3 Minute Thesis

A PhD student who is developing a tool to help doctors increase their chances of ensuring breast cancer doesn’t return after surgery has overwhelmingly won the Trans-Tasman Three Minute Thesis competition at UWS.

Forty-four universities participated in the Three Minute Thesis Final held on the Parramatta campus on Friday 18 October. Kelsey Kennedy from The University of Western Australia ended the day as both the Overall and People’s Choice Winner after she wowed the judges with her research into a new surgical implement for operations to remove breast cancer.

Lily Chang from the University of Auckland was selected as the runner up for her thesis investigating whether eye examinations could provide an early diagnosis of Alzheimer’s Disease.

Ms Kennedy, from the UWA Faculty of Engineering, Computing and Mathematics, impressed the crowd of over 200 people in the audience and online via a live stream with her presentation that could spur new advances in breast cancer treatments.

“The main way that surgeons currently find tumour boundaries is by feeling, but breast tumours are complex and have tentacle like structures that grow out into the tissue, meaning the extensions of cancer can be too small to detect by touch alone,” she told the audience.

“We’ve taken a microscope that can see and feel these small extensions of cancer and put it inside a needle, so surgeons are able see if there’s any cancer in a particular area.”

“With that information in the hands of a surgeon we just might be able to make breast cancer surgery more effective the first time around.”

Kelsey Kennedy, UWA winner of 2013 Trans-Tasman 3 MT and People’s Choice Award

All 44 contestants on stage with compere Ruben Meerman, from Catalyst on ABC television.
Last year’s winner, Tim Paris from the UWS MARCS Institute, paid tribute to Ms Kennedy for winning the competition.

“Winning the Three Minute Thesis competition was a remarkable experience, and I wish Ms Kennedy all the very best for her promising research career,” Mr Paris says.

“Pursuing a PhD is a long and arduous process, so to have experts in the research community reaffirm your work while you are still researching is very rewarding.”

UWA will host the Trans-Tasman Three Minute Thesis challenge in 2014.

**3MT Finalists:**

» Xiao (Demi) Gao from the University of South Australia. 3MT Title: Building a better bionic ear.

» Sharon Savage from the University of New South Wales. 3MT Title: Giving words new life in dementia.

» Kelsey Kennedy from the University of Western Australia. 3MT Title: Feeling for cancer: an imaging tool to make breast cancer surgery more effective

» Lily Chang from the University of Auckland. 3MT Title: An “eye” on Alzheimer’s disease.

» Thomas Finn from Massey University. 3MT Title: Oxygen: A double-edged sword for life forms

» Shu Hui Yau from Macquarie University. 3MT Title: Beeps, Burps and Brains: Auditory Processing in Autism

» Ksenia Gnevsheva from the University of Canterbury. 3MT Title: Non-Native English accents: How malleable are they?

» Gemma Sharp from Flinders University. 3MT Title: Paying for Lip Service

If you missed the 3MT you can still catch it [here](http://www.ayac.or.kr/commu/notice_view.asp?skey=&sword=&BCATE=BD00001&BSUBCATE=&page=1&idx=2829&bidx=506) on our web pages.

---

**International Music Composition Winner**

Ms. Holly Harrison, DCA candidate in the School of Humanities and Communication Arts, has won an international composition competition in Korea. She won the 2013 Pyeongchon Art Hall International Chamber Music Composition Competition with her work *Red Queen, White Queen, Alice and All*.

Holly writes: “Along with the money prize, the prize also includes being selected as a required piece for the Pyeongchon Chamber Music Performance Competition or a repertoire for future concerts hosted by the Anyang Foundation for Culture & Arts”.


This is a substantial international achievement and marks Holly out, along with many other international successes, as one of the most talented young composers emerging in Australia at present.

Hwaum Chamber Orchestra will perform the finalists on November 2, 2013 in Pyeongchon Art Hall.

---

**Candidature time, thanks to Jorge Cham**

Singapore Statement

The UWS Academic Senate has endorsed the Singapore Statement on Research Integrity further integrating the University’s research with the global research enterprise.

The Statement

The Singapore Statement represents the first international effort to set out principles and responsibilities for research integrity. It provides guidance and a foundation for the development of expanded and localized standards and policies worldwide and was produced by the Second World Conference on Research Integrity (Singapore, 21-24 July 2010).

Further Information

The First World Conference on Research Integrity (Lisbon, 16-19 September 2007) was initiated by the European Science Foundation (ESF) and the U.S. Office of Research Integrity (ORI). The 3rd World Conference on Research Integrity (Montreal, May 5-8, 2013) has prepared a draft statement on Research Integrity in Cross-Boundary Research Collaborations. When finalised the Montreal Statement will be considered by UWS.

What does the HDR Director check when you hand in your thesis for examination?

Ok, so you know that you are solely responsible for the content and that your supervisor has checked and rechecked your work and may be it has even been professionally edited.

So what does the HDR Director look for?

HDR Directors do a final quality check. Usually all is well but they may find something like this example:

A thesis that had been checked many times opened with an acknowledgment statement that read I herby, rather than I hereby.

Here is a list that HDR Directors use when checking submitted theses:

» Look at the table of contents to give an idea of the structure of the thesis
» Check to see that the thesis aims and research questions are stated up front
» Check the bibliography to see if it is adequate for a doctoral/M(Hons) thesis in terms of breadth
» Take a quick check to see if there is a methodology chapter and a theory section
» Read a page or two in the theory section for a quick assessment of the writing
» Always do some random reading

» Check the originality form
» Look at references
» Check a few tables and figures
» Read the last chapter, the pulling together and then just somewhere mid way for a random check and the first paragraph
» Length- is it within range for the degree?
» Formatting – margins, typeface, spacing etc
» Contents – suitable chapter/section divisions
» Check;
  » Acknowledgments
  » Summary
  » Certificate
  » Title page
  » Referencing style; suitable/consistent?
  » Tables and illustrations; captions? Attributions? Copyrights?
  » Proof reading – read a dozen pages at different spots to ensure there are no frequent typos or other errors
  » Quality of writing; read about 10 pages to check style is grammatical and argument logical coherent

These dot points may be handy indicators for your submission and end stages of candidature.
**UWS Rotary Health Scholarship Winner**

Marlee Bower has been awarded the Ian Scott PhD Scholarship, project entitled *The experience of loneliness in the Australian homeless population*. The scholarship is offered through Australian Rotary Health.

The assessment panel was very impressed by Marlee’s presentation and they were delighted to offer her the scholarship. Marlee is enrolled in the Centre for Health Research.

---

**Dengji continues to excel - Best Thesis Award**

Dengji Zhao, one of our Cotutelle PhD students, received “The Best 2012 Thesis in Math-Computer Science in Toulouse”. Dengji submitted his thesis in March 2012 at UWS and passed his oral defence at University of Toulouse in June 2012 (received nomination of best thesis at the oral defence). He is now working at Kyushu University, Japan as a postdoc.

---

**Research Volunteers Needed**

People aged between 18 and 65 with:

» elbow pain in one or both arms (tennis elbow)  

OR

» no history of arm pain or injury (fit and healthy volunteers)

Are needed for a research study investigating how our brains contribute to pain. By conducting this study it is hope to find out why some people get better after injury while others go on to develop a persistent or reoccurring condition. All procedures are non-invasive and pain-free and conducted at University of Western Sydney, Campbelltown campus (Ethics H10184). Participants will be reimbursed for their time.

For more information and eligibility criteria please contact Emma Jones 17614317@student.uws.edu.au
What you need to know about eResearch (hint; it is a great resource for students)

What is eResearch?

eResearch refers to the use of advanced information and communication technologies (ITCs) to support research. eResearch aims to ensure research processes are more effective, efficient and collaborative.

eResearch is underpinned by the following themes:

Data management

Data management entails the collection, storage and classification of research data to enable logical and timely data retrieval and management as well as sharing and reuse for researchers. It is very important that all research publications, including theses are supported by data-sets that can be used to prove the integrity of the research. Whatever the field and whatever level of privacy is needed for the data, having a plan to manage data for the long term is an essential part of research.

High performance computing

Via the sharing of robust infrastructure and high performance computing systems, eResearch facilitates the processes of data management, analysis and reporting across large and complex data sets. It also increases researchers’ access to such things as advanced data processing and modelling techniques that would otherwise remain largely inaccessible to smaller institutions and individual researchers due to the costly nature of such systems.

Research collaboration

Global and interdisciplinary research collaboration enabled through communication and data sharing capabilities allows researchers to collaborate in real-time through technologies such as video conferencing and other web communication tools. These deliver improved research outcomes by enabling collaborative work data sets by providing shared access to storage and computing resources.

What does the eResearch Team Do?

The eResearch team at UWS provides researchers with out-of-the-box and custom data management and computing solutions (ie: computing power and specialised software) which both streamline and uplift research. eResearch helps researchers deliver reproducible research and to meet appropriate compliance standards. To achieve this, we work with the following major stakeholders across the University:

- Researchers (via the office of the Pro Vice Chancellor, Research)
- Office of Research Services
- Information Technology Services (ITS)
- The University Library.

Why is Data Management Important?

Every researcher should be concerned with data management during the course of the data life cycle and beyond. Through sound data management planning and implementation, a researcher can:

- Plan for end-to-end data management needs, including computational and storage requirements.
- Increase research impact by ensuring data is both preserved and citable.
- Ensure long-term access of data through well-described and retrievable data sets.
- Retain the potential to make available data sets for reuse and/or future research projects and collaborations.

What will Data Management Planning do for Me?

Data management planning from the outset of a research project will help researchers plan for and articulate the following:

- Data to be produced
- Data documentation and metadata (data about the data)
- Data storage and security needs
- Ethics, copyright and Intellectual Property
- Access, sharing and reuse of data
- Data retention and disposal
- Preservation and archiving of data.

The University has both a Data Management Checklist and a Data Management Plan proforma to help guide you through the Data Management process. Along with Office of Research Services, ITS and the Library, the eResearch Team can provide or connect you with the right advice to get you started with your data management plan.
What Computing Resources will I have Access to?

As a researcher at UWS, you have access to a wide-range of computing platforms. These include:

» Desktop Computing

» Desktop sized computing resources including laptops, can be obtained through your School or Research Institute.

» Virtual Servers

» For medium-sized long-running computing, a good first step is to make use of the free virtual machines available to all researchers both here at the university and on the Nectar Research Cloud, please log a request via the USW MyIT service portal using your UWS login details.

» High Performance Computing (HPC)

For intensive computation, access to a high performance computing cluster or super-computing environments may be necessary. UWS hosts some HPC clusters within some of our research institutes. These can be accessed for research purposes. Please log a request via the USW MyIT service portal using your UWS login details.

What Tools and Collaboration Environments will I have Access to?

The eResearch team can help connect researchers with the appropriate software tools or collaboration environments they may be seeking. You can visit the eResearch website to see the list we have compiled of the mostly commonly used tools and collaboration environments.

For more information about eResearch please visit our website at: uws.edu.au/eresearch

Assistance

If you have a technical issue or requirement related to your research, please contact the eResearch team by logging a request with the UWS IT Service Desk.

Best Student Talk

Jenny Shanks with Ryan McMullan at the 3MT

Jenny Shanks was awarded the best student talk at the Australian Entomological Society Conference in Adelaide. A significant number of current and recently graduated PhD students from Hawkesbury Institute of the Environment and the School of Science and Health attended the conference and have done a great job in showcasing their research and representing the entomological expertise that is present on the Hawkesbury campus.

The title of Jenny’s talk was “Superior hygienic behaviour: one possible explanation for lower levels of brood pathogens in Australian stingless bees.”

Congratulations Jenny.
Footnotes is produced by the Office of Research Services.
For comments, questions or contributions please contact Mary Krone, m.krone@uws.edu.au