run in my family like colon cancer. This is on the rise now, especially in young people. However, to test you must be 40 years old plus, even if there are people within your family that have been previously diagnosed with the disease, which could be avoided if research allowed. I am also currently running 25km in aid of my aunt who at the end of May suddenly became paralysed due to hospital negligence. She was diagnosed with a rare spinal condition that I would also like to explore the possibility of it being genetic. My aim with this degree is to build on the genetic research that is currently at the forefront of study and help provide more treatment and diagnosis in these areas, which with your funding and support will help me enormously. Thank you.

I was also a competitive Irish Dancer for over 10 years. During my time I competed in numerous *feiseannas* all over the UK and competed twice in the World Irish Dancing Championships in Ireland. I competed solo and with my team and have obtained 4 grades in this area where I performed and answered questions on the history of Ireland and the dances as well as the techniques included.

From an early age I also participated in horse riding at my local RDA centre but had to stop due to covid. We competed in dressage at regional level achieving 1st place allowing me to compete at national level. Not only was this my first time competing at national level but unfortunately my horse was injured just before the event, which meant I had to ride a horse that I had not previously ridden or met, but I persevered and placed 7th.

I also volunteer at my local Girlguiding unit, where I am known as Elf Owl. I help arrange and present activities to girls from ages 4-18, where this term we're doing a badge based around pumpkins and towards this we made pumpkin shaped pizzas, I've included a picture below!

In my spare time I also volunteer at my local dog shelter. Here I help care for the dogs by walking, socialising, and cleaning. Most have been abandoned, have many different health and behavioural problems, and so I use my prior knowledge from my degree and life to help in these situations. These can be stressful times and can also be

daunting, but I always help wherever I can, providing support where I may have less experience whilst also learning along the way. This is extremely rewarding as we see dogs blossom and find their forever homes.

At home, I have many friends who I often see and most who I have been friends with for 10+ years. Turning 21 this year meant lots of 21st birthdays in my friendship group, which we made sure to celebrate. We often go out to a karaoke bar or play some pool. These friends have supported me throughout my studies, often being fascinated by what I do, pushing me to do my best.

I have just completed my BSc in Zoology in which I got a 2:1, and studied Canine Cushing's disease for my dissertation, researching if there are any genetic links. Through this I found that there are many different genetic links including mutations in genes and repetitive diagnosis in certain breeds even though it is said to be non-genetic. Also, to get the base genomic research I had to use a lot of human research as reference, due to the animal research really being little to none. My final aim would be to try and reflect genetic research to animal populations, first being mammals due to similarities against humans, providing the genetic research and care that is needed within the animal sector as there is minimal.

If you would like to meet or contact me personally, I would be more than happy to and if you would like to post my story anywhere, please feel free to.

Once again thank you so much for awarding me the Harry Lownds Memorial Scholarship.

Hannah Baker

A few snaps from Hannah Baker



Hannah Baker



In the Bridge Café at Sussex