

Interview with the recipients of the NZIMLS top student award, 2023

Top Student Awards are offered annually by the NZIMLS for student academic achievement during the third year of the BMLSc degree or in more recent times during the fourth year. The award is made to students at the University of Otago and AUT in New Zealand who offer the BMLSc qualification and is provided in support of the recipient's final clinical training year in the BMLSc programme. The \$2,000.00 prize is typically paid to the University who then present it to the winner on behalf of the NZIMLS.

In November, AUT recognised fourth year students; Lillian Birkett and Alejandra Walker as joint top students and Rei Miyamoto was awarded top Otago University student. Coincidentally, Rei also features in this issue as a published author with her review article entitled; 'The MNS Blood Group System'.



Alejandra Walker



Lillian Birkett



Rei Miyamoto

Firstly, congratulations to you all on winning the top BMLSc student awards! What a fantastic accolade to start your careers in medical laboratory science. Thank you for sharing your experiences with us.

1. Can you tell us a little about yourself?

Alejandra: I am originally from Colombia but moved to New Zealand at a young age. During my high school years, I developed a keen interest in sciences and was attracted to the idea of pursuing a career in medical science. With that goal in mind, I completed a degree in Biomedical Sciences. However, this was just the beginning of my journey, as I later discovered my passion lay in Medical Laboratory Science. I am grateful for the opportunities I've had to learn and grow, and I'm excited to see where my career takes me next.

Lillian: My name is Lillian Birkett and I am originally from Sunshine Coast Australia but have been living in New Zealand since the age of five. I lived in a very rural region of Whangarei and eventually moved to Auckland for university. I really enjoyed the nature and country lifestyle that Whangarei had to offer and often spent my time outside in the ocean or in the beautiful bush.

Rei: I have always had a passion for health sciences since high school. I am fascinated by the pathology of different diseases, mechanisms of microbes and the immune system, and the anatomy and the physiology of the human body. I always knew that I wanted to somehow contribute to the healthcare system, so I knew medical laboratory science was for me when I discovered it.

2. What interested you about the BMLSc degree?

Alejandra: One of the things that attracted me to this programme was its versatility. I liked that the programme allows you to explore the different medical laboratory science disciplines before choosing a specific pathway. This approach lets you customise your academic journey based on your interests. Additionally, the programme's emphasis

on practical work captured my attention. I think that the chance to apply theoretical knowledge not only reinforces learning but also prepares students for the demands of the field.

Lillian: I have always been fascinated by biology and the relationship that diseases impact such a perfectly designed system. Further, how we can determine the presence/absence of such diseases through testing. This made the BMLSc degree very enticing. The blend of these two interests, the comprehensive and specialized curriculum alongside the strong focus of diagnostic procedures, laboratory techniques and sample analysis made this degree really stand out from the rest. Moreover, AUT's BMLSc degree design of covering multiple areas of specialization from haematology, microbiology, clinical chemistry and more created a holistic understanding of multiple laboratory practices which was another key reason why this degree appealed so much to me.

Rei: I didn't know about BMLSc until I came to university, but I knew that it was what I wanted to study when I saw the course programmes. It consisted of both theory and realistic practical work in a large range of pathology disciplines. I enjoy lab work so I thought it would be fascinating to learn and work in a medical laboratory while I contribute to the healthcare system.

3. Was there a defining moment where you thought; 'yes that's what I want to do'? Can you tell us about it?

Alejandra: Upon completing my biomedical sciences degree and working in the field for a year, I realised I wanted to play a more active role in the healthcare industry. That's when I came across the BMLSc program and was immediately captivated by the idea of combining my passion for microbiology with the opportunity to positively impact people's health and well-being.

Lillian: Since the age of ten, my aspiration was to embark on a career as a marine biologist with a noble mission of safeguarding marine life, particularly the turtles. However, it was during my high school years that a transformative encounter with my physical education teacher redirected my path toward becoming a medical laboratory scientist. Interestingly, he, too, had initially aspired to be a marine biologist before transitioning to teaching. His profound insights into the field, coupled with his encouragement to dream beyond my initial aspirations, prompted me to re-evaluate my interests. Despite hailing from a rural school where ambitious career choices were viewed as unconventional, my desire to delve into the realms of science, especially human biology and pathology, intensified. Researching alternatives, I stumbled upon the Bachelor of Medical Laboratory Science (BMLSc) degree the summer before commencing university. As I delved into the intricacies of the program, I was captivated by its unique blend of biological sciences, human health, and critical analysis—elements that resonated deeply with my passions. From that moment, I was resolute in my decision to pursue the BMLSc degree, recognizing it as the perfect amalgamation of my interests and aspirations. This journey, sparked by an early fascination with marine biology and nurtured by the guidance of my teacher, has evolved into a profound commitment to the intricate realms of medical laboratory science.

Rei: When I found myself enjoying the studying and the practicals, despite the large workload, I knew I wanted to

pursue my career in this field. This passion was reinforced during my placement experiences when I saw that every day is different and there are more learning opportunities even after university.

4. **What did the programme entail? Was there a speciality or a particular placement that really grabbed you?**

Alejandra: The BMLSc programme offers a great blend of theoretical learning and practical experience across diverse fields of medical laboratory science. There were a few subjects that piqued my interest, but I ultimately decided to specialise in medical microbiology and transfusion science. The fascinating world of bacteria and fungi captivated me, and during my placement, I found the work to be like an exciting puzzle that I couldn't get enough of. As for transfusion science, understanding the different blood groups and their characteristics was intriguing. I particularly enjoyed working on antenatal cases during my placement. The joy of helping pregnant women and ensuring the safety of their neonates was an unparalleled experience.

Lillian: The educational journey I undertook comprised three years of rigorous study at the university, coupled with a transformative one-year placement. The initial two years were dedicated to foundational coursework, delving into general knowledge and exploration of various specialization options. The culmination occurred in the third year when I had the privilege of selecting two specialized papers, immersing myself in a profound exploration of both immunology and clinical chemistry. Thankfully, my placement unfolded at Labplus, where I delved into the realms of clinical chemistry and immunology. Clinical chemistry captivated me with its comprehensive coverage of diverse organ systems and their intricate connections to prevalent diseases. What truly resonated with me was the fascinating interplay between theoretical knowledge acquired in lectures and its practical application to real-life case studies. This experiential bridge between theory and application heightened my academic experience and brought forth a profound enjoyment in the process. In the realm of immunology, my fascination soared as I delved into the intricate mechanisms governing the body's defence and response mechanisms against diseases. The immune system, a marvel of complexity, unveiled itself as a breathtakingly beautiful system. Exploring its intricacies left me awe-inspired by the multifaceted layers of defence and the dynamic reactions orchestrated to maintain the body's equilibrium in the face of pathogenic challenges. In essence, my educational expedition not only encompassed the acquisition of knowledge but also provided a rich tapestry of experiences. The specialized focus on clinical chemistry and immunology during my placements not only deepened my understanding of these disciplines but also fuelled my passion for their intricacies. The hands-on application of theoretical concepts and the profound revelations encountered during these studies have left an indelible mark on my academic journey, fostering an enduring appreciation for the complexities inherent in the field.

Rei: The programme starts off with every discipline so that students can get to know each specialisation before deciding which ones suit them best. The lectures, tutorials, and labs are very fun but can be tough to balance all of the workload. I think it is a great opportunity to learn organisation and time management skills which will come in handy in high-demand labs in the future. I also enjoyed learning each discipline from different angles such as studying the theory, experiencing hands-on practical work, solving problems and case studies, and discussing amongst my classmates and lecturers.

5. **Top Student, what does this prize mean for you?**

Alejandra: Being recognised as a top student is a great honour that fills me with pride. This achievement validates all the hard work and dedication I have put into my studies and motivates me to continue striving for excellence in both my future academic and professional pursuits.

Lillian: This award holds profound significance for me as it symbolizes the culmination of relentless dedication to enriching my educational journey and absorbing knowledge at every opportunity. Beyond its monetary value, this prize represents an opportunity to joyously acknowledge and express gratitude to my family and friends, unwavering pillars of support throughout my academic pursuits. Their encouragement and support have been integral to my success in attaining the high level of achievement I've reached. This degree is not only a personal triumph but also a collective achievement shared with my loved ones. Their unwavering love and support have played an indispensable role in my academic journey, shaping it into the success it is today. I firmly believe that without their steadfast encouragement, I would not have achieved the position I currently hold. This award is, in essence, a celebration of the collaborative effort and shared triumph that defines my educational accomplishment.

Rei: It feels great for my hard work to be acknowledged! I was surprised when I first got this prize, but it made me feel more motivated to keep learning and growing.

6. **Was there a person/s who inspired you during this journey?**

Alejandra: Absolutely! Throughout my journey, I've been fortunate to come across remarkable individuals who have inspired me and shaped me in many ways. I was lucky to have professors who were not only knowledgeable in their fields but also genuinely passionate about their work, and they ignited my curiosity. Moreover, my fellow students have also played a crucial role in my journey by creating a positive learning environment with mutual support during challenging times. Lastly, my family has been a great source of inspiration, and their unwavering support and words of encouragement kept me grounded and focused on my goals.

Lillian: I have been fortunate to be surrounded by a diverse tapestry of inspirational figures who have profoundly shaped my outlook on life. The indelible lessons instilled by my parents, emphasizing the unwavering commitment to invest 100% effort into every endeavour, have been the cornerstone of my journey. Their guidance has been the steady compass navigating me through the labyrinth of challenges. In addition to the familial wisdom, my twin sister stands as a beacon of inspiration, effortlessly excelling in every facet of her existence. Her remarkable academic achievements during her university tenure have served as a catalyst, igniting within me the ambition to not only match but surpass her accomplishments. Witnessing her prowess has been a testament to the boundless potential that resides within myself. Among the constellation of influences, my partner, Douglas, has been an unwavering source of encouragement. His steadfast belief in my capabilities has always been a constant reminder that I possess the power to achieve anything my mind sets out to conquer. His motivational words have been the driving force behind my pursuit of excellence, instilling in me the confidence to embrace challenges as opportunities for growth. Together, these inspirational figures have woven a narrative of determination, resilience, and the pursuit of excellence in

my life. Their collective impact has propelled me to strive for greatness, armed with the conviction that I am capable of transcending boundaries and achieving the extraordinary.

Rei: Throughout my studies, I have met many intelligent lecturers, researchers, and scientists. When I saw them immersing themselves in their job, it inspired me to focus on things I enjoy learning. Lecturers are passionate about the topics they are teaching, researchers are always curious and aiming high, and scientists are fulfilling their goal to provide a safe healthcare service. BMLSc provides students with opportunities to meet with these aspiring people which helps us find our path.

7. *What's next for you in your career?*

Alejandra: My immediate goal as a recent graduate is to secure a position in the microbiology or transfusion science field. I am eager to apply all the knowledge and skills I've acquired throughout my academic journey to real-world scenarios while working towards obtaining my full registration. In the future, I would like to pursue further study.

Lillian: Even before officially graduating, I secured a position as a medical laboratory scientist specializing in clinical chemistry at Labplus, specifically in the special techniques department. This presents a remarkable opportunity to contribute to the same institution where I completed my placement, providing me with invaluable insights into the intricacies of the department and its specialisation. Looking ahead, my immediate focus is on accumulating more experience and honing my skills as a medical laboratory scientist. The goal is to immerse myself in the dynamic field, continually learning and growing in a hands-on capacity. In the long term, I envision a return to Australia, my home country, where my roots lie, and my entire family resides. However, for now, my primary objective is to amass valuable experience, forge professional connections, and lay the foundation for my future endeavours.

Rei: I am working in the Transfusion Science Blood Bank at Christchurch Hospital. It is very exciting to be working in a dynamic field with continuous challenges that allows for both personal and professional growth. My goal is to get fully registered, contribute my skills, and become a scientist who can inspire future scientists. I am also interested in further studies in relevant fields in a few years' time. In university, I enjoyed writing review articles and participating in research projects so I want to continue this passion for knowledge expansion in my career.

8. *What do you enjoy about the job? And what has your experience in the laboratory taught you?*

Alejandra: As a medical laboratory scientist, I will have the important role of testing patient samples and ensuring the results are interpreted accurately. The information you provide is crucial in guiding clinicians to make informed decisions about the appropriate treatment plan for patients. I believe this work is rewarding, as it gives you a sense of purpose and impact, knowing that what you do can make a real difference in someone's life. Throughout my clinical placements, I had the opportunity to work with a diverse group of people, each with unique backgrounds and experiences. This exposure was invaluable, as it taught me the importance of teamwork and how to appreciate the different perspectives that each person brings to the table.

Lillian: Working as a medical lab scientist fascinates me because it involves the use of analytical methods which directly affect patient care. I enjoy conducting detailed

scientific analyses that help diagnose, treat, and prevent diseases. The precise and detail-oriented nature of the laboratory environment aligns with my passion for accuracy and scientific exploration as described above. My experience in the lab has been a valuable learning journey, though a short experience so far as new graduate. Performing different tests and experiments has improved my analytical skills and has allowed me to engage my critical thinking skills.

In summary, working as a medical lab scientist has not only increased my scientific knowledge but has also given me a deep appreciation for the crucial role laboratories play in healthcare. It has taught me the importance of precision, adaptability, and collaboration in delivering results that directly impact patient outcomes, making each day in the laboratory rewarding and intellectually stimulating.

Rei: In general, working in a medical laboratory is very fulfilling and stimulating. It gives us a strong sense of purpose because of the challenges, problem solving, and the large influence we have on the patients. Even in the short time frame of my past laboratory experiences, I have seen many advancements in technology and laboratory tests. Every day and every sample is unique in the medical labs and these changes give us valuable learning experiences. Another quality of medical labs is the people. Not only the laboratory team but the clients, pathologists, and clinicians are all involved in providing the best patient care. Collaborating as a team to work towards the same goal is so special and important.

9. *The profession has been prominent in New Zealand media since the Covid-19 pandemic and more recently relating to the strikes and protests over MLS/ MLT pay and conditions. What has been your experience or thoughts on this so far?*

How do you think this has impacted both the profession, your career and you personally?

Alejandra: The pandemic has significantly strained our healthcare system, creating an increasing demand for qualified laboratory professionals. As a result, it is encouraging to see individuals in this field working towards improving the working conditions for MLS and MLT. I believe that these efforts will not only attract more people to these critical careers but will also help ensure that existing professionals stay in the field, leading to a more stable workforce that can provide better quality services. Moreover, the pandemic has reinforced my views on how essential this job is and how much positive impact we can have on the community

Lillian: I find myself standing somewhat apart from the prevailing narrative surrounding the impact of COVID-19 on my academic journey. While many of my peers in the degree grappled with the challenges of remote learning, I discovered a sense of empowerment amid the chaos. My inherently dedicated and hardworking nature propelled me to thrive in the online learning environment, relishing the autonomy it afforded me to delve deeply into my studies within a conducive setting. The asynchronous nature of online lectures became a boon, allowing me to meticulously review and absorb the course content at my own pace, a luxury I found conducive to my learning style. Nonetheless, I empathize with those who faced difficulties navigating this shift in educational paradigms. Entering the professional realm during the pandemic has been an enlightening but somewhat uncharted experience for me. While I may not be well-versed in how the pandemic has shaped my chosen profession, I can envision the challenges faced by medical laboratory professionals, navigating the intricacies of their

roles amidst lockdowns and heightened health concerns. The commitment and resilience required to carry out crucial work during such tumultuous times undoubtedly speak volumes about the dedication inherent in the field. Regarding the strikes and pay conditions, my novice status in this career realm leaves me somewhat uninformed about the intricacies of these issues. However, based on my observations during placements and in my current job, I've witnessed medical laboratory scientists tirelessly labouring to deliver quality results for patients. This unwavering commitment to excellence merits not only recognition but also fair compensation reflective of the dedication and hard work invested in ensuring the well-being of those we serve. As I delve deeper into this profession, I am eager to gain a more comprehensive understanding of the challenges and nuances that shape its landscape while advocating for the just recognition and compensation that my colleagues rightfully deserve.

Rei: I think the Covid-19 pandemic has affected medical laboratory science in many ways. It has greatly increased the workload, pressure, and expectations in some labs. On top of the general difficulties that many people faced during the pandemic, scientists were entrusted with more responsibilities in the labs. On a positive note, it has helped this profession be more recognised and appreciated. It would have been impossible without the hard work of scientists all around New Zealand. The strikes have highlighted the need for better compensation and working conditions to acknowledge these diligent scientists. I think this is crucial for protecting their motivation and maintaining the positive influence that medical laboratories have in the healthcare system. Personally, the pandemic has taught me the importance of adaptability and continuous professional development. Although half of my university years have been affected by the pandemic, I think it was a valuable learning experience.

10. **Do you have any advice for our up-and-coming medical laboratory scientists?**

Alejandra: My advice is to pursue what interests you within the field, stay curious, and never stop learning. Take advantage of every opportunity that comes your way, even if it means stepping outside your comfort zone. Lastly, remember to persevere and work hard, and you will achieve great things.

Lillian: My advice for any up-coming medical laboratory scientists would be to really apply yourself to your studies as you get out of the degree as much as you put in. I really put myself 110% into my degree and I have come out of this degree with so much knowledge and experiences that have really benefited me in placement and the current job I have as a medical laboratory scientist. By truly applying yourself to the degree it also means a greater chance to get into the specializations you are wanting and setting yourself up for a very fulfilling career.

Rei: Experiment with different topics and specialisations and focus on what you are passionate about. Stay curious and enjoy learning while taking care of your well-being. Medical laboratory science is crucial to the healthcare system so being dedicated and positive will make a significant impact on patient outcomes and healthcare advancement.

Thank you, Alejandra, Lillian and Rei, your experiences are truly inspiring and aspirational. On behalf of the NZIMLS and its members we wish you all the best in your careers. I have no doubt that we will be hearing more from you all in the future.

Lisa Cambridge
Editor

2024 NZIMLS CALENDAR			
<i>Dates may be subject to change</i>			
Date		Event	Contact
March	16	Haematology SIG Meeting, Wellington	Alan.Neal@pathlab.co.nz
	23	South Island Seminar, Nelson	Tony.Barnett@awanuilabs.co.nz
April	20	Closing date for QMLT applications	admin@nzimls.org.nz
May	03-05	NICE Weekend, Christchurch	Raewyn.Cameron@pathlab.co.nz
	15	Material for the July Journal must be with the Editor	editor@nzimls.org.nz
June	22	Biochemistry SIG Meeting, Hamilton	PingTat.Luk@waitematadhb.govt.nz
August	15	Annual Reports and Balance Sheet to be with the Membership	sharon@nzimls.org.nz
	28-30	NZIMLS Annual Scientific Meeting , Te Pae, Christchurch	sharon@nzimls.org.nz
August	29	NZIMLS Annual General Meeting, Te Pae, Christchurch	sharon@nzimls.org.nz
September	15	Material for the November Journal must be with the Editor	editor@nzimls.org.ng
October	05	QMLT Examinations	sharon@nzimls.org.nz
	TBC	Anatomical Pathology SIG, Hamilton	TanyaF@adhb.govt.nz