Three Minute Thesis (3MT®) is an academic competition developed by The University of Queensland (UQ), Australia.
We held our first Postgraduate Research Conference (PGRC) in 2012, with the aim of creating a space for postgraduate researchers to share their work in a friendly, relaxed environment. We also wanted to give them the chance to meet fellow researchers and engage with questions from beyond their own field.

The conference is now seven years old, and we’re pleased to say it’s gone from strength to strength. We received many presentations and posters, making the decision making for the programme a challenging task.

If you attended the PGRC this year, we hope you had a wonderful time, and were just as inspired as we were by the sheer breadth and diversity of research on display. We also hope you enjoyed the guest presenters and workshops and that you came away from the conference inspired by what you’d seen, with new connections, new friends, and maybe even an idea or two that might influence your future research. If you’ve not attended the PGRC before, then we warmly invite you to attend next year’s event, and browse this booklet to see the great impact our conference has made – both at Lancaster and Cumbria, and also in the wider community.

If you have any questions or feedback, please do contact us at the Graduate College and we will be more than happy to help. We are always looking for guest speakers, presenters and volunteers to help on the day, so if you have time to spare and want to get involved, do let us know.

All that remains now is for us to thank our many guest speakers, workshop leads, and the members of our various judging panels. We are also particularly grateful to the postgraduate students who have contributed to the programme, as without you we would not have a conference! Please take a moment to look at the back page for acknowledgements.

On behalf of the organising team and everyone at Graduate College, we wish you all the very best, and look forward to seeing you at PGRC 2020!

Claire Povah and Paul Dolby
Principal and Vice Principal of Graduate College

PGRC 2019

Over 65 delegates attended in person on the day with 75% full time students and 25% part time students from both Lancaster University and the University of Cumbria.

We had a breakdown of:

- 40% First Year PhD students,
- 25% Mid-PhD,
- 12% Final Year PhD,
- 5% Research Masters/MPhil,
- 18% Taught Masters students.

We had the opportunity for distance learners to attend online. Our OpenLearning site had a video livestream as well as the titles and abstracts of the presentations, the programme, information about guest speakers and posters. The website also allowed online delegates to interact with those attending in person via chat rooms, to ask presenters questions and to vote for their favourite poster in the delegate poster competition.

We had 66 sign ins online from not only the UK but also the US, France, Ireland, Switzerland, Germany and Ghana.

We had a lot of interest in presenting for:

- 27 Posters,
- 11 3-Minute Thesis Presentations,
- 23 Long Presentations.

This breadth showed on the day with not only delegates but presentations from every faculty at Lancaster University, giving rise to a very interesting programme with something for everyone.

Statistics
Morning Session

To start of the presentations, Myriam introduced the day’s first speaker, Professor Dame Sue Black, Pro Vice Chancellor for Engagement at Lancaster University. She gave a presentation on ‘Engaging with Engagement’ reflecting not only on her career but what she has seen since joining Lancaster University.

Professor Dame Sue Black is a career anatomist and forensic anthropologist as well as Pro Vice Chancellor for Engagement at Lancaster University. She is best known for her work in the Kosovo war crimes investigations, in the aftermath of the Asian tsunami and in her ground breaking work of identifying criminals from images. She is President of the Royal Anthropological Institute and life time Professor of Anatomy for the Royal Scottish Academy. She holds the Lucy Mair medal for humanitarian assistance, the Jephcott Gold medal for contributions to science, the Saltire award for outstanding contribution to culture and science, Anatomical Society Gold medal for outstanding contribution and two police commendations. She is most proud that she has a science laboratory named after her in a local secondary school.

Knowledge Exchange

Each year the conference has a theme ranging from ‘Demonstrating Impact’ to ‘New thinking’. The aim is to challenge presenters to frame their work in relation to this theme. The theme of the conference this year was ‘Knowledge Exchange’ which is defined by VITAE as

“a two-way mutually beneficial process through which knowledge, know-how, expertise and skills are transferred from one party to another leading to innovative, social and economic improvement.”

On Saturday 18th May 2019, delegates from Lancaster University and the University of Cumbria came together for a day of workshops and networking at the Postgraduate Research Conference 2019.

The day was opened by Graduate College student Myriam Illovits, who welcomed the delegates and set out the programme for the day. She also welcomed those watching online.

The recent Postgraduate Research Conference was inspiring. The quality of research, the level of professionalism in presentation and the clear commitment to high quality research was incredible. It was extremely challenging to select a winner in all the categories as the competition was so strong. The conference is a tremendous platform from which to launch research and practice skills in a supportive and encouraging environment. I would encourage all research students to think about submitting for next year because there is so much to be gained.

- Sue Black, Speaker & Judge.
3-Minute Thesis® Competition

Sue’s talk was followed by the 3-Minute Thesis Competition (3MT®). This is a competition created by the University of Queensland, Australia. The aim is to present your entire thesis to a non-specialist audience in just 3 minutes. There are very strict rules including:

- A single static PowerPoint slide is permitted. No slide transitions, animations of ‘movement’ of any description is allowed. The slide is to be presented from the beginning of the oration.
- No additional electronic media (eg. sound and video files) are permitted.
- No additional props (eg. costumes, musical instruments or lab equipment) are permitted.
- Presentations are limited to 3 minutes maximum and competitors exceeding 3 minutes are disqualified.
- Presentations are to be spoken word (e.g. no poems, raps or songs).
- Presentations are to commence from the stage.
- Presentations are considered to have commenced when a presenter starts their presentation through either movement or speech.

We had 4 judges, Professor Dame Sue Black, Dr David Ellis, Helen Boswood and Hiyem Cheurfa who had the challenging job of judging the presentations against certain criteria.

We had a varied programme from many different departments, Medical School to Computing & Communications and Linguistics and English Language to Engineering.

| 3MT® presentations | 
|-------------------|---|
| Make no bones about it - fat cells have a role in bone formation. | Rebecca Shepherd, Lancaster Medical School, Lancaster University.
| The effects of concept mapping and summarisation on metacognitive accuracy and academic success. | Nour Toumi, Linguistics and English Language, Lancaster University.
| Infiltrating our immune system - the secret life of Leishmania parasites. | Rebecca Barker, Biological and Life Sciences, Lancaster University.
| Cinderella DNA and the Mother’s Curse: A heart-breaking fairytale? | Emma Drummond, Biological and Life Sciences, Lancaster University.

Although there were some nerves, the presenters did an amazing job of explaining their research to a non-specialist audience in such a short period of time. It was evident that presentations had been well rehearsed as all the presenters finished within their 3 minutes.
Winner!

Rebecca Shepherd won with her presentation 'Make no bones about it - fat cells have a role in bone formation'.

Rebecca will be representing Lancaster University in the National Semi-Final. We wish her the best of luck!

I was particularly happy to be given the opportunity of joining the judging panel of the 3MTs. While there was a great line up of presentations on a variety of topics ranging from medicine to linguistics, PGs were very efficient in communicating their research to a non-specialist audience in a captivating and entertaining way. The decision was indeed very difficult. Overall, it was a brilliant day packed with knowledge, stimulating ideas, and interesting discussions.

- Hiyem Cherurfa, Judge.

Morning Session continued

After a short break for some refreshments and a leg stretch, there was a presentation from guest speaker Dr. Carly Stevens who is from Lancaster Environment Centre. She spoke about 'Outreach and Engagement: Inspiring an interest in Science'

Dr Carly Stevens is a senior lecturer at Lancaster University where she has been working since 2012. Her research is related to the impacts of global change on plant communities and soils. Her research group work on a range of topics focussed around plant ecology, soils and global change, including some interdisciplinary projects working with sociologists, historians and linguists. As well as conducting academic research Carly runs a large knowledge exchange project called Science Hunters. Science Hunters uses the computer game Minecraft to teach children about science topics. The topics are largely based on research being conducted in Lancaster Environment Centre. Science Hunters undertakes school visits, runs Minecraft Clubs and participates in public events.

The day overall was amazing: we had three fantastic keynotes, all of whom offered new insights, advice, and ideas about knowledge exchange. All three keynote speakers were keen to support the postgraduate students with a wide variety of advice, from profession to personal.

- Frazer Heritage, Chair.
Workshops

Following on from Carly’s presentation there were some workshops. The delegates were free to choose which workshop they wanted to attend. These were held in smaller flat rooms to allow some groupwork.

The workshops were an opportunity for delegates to develop some skills that should be of use to them in their work.

- **Becoming KE ready. Developing enterprising skills for Knowledge Exchange.**
  Led by Lancaster University Research and Enterprise Services. This session was to introduce delegates to Knowledge Exchange and to help plan skills development for being competitive in this space.

- **Academic Writing.**
  Led by Learning Developers at Lancaster University. This session was to look at what good academic writing is and what makes a good academic writer. It was spoken about finding ways of talking about and conceptualising the academic writing process and product.

Postgraduate Research Conference is definitely a fantastic opportunity for MA and PhD students to share their research in a friendly environment. You will have the chance to know what other research students are doing and you will get helpful and valuable feedback from participants. It also provides you with free lunch and refreshments. Welcome to PGRC!

- Haoran Yang, CCA.

After the workshops, delegates were invited to enjoy a buffet lunch. During this time the poster session was held where delegates could look at the posters, talk to the presenters and vote on their favourite poster.

Posters

We had many posters entered this year covering a range of topics. Presenters were very knowledgeable on their posters whilst fielding questions from their peers.

<table>
<thead>
<tr>
<th>Posters</th>
<th>Authors</th>
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<tbody>
<tr>
<td>Make no bones about it - fat cells have role in bone formation.</td>
<td>Rebecca Shepherd, Lancaster Medical School, Lancaster University.</td>
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<td>Nour Toumi, Linguistics and English Language, Lancaster University.</td>
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<tr>
<td>Visualising 3D printing Innovation Ecosystem Roles.</td>
<td>Badziili Nthubu, Institute for Contemporary Arts, Lancaster University.</td>
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<tr>
<td>Knowledge exchange in infancy: “I don’t know but I know who to ask!”</td>
<td>Marina Bazhydai, Psychology, Lancaster University.</td>
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<td>Medical staffing of emergency departments: an ethnographic study to explore the retention problem.</td>
<td>Daniel Darbyshire, Lancaster Medical School, Lancaster University.</td>
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<td>Understanding the role of animal personality in behavioural responses to environmental change: A meta-analysis.</td>
<td>Rachel Gunn, Lancaster Environment Centre, Lancaster University.</td>
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<td><strong>Understanding the variation in MBA students’ ‘experience’ of using Learning Technology in Pakistan.</strong></td>
<td>Ahmad Timsal, Law, Lancaster University.</td>
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<td><strong>Examining the underlying tensions of delivering long-term collaborations for sustainable growth.</strong></td>
<td>Stephen King, Lancaster Environment Centre, Lancaster University.</td>
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<td><strong>Additional bend arcs as variable bunch compressors.</strong></td>
<td>Gustavo Pérez-Segurana, Physics, Lancaster University.</td>
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<tr>
<td><strong>Can the Left Hand Benefit from Being Right?</strong></td>
<td>Rachael Taylor, Psychology, Lancaster University.</td>
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<td><strong>Do not interrupt while I am speaking: Interruption Design in Chinese Mundane Conversations.</strong></td>
<td>Yingtian Tao, Linguistics and English Language.</td>
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<td><strong>Towards Sustainable Family Businesses – The Role of Management Accounting.</strong></td>
<td>Chamila Dasayanaka, Business School, University of Cumbria.</td>
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<tr>
<td><strong>Characterisation and Cell Viability for Synthesis Fluoride-Citrate HA.</strong></td>
<td>Fahad Alhamoudi, Bioengineering, Department of Engineering, Lancaster University.</td>
</tr>
<tr>
<td><strong>Characterization of multilayer thin film superconductors</strong></td>
<td>Daniel Turner, Engineering, Lancaster University.</td>
</tr>
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**Poster winner!**

**Winner of the Judge’s Vote:**
**Stephen King**

Examining the underlying tensions of delivering long-term collaborations for sustainable growth.

**Winner of the Delegate Vote:**
**Daneyal Mirza**

Ubiquitous Knowledge Exchange: Conceptual Framework for the 4.0 Era.

I really enjoyed the poster session, I think it is such a skill to be able to show your work on one A1 piece of paper in an easily accessible way. Some were very eye-catching too!

- Alice Wright, Organiser.
Afternoon Session

After lunch, the afternoon Chair, Frazer welcomed everyone back and introduced the next guest speaker.

Dr David Ellis from the Psychology Department of Lancaster University, gave a talk on 'Staying in the loop: using knowledge exchange activities to develop and disseminate research'.

David Ellis holds a 50th Anniversary Lectureship in Psychology at Lancaster University and an Honorary Research Fellowship at The University of Lincoln. He previously obtained an undergraduate degree in psychology from the University of Glasgow followed by an MSc and PhD. Much of his work considers how recent methodological developments in technology and data collection (often referred to as digital traces) can reveal information about individuals and their behaviour. His research has been published in a variety of academic journals across psychology, medicine, and computer science with results often re-appearing on radio and television including BBC One, Radio 4 and, The World Service. In addition to university-led research, David continues to work collaboratively with industry and government partners. This previously included an ESRC funded placement at The Scottish Government. His research has also received funding from the Chief Scientist Office, DStL, Unilever, and the EPSRC.

Long Presentations

Following on from David's presentations were the long presentations. These consist of a 10 minute presentation followed by 5 minutes of questions from the judges and audience. The aim is again to present your work to a non-specialist audience in relation to the theme of 'Knowledge Exchange'.

This year we had 23 submissions for the 9 presenting slots, making the decision making very difficult. The final programme covered a range of topics, with something for everyone.

We had 4 judges, Professor Dame Sue Black, Dr David Ellis, Helen Boswood and Myriam Illovits who had the difficult job of judging these excellent presentations:

Rachel Gunn, Lancaster Environment Centre, Lancaster University.

Understanding the role of animal personality in behavioural responses to environmental change: A meta-analysis.

Daneyal Mirza, Organisation, Work & Technology, Lancaster University.

Ubiquitous Knowledge Exchange: Conceptual Framework for the 4.0 Era.

Yejin Jung, Linguistics and English Language, Lancaster University

All opinions are not equal.
Claire Mather, Centre for Global Eco-Innovation, Chemistry, Lancaster University.

DIY Testing for Chronic Health Conditions.

Johannah Truppin, Politics, Philosophy and Religion, Lancaster University.

Cultural Diplomacy and Conflict Resolution.

Daniel Darbyshire, Lancaster Medical School, Lancaster University.

Medical staffing of emergency departments: an ethnographic study to explore the retention problem.

Kin Chung Jacky Chan, Psychology, Lancaster University.

Speaking to Children Learning English as an Additional Language: An Observational Study of Preschool Teacher Talk.

Sejal Changede, Institute for Contemporary Arts, Lancaster University.

Traditional knowledge exchange for sustainable future.

Winner!

Winner of the Delegate Vote: Daneyal Mirza

Ubiquitous Knowledge Exchange: Conceptual Framework for the 4.0 Era.

PGRC ‘19 was a great learning experience for me. I presented my paper through a long presentation and a poster and the kind of feedback that I received was very valuable, and the reason for that was the inter-disciplinary nature of the conference therefore I got the opportunity to gather constructive feedback on my research from the medical, law, computer science and even natural sciences perspective’s. Moreover, the workshops were very engaging and the best part was that it allowed me to network with Masters/PhD students from diverse fields.

- Daneyal Mirza, Presenter and Delegate.
What our attendees think:

Attending PGRC 2019 was a great experience. I was impressed with the presentation skills of many of the participants and learned about the cutting edge research that’s being done in other disciplines. The long presentations provided the postgraduates with the opportunity of telling us a little more about their work and left room for questions from the attendees.

- Myriam Illovits, Chair & Judge.

The Postgraduate Research Conference provides research students with an excellent opportunity to present their research and prepare themselves for other conferences. Taught students have the chance to learn and see what research is about. It gave me, personally, more enthusiasm to start my PhD next year. Seeing all these researches talking about their research with a lot of passion, and listening to the inspiring guest speakers, Sue Black, Carly Stevens and David Ellis, gave me a lot of motivation for my dissertation as well. The theme of the conference, Knowledge Exchange, and cross-discipline research, fitted right within my thesis. As a cybersecurity student, I will be writing about international law in cyberspace, which is a great example of two disciplines that need to work together. I would encourage all postgraduate and undergraduate students who are interested in doing research or learning to come next year, although I might not be studying at Lancaster, I will most definitely come again.

- Sam Maesschalck, Delegate.

The Postgraduate Research Conference organised by Graduate College at Lancaster University was an excellent academic day. Knowledge exchange, the overarching theme of this year’s conference, was indeed the outstanding character of the day during which PGs from across all the faculties initiated academic dialogues and shared their research output.

- Hiyem Cheurfa, CCA & Judge.

Like research? Want to meet like-minded people? If so, then come to New Cafe!

Every month, the Graduate College hosts an informal research event where two PhD researchers present their work to a friendly, non-specialist audience. It’s a great chance to share your work and practice speaking in public. You can also network with fellow researchers, and enjoy free food and drink afterwards.

For more details see social media:
• [www.facebook.com/thenewcafe](http://www.facebook.com/thenewcafe)
• [www.twitter.com/LUGradNewCafe](http://www.twitter.com/LUGradNewCafe)
We are grateful to the following people/organisations which have contributed to this conference:

Dr Paul Dolby - Vice Principal, Graduate College
Claire Povah - Principal, Graduate College
Jane Hulland - Manager, Graduate College
Alice Wright - Administrative Assistant, Graduate College
College Community Assistants, Graduate College

Lancaster University ISS
Lancaster University Management School
Lancaster University Careers Service
Lancaster University Research and Enterprise Services

Lancaster University and Graduate College have also contributed funds to this event.

We would also like to thank our guest speakers, workshop leads, chairs and presentation/poster judges.

Finally we would like to thank all our delegates and those who have contributed to the programme; without them the conference would not have happened.

#lupgrc