Building Research Relationships Through Postgraduate Seminars

Victoria University: Alan Hayes, Andrew McAinch, and Mary Carolan-Olah

ALAN HAYES

The beginning of our research collaboration with the University of Texas at El Paso began in 2009 when potential synergies were identified between the School of Biomedical and Health Sciences at Victoria University and the College of Health Sciences at UTEP through the respective Deans, Michelle Towstoless (Faculty of Health, Engineering and Science) and Kathleen Curtis (College of Health Sciences). There was an initial exchange of staff profiles and a videoconference—after which as Academic Coordinator for Research and Research Training, I was put into touch with my counterpart in the College of Health Sciences, UTEP, Associate Research Professor Joao Ferreira-Pinto. After some initial discussions and use of Skype (which at the time was a new way to videoconference with friends and work colleagues), we agreed that just trying to put people together was not the best way to produce a long standing and mutually beneficial research collaboration, and that we needed to get to know each other better.

Thus, we decided that the best way to exchange research expertise and current interests was for students (primarily) and staff to deliver a monthly oral presentation on topics of mutual interest. The benefits of this approach was it did not need to wait until conference attendance coincided, gave research students international exposure, and allowed them to practice their oral presentation skills in a smaller, supportive environment.

The initial potential problem was a room with suitable technology—we needed more than just videoconference facilities, but also the ability for content sharing, as the idea was that the audience on both sides of the world would be able to see the presentation, while still also being able to see

the speakers and interact with them in real time. Fortunately, such a room existed in both locations: the Conference Room 2 on level 6, K building at the Footscray Park campus at VU, and the Teleconference Room at the Undergraduate Learning Center, room 101 at the UTEP Campus. The postgraduate UTEP/VU seminar series, as it came to be known, was born. Given the location and also the wider health focus of the UTEP College of Health Sciences, the seminars were expanded to involve staff and students of the School of Sport and Exercise Science at VU, and other presenters from the El Paso region.

Next came the timing. The time difference meant that it would only work if it was late afternoon at UTEP and early morning at VU. So, as to minimise interruption to teaching, and try and keep some consistency, it was agreed that timing would always be 4:00 pm in El Paso. This meant that with the vagaries of daylight saving at both locations, from February to November, the sequence at VU went from 10:00 am, to 9:00 am, to 8:00 am and then back to 9:00 am and 10:00 am again. While the 8:00 am starts were not necessarily a favourite of staff, the presenting students didn't mind as they managed to get a car park! There is no doubt that the presentations would not have had the longevity they have enjoyed without the support of the two Deans. Despite how busy they were, in the early days of the seminars, Professor Towstoless and Professor Curtis made a specific effort to attend. This level of support was greatly appreciated by the students, and demonstrated to staff how sincere and committed the University was for the collaboration with UTEP to be successful.

So, what could possibly go wrong? Well, while what will follow may sound like a litany of problems, the seminars really have gone remarkably smoothly

and some of the below were quite funny and importantly, any difficulties have been dealt with in a professional manner and respect:

The time is OK, but what about the day?

In the beginning, we went with the 3rd Wednesday/Thursday of the month. In general that is fine—until the 1st of the month falls on a Thursday. There we were sitting in the room on the 3rd Thursday of the month and no one was on the other end of the phone—only after a call to João did we laugh about it being only the 2nd Wednesday in El Paso. At least we were a week early and not a week late.

I'm not as important as I think I am.

A day before the talk, the Vice Chancellor at VU needed the room when we had it booked. Not surprisingly, I agreed! Now too late to cancel or move to another room (not that we had one to move to), we hired a projector from the library, e-mailed the talk and verbally/ manually changed the slides on each end with the video from my laptop screened on the wall and everyone on the other side crowded around for our one and only Skype-inspired presentation.

Holidays are fun but can play havoc with your plans.

Anzac Day in Melbourne and Thanksgiving in El Paso have both caused cancellations. The different semester times were also a major impediment to maximising attendance. Having a presentation in late May meant that many staff at UTEP were already on Summer Holiday break (for the same reason we chose not to undertake presentations in June/July or December/January) and I still remember the week that not only did this occur, but the UTEP President had called a meeting for all staff. There was poor João and the speaker around a big table. The minimum attendance at VU has been three, so we are ahead on that one! We have subsequently considered this in scheduling, and while the Wednesday/Thursday has remained, the exact days vary from month to month.

When the picture-in-picture is faulty, animations in PowerPoint are not useful.

There was a period where a glitch in the system sometimes made both the

major screen and picture in picture flash and flick between the slides and the speaker. However, on the UTEP side, things were fine. So, with UTEP being able to see the slides, we could only see our UTEP colleagues and thus I tried changing the slides on a keyboard for slides I could not see, while the speaker followed their talk on their own laptop. Due to the large number of animations and things appearing and disappearing, I take it as a success that I only got stopped twice to be told that we were talking about a figure that they could not see!

Upgrades are not always for the better.

After many years of successfully operating the videoconference control panel (I liked to think I had become quite proficient), I came in to find that all the IP address numbers had been wiped from the system. I had always just dialled in with the number in the address book—now it was gone. Luckily I had asked IT to trial the system from another site, and thus was able to find the IP address. I successfully dialled in, but could not get the content sharing to work (nor sound)—even our own IT could not get it to work as it is an external company who upgraded it. At least I didn't take it personally—apparently the same thing had happened to the Vice Chancellor the day before.

When you think about all the things that need to be organised and go right, it is a credit to both organisations, the people involved and the support senior staff that the seminars are entering their seventh year. We now run them regularly at VU's St Albans and Footscray Park campuses, and it has been wonderful for staff, particularly at UTEP, to hear from new PhD students in the first years of the seminars, and having them deliver a talk at the end of their PhD.

As part of the further strengthening of research collaborations between UTEP and VU, a call for applications for International Collaborative Research Grant Schemes between the two organisations was announced in late 2013. The first two of these are described in the next sections.

ANDREW McAinch

Following the release of the guidelines, Dr Sudip Bajpeyi from UTEP was

identified as a possible collaborator with my group. Assistant Professor Bajpeyi from the Department of Kinesiology, College of Health Sciences, UTEP, had a complementary background to my group in muscle physiology, human primary skeletal muscle cell lines and an interest in fat oxidation and its role in obesity/diabetes as well as sports performance. He also brought expertise in determination of intramuscular lipid content and intermediates. My group had just finished a rodent study with different agonists and antagonists targeting the endocannabinoid system, thus we applied for a collaborative project titled "Role of endocannabinoids and diet in obesity management". This application was successful. This has started an ongoing collaborative relationship with Dr Bajpeyi.

This initial grant enabled a visit first by one of my PhD students for six weeks to undertake some analysis on samples that we sent across to Dr Bajpeyi's lab as well as Dr. Igor Almeida, Director, Biomolecule Analysis Core Facility (BACF), Department of Biological Sciences, Border Biomedical Research Center, and members of his research team. Specifically, my PhD student Shaan Naughton and Dr Almeida's PhD candidate, Felipe Lopes, spent a significant amount of time working up methods for analysis on their mass spectrometer and High Performance Liquid Chromatropher (HPLC) during Shaan's six week visit to UTEP. This work has been continued by Dr Nathan VerBerkmoes at UTEP and a Master's degree student with Dr Bajpeyi, Manuel Amador. Following this research exchange, I also went across for a short visit to El Paso along with our Chancellor and Vice Chancellor as part of UTEP's Centennial celebration in the latter half of 2014. During this visit, I met in person with Dr, Bajpeyi and Dr Almeida and had a tour of their facilities.

Our ongoing collaboration has resulted in a recent successful Border Biomedical Research Center grant application which will ensure the continuation of our collaboration over the coming years. In addition to this successful grant we have also submitted multiple other grant applications (including NIH R01, National Health and Medical Research Council project grant).

Outside of these collaborations, I have also helped formulate and design the dietary intervention for a project being conducted by Dr Bajpeyi and have collaborated extensively on this project which has included numerous email exchanges with his research students involved in the project. We will continue to look at other research collaborations into the future that mix our overlapping and complementary backgrounds.

MARY CAROLAN-OLAH

Our collaboration began in 2013 and centres around our common interest in women's health and empowerment to live healthier lives, especially during pregnancy. Our particular focus is gestational diabetes mellitus (GDM), or diabetes that is first discovered in pregnancy, which may result in serious pregnancy complications. Hispanic women in the Mexican border regions are more at risk of this condition based on ethnicity and low socio economic status.

Our research team brings together a diverse range of expertise including Professor Carolan- Olah's clinical midwifery experience in the area of 'at risk' pregnancies, and her research work in GDM and ethnicity, UTEP Professor Maria Duarte-Gardea's expertise in dietetics and GDM and her interest in Hispanic populations, and UTEP Associate Professor Julia Lechuga's expertise in psychology and the development and testing of culturally appropriate behavioral interventions targeting Latina women.

Together, we have been involved in a collaborative project 'Developing an educational intervention for Hispanic women with GDM in El Paso, Texas' and it has been fascinating to work closely together and to see the world from each other's philosophical, cultural, and professional lens. The first phase of this project has now been completed and has achieved its aim to gather preliminary data on the experience of gestational diabetes in low income Hispanic women, and to ascertain the women's knowledge of food values and dietary recommendations during GDM. We have one publication accepted and two publications under review.

In phase two we plan to apply for grants to fund the development of an educational program, aimed at low levels of health literacy and containing pictures of food and simple instructions.

ALAN HAYES

The collaboration between UTEP Professor Sandor Dorgo and myself started a little differently. It was clear we had strong similarities in research interests in muscle mass and function, particularly as it relates to aging. However, Professor Dorgo had specific need for help with the psychological aspect of his training program, and thus submitted a grant application with other VU colleagues (which was ultimately unsuccessful). However, given my mechanistic approach to aging muscle research, and the already successful Golden Age exercise intervention program that Professor Dorgo was running, we got back in touch and agreed that we should work together on submitting an International Collaborative Grant to the National Strength and Conditioning Society on "Combating dynapenia in diverse ethnic groups of older adults" in 2014. While the grant ended up not being reviewed due to an administrative mix up, we began to work on the project. Further impetus came from the second round of International Collaborative Research Grant Schemes between the two organisations, of which we were the only successful applicants. I undertook a radiations course that allowed me to operate a dual energy x-ray (DXA) machine for body composition, as well as peripheral quantitative computer topography machine for more in depth analysis of bone and muscle quality. This would complement the introduction of DXA measurements into the Golden Age program at UTEP, and importantly allow cross reference of measurements on a wide ethnic demographic.

I had the opportunity to visit El Paso in August 2015, where I instructed Professor Dorgo's assistants on the correct use and interpretation of DXA information, and was able to experience first hand the Golden Age program, particularly the pre and post-training testing sessions. While technology has made keeping in touch easier than ever, the opportunity to visit and meet face-to-face many people I had only seen on video was wonderful. Further, it strengthened the research collaboration with Professor Dorgo, as we were better able to plan for the future and how we could use data already existing, submitted a number of EOIs for upcoming grants, and have resubmitted the NSCA grant. We will catch up again at the American College of Sports Medicine annual conference this year to follow up, conduct further planning,

and continue to strengthen what began as very humble beginnings of the UTEP/VU research collaboration in the Health area.



