

Charitable Trust Committee  
Philanthropy, ANZ Trustees  
GPO Box 329  
Melbourne, 3001

21<sup>st</sup> of February, 2012

Dear Committee Members,

**RE: Felice Rosemary Lloyd Travel Scholarship**

Please find attached the final report of the travels I was able to complete, with thanks to the Felice Rosemary Lloyd travel scholarship. The opportunity was an amazing one that has grown my physiotherapy and research knowledge, as well as my passion for the field of paediatrics. The contact with such a variety of people, over a broad range of work places will no doubt be formative to my developing professional life.


Please do not hesitate to contact me should you require any further information.

Best wishes,



Stacey Carlon  
Physiotherapist and PhD Candidate  
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**FINAL REPORT**

<b>Grant recipient to complete</b>		<b>ANZ Trustees' use only</b>
<b>Name of Trust:</b> Felice Rosemary Lloyd		
<b>Name of recipient:</b> Ms Stacey Carlon		
<b>Project title:</b> A study tour focusing on developing skills in designing and implementing evidence based exercise programs for children with cerebral palsy, in the school setting, with a focus on outcomes related to activity, participation and quality of life.		
<b>Date of grant:</b> December 2010		
<b>Duration of project &amp; current stage:</b> 7 weeks (October-November, 2011)		
<b>Locations of project:</b> Las Vegas, United States Toronto, Canada Hamilton, Canada Amsterdam, The Netherlands Utrecht, The Netherlands London, England		
<b>Funds granted &amp; total project cost:</b>  Funds Granted:           \$7,500 (FRL)  \$2,500 (La Trobe University)  Total Cost:                 \$9,849		
<b>Report author &amp; position:</b> Ms Stacey Carlon   Physiotherapist and PhD Candidate Department of Physiotherapy   La Trobe University, Bundoora		
<b>Statement of expenditure</b>		
Total amount of grant received:	\$7,500	
Amount of grant expended:	\$7,500	
<b>Balance as at [08/02/2012]</b>	\$0.00	
<b>Signed:</b>		
<b>Date:</b>	21/02/2012	

**Brief description of the project including original objectives:**

This project was centred on the population of children and adolescents with cerebral palsy, specifically in specialist schools. Its focus was the relationship of those with cerebral palsy to physical activity: who encourages and facilitates it, how programs are developed, what research is involved, and what role do physiotherapists play.

The original objectives, as stated in my application were:

- 1) To broaden my insight with regard to implementation of fitness interventions for children with cerebral palsy, in the setting of specialist schools
- 2) To develop skill in fitness assessment and program design in children with cerebral palsy. This learning will enable me to plan and implement a randomised controlled trial of fitness training for children with cerebral palsy in Melbourne
- 3) To develop strong links with leading researchers in physical activity for children with cerebral palsy

In addition to the aims stated above were added interests around models of service delivery in specialist schools, and the interplay that exists between educational and health services, especially tertiary hospitals and rehabilitation centres.

**Brief description of any changes made to the project and the reasons for these:**

Due to research and teaching commitments mid-year, my intended time of travel was moved to October-November. This different time meant a change in conference attendance, as well as some alteration to those researchers and clinicians who were available to host me in their workplaces.

**Project results:**

- Provide a brief subjective assessment of how the research has progressed against the project aims provided in the application

- 1) To broaden my insight with regard to implementation of fitness interventions for children with cerebral palsy, in the setting of specialist schools

After visiting four separate school sites and speaking with numerous clinicians and researchers, I saw a variety of successful ways in which physical activity programs can be implemented in the lives of young people with cerebral palsy. Witnessing a number of different models has provided me with new insight into the Victorian setting.

- 2) To develop skill in fitness assessment and program design in children with cerebral palsy. This learning will enable me to plan and implement a randomised controlled trial of fitness training for children with cerebral palsy in Melbourne

Since applying for the Felice Rosemary Lloyd scholarship, the timeline for my major research project was altered. During 2011 I planned and commenced the first of a three stage randomised controlled trial. The result of this was that, while I did take part in fitness assessments and in many conversations around program design, the information was not directly related to the work I am currently carrying out. Having now had experience in additional modes and types of exercise testing, and program development, provides information for future practice in a Victorian context.

- 3) To develop strong links with leading researchers in physical activity for children with cerebral palsy

One of the most beneficial aspects of this trip was the opportunity to meet with a broad range of

researchers and clinicians in many contexts, and have the chance to speak with them at length. Conversations encompassed their current projects; the differences in health systems compared to Australia, and how this influences practice, as well as the direction of health care provision. Having such insightful and inspiring conversations with these strong leaders in the field was a privilege, and a project goal fulfilled.

**Knowledge sharing:**

- How have you disseminated the results of this project?

Please find following the details of how this knowledge will be shared:

- Discussions with specialist school physiotherapists and leading teachers early in the new school year (four metropolitan specialist schools).
- As a part of my role as a Profession Mentor, to first year physiotherapy students, I will be sharing with them aspects of this trip as a part of a 'what is physiotherapy?' lecture that is given early in the academic year.
- The skills built and knowledge gained during this travel will be used in my PhD research, which, upon publication would help to further the positive reputation of Victorian paediatric physiotherapists, both in research and clinical practice.

**Project achievements:**

- List your achievements relating to the funded project e.g. further grant application made, awards received or further funding received to further this research project

The travels and knowledge gained from this scholarship will be helpful in informing the direction of my PhD, as well as guiding my thoughts around the future possibilities for research and clinical practice in Victoria. If any awards are given, where work may have been influenced by the travels taken as a part of this scholarship, the philanthropic team will be informed.

**Future plans:**

- What plans do you have based on the completed research? E.g. future grant applications

In the future, because of this project, there may be grant applications made that request equipment to enable physiotherapy researchers and physiotherapy clinicians to accurately assess various aspects of fitness in young people with cerebral palsy. Additionally, grant applications to conduct more physically focused research in this population are likely.

**Project impacts:**

- Do you believe the project will have long-term impacts? E.g. changes in policy, clinical practice or research direction?

I hope that the results of this trip will help to continue important discussions surrounding physical activity in specialist schools in Victoria. Having seen successful programs and the ways in which they are carried out may provide valuable information to clinicians and education staff who are concerned about the implementation of such activities in their school setting.

- If it does, how will you communicate these with the funder? E.g. provide a list of publications/citations

If any long-term impacts originate from the connections, knowledge and insights gathered on this trip, then the details will be shared with the funding body. Copies of additional publications, where the content has been impacted by knowledge gained on this trip, will also be shared with the funding body.

**Travel agenda and summary of activities:**

For each of the segments of this research trip there were standout additions to knowledge. Following is the summary of activities and key areas of learning.

## **Las Vegas, United States: The American Academy of Cerebral Palsy and Developmental Medicine (AAPDM) Conference**

Key areas of learning:

- Exposure to the latest in developmental disability research
- Insight into the future directions of physiotherapy
- Professional relationship development

The time spent at the AAPDM) conference was informative, thought provoking, and academically enriching. The AAPDM conference is a yearly gathering of approximately 800 delegates, predominantly from America and Canada, though with representatives from close to 30 countries.

It was encouraging to attend research presentations that confirmed many of the Victorian physiotherapy working practices regarding physical activity. An example of these affirmations was the drive and promotion by physiotherapists and rehabilitation physicians to challenge the current expectations and perceptions surrounding physical activity as a means of rehabilitation for those with cerebral palsy. Hearing health professionals speak on overcoming barriers to increasing physical activity, what the results have been, as well as the processes involved in gathering support was not just heartening in a theoretical sense, but provided practical assistance that will hopefully be transferrable to our Victorian setting.

Some specific challenges were presented, which will no doubt provoke conversation and debate in Victorian professional circles. There was much talk around gold standard expectations for physical activity assessment, both in regularity, who performs assessments and importantly, the expectation of where activity programs are provided, and who they are funded and initiated through. The Victorian standards of care for children with cerebral palsy are in many respects world leading; however, it is evident that the issues surrounding physical activity in this population require further collaboration between families, various services, and funding bodies, in order to increase the opportunities available.

## **Toronto, Canada: Holland Bloorview Kids Rehabilitation Hospital (with onsite specialist school)**

Key areas of learning:

- Innovative service delivery at a specialist school
- Interplay between the integrated hospital, rehabilitation centre and the school
- Novel career opportunities

Holland Bloorview is a facility specifically designed for children and adolescents with developmental disabilities and acquired brain injuries. As these are the target group, staff and services can be incredibly specialised, catering in a family centred way to those who it serves. Surgical procedures and subsequent post-operative plans are designed with families in combination with treatment teams a client may be involved with, for example, the hypertonicity team, school therapists and the social work team.

Ontario has a 'full inclusion' philosophy, whereby as many children as possible are integrated into mainstream schools. The on-site specialist school I spent time at was a therapy intense program for children from junior kindergarten to grade one. The idea behind the therapy at school was to provide concentrated input to children while their gross motor skills are still developing and while initial surgeries for muscle shortenings or bony misalignments are taking place. Children and their families receive this intensive therapy and support before being transitioned into local mainstream schools for grade two.

Uniquely, the two specialist kindergarten classes were integrated with local children who are typically developing. All students took part in a school curriculum that aimed to prepare those with physical impairments for integration in mainstream school, as well as breakdown barriers and perceptions that might exist between those who do and do not have physical impairments.

Another standout of my time at Holland Bloorview was being able to meet with Dr Darcy Fehlings, Senior Scientist and Physician Director of the Childhood Development Team. I attended a workshop run by Dr Fehlings in Las Vegas, and meeting with her shortly after in Toronto allowed for further discussion on the topic of pain in young people with cerebral palsy, as well as discussion around the set-up and working practices of Holland Bloorview. The integration of family centeredness and a high level of clinical care was exciting to hear about, as was the prospect of combined researcher-clinician roles for physiotherapists, something that is highly appealing. The organisation and care delivery model is quite novel; it was great to see and think about how such principles could be worked into practice here, even without a dedicated rehabilitation hospital.

### **Hamilton, Canada: CanChild Centre, McMaster University and McMaster Hospital**

Key areas of learning:

- Observation of novel interdisciplinary relationships
- Hands-on involvement in hypertonicity clinic
- Integration of clinical practice and high quality research

I was excited to be travelling to CanChild, being an avid reader of research from the centre for some time. Associate Professor Jan Willem Gorter was generous with his time, taking me to meetings and teaching sessions, in addition to spending time discussing the great aspects of, and dilemmas in, Canadian developmental paediatrics. Most interesting was the morning spent in the interdisciplinary hypertonicity clinic, which consisted of a developmental paediatrician, paediatric neurologist, physiotherapists, occupational therapists and nurses. I was fortunate enough to see this team in action, and be involved in the assessment and treatment of a number of children. Through speaking with staff at this clinic and those from the community, I was also able to develop greater insight into the working relationships between physiotherapists in the hospital and local setting. There was an emphasis on discussion and collaboration; thorough organisational procedures have been developed to support these aims.

### **Amsterdam, Netherlands: Vrije University Medical Centre**

Key areas of learning:

- Models of PhD programs and research group collaboration
- Introduction to Dutch early-intervention care
- Models of physiotherapy practice within a specialist school

The week spent at the VU Medical Centre was quite the whirlwind! Associate Professor Annet Dallmeijer had organised a schedule of events that enabled me to see and take part in a whole spectrum of work the centre is involved with. I was also able to present an aspect of my research to the team at VU Medical Centre. Highlights included participating in the follow-up assessment clinic for children born prematurely, assisting toddlers in hydrotherapy, and pre-school children in a strength-training program and teenage participants in the gait laboratory.

An often-difficult process is the translation of research into clinical practice; having a link person who can 'translate' and share new information to those wanting to access it can be extremely beneficial. Knowledge Brokers are such intermediates, and in an outer-Amsterdam specialist school, I was able to speak with a physiotherapist who coordinates such a program on-site, as well as the staff members at the receiving end. In this particular school, at the start of a semester, a list of topics

were devised from both the Knowledge Broker and therapist. The feedback and the results of the program were positive, and this was encouraging, especially after hearing that a similar program may be implemented in some Victorian paediatric centres.

### **Utrecht, Netherlands: Hoogstraat Rehabilitation Centre**

Key areas of learning:

- Incorporation of research into the 'daily life' of a school
- Modelling of the combination of physiotherapy clinical work and physiologic outcomes

Dr Verschuren is a research physiotherapist who has worked clinically in specialist schools, and now focuses his research there. With him, I was able to visit the Specialist School local to Utrecht while fitness assessments for a research project were taking place, as well as the Rehabilitation centre itself.

I was able to assist in a series of maximal exercise tests, including those that use specialist equipment that I had not previously used. Assisting the students to complete the tests and discussing the finer details of such testing with Dr Verschuren may be beneficial in the future when I am in a position to undertake further research into physical activity, in a Victorian setting. Being a specialist area, having the opportunity to see these tests demonstrated and worked through was invaluable.

### **London, England: The Vale School, Secondary Resource Base**

Key areas of learning:

- Promotion of sports for students with disabilities, including interschool relationships
- Integration of physical activity programs within school lessons and across the day
- Community networking and media attention to encourage practical support and funding

The Vale School Secondary Resource Base is a Special School attached to a mainstream school in Tottenham, London. My time spent at Vale was overwhelmingly fun and very useful. The Vale staff were eager to give of their time and I was able to meet with teachers and with the Principal, in addition to spending a great deal of time with the physiotherapy team.

The Vale School is unique in that it is one of only 50 schools in England to be classed as a "Project Ability Lead School." This identifies it as a centre that has developed expertise in the engagement of students with disabilities in sports. Lead schools have been tasked with developing innovative ways to have young people with disabilities engaged in sports, as well as providing disability awareness training and equipping other schools to develop similar programmes. For Vale this means physical education sessions that group students according to physical ability, regardless of class or year level, integration of novel teaching sessions that engage the students physically, for example dramatic interpretation of books, combining dance, drama and reading, as well as physically based music classes that emphasise body movement and awareness as well as music skill development. The school also facilitates training for those of its students who are on elite athlete pathways, a great model to be reviewed for a Victorian context.

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As I hope you can tell, the experience gained and opportunities presented were incredibly valuable. Thank you again for the wonderful opportunity!

**Project Budget:**

Received from FRL Trust: \$7,500 FRL Trust Balance: \$0  
Received from La Trobe University: \$2,500 LTU Balance: \$151

<b>Budget items</b>	<b>Cost (AUD)</b>
Flights (Melbourne, Las Vegas, Toronto, Amsterdam, London, Melbourne)	\$3,745
Conference registration & accommodation	\$1,554
Accommodation (Toronto, Amsterdam, London)	\$3,708
Living Expenses (meals and on-ground transport)	\$842
<b>Total:</b>	<b>\$9,849</b>