Welcome back to the first issue of Research News for 2018. In this issue I look back at the research activities of 2017, announce the launch of the Research Community of Practice (RCoP) and invite you to apply for funding in the 2018/19 R&D Grant Pool Funding round.

In 2017, 20 researchers from Forensic and Scientific Services submitted 61 new projects to the Research Office. Of these, 49 were approved, utilising $203,000 in funding from the Research and Development fund. Focussed on improving our capability or service delivery these projects involved 33 different collaborators and a total value of approximately $2.8m.

The opportunity to receive dedicated R&D funding is open to all staff conducting research and development at or in collaboration with FSS. The 2018/19 Grant Pool Funding round opens on March 12. Information sessions will be held on Thursday 15, Thursday 22 and Wednesday 28 March to review Funding and Application Guidelines, Project Design and general questions and answers.

Closing date for applications to the Grant Pool Funding round is Friday 27 April.

Additionally, the first meeting of the Research Community of Practice (RCoP) is to be held on March 14. I encourage all interested staff to get involved. More information about this event can be found below or by contacting the Research Office.

Congratulations to the three staff from FSS who were recognised at the Department of Health Australia Day Achievement Awards 2018. John Bates, Dr Amy Jennison and Dr Glenn Graham received awards for their high quality work, level of commitment, staff and business development and recognition nationally and internationally. Additionally, Public Health Virology as part of the Zika Mozzie Seeker Project, was recognised at the Queensland Health and Department of Health Awards for Excellence in December.

We have so many deserving staff here at Forensic and Scientific Services and it is fabulous to see this recognised. I encourage you all to consider nominating yourself, your colleagues or a team for accolades whenever they become available. There are staff who can help guide your application, so if you are interested please contact Trish in the library trish.murphy@health.qld.gov.au
Staff publications


Mackay, I.M., Arden, K.E. (2017) This may not be the ‘biggest flu season on record’, but it is a big one – here are some possible reasons. The Conversation, online (18 Aug 2017). http://qhpsseprints.sth.health.qld.gov.au/2149/


The National Ethics Application Form (NEAF) has been replaced by the Human Research Ethics Application, or HREA. The aim of the HREA is to be a concise single application that facilitates both Standard and Low or Negligible Risk research involving humans and/or their data. The HREA format assists researchers to consider the ethical principles of the National Statement on Ethical Conduct in Human Research (2007) in relation to their research, rather than focus on requirements for approval.

The HREA is accessed on Online Forms for Research website in the same way an applicant would have started a NEAF or LNR form.

One of the changes that will take some getting used to is the mandatory requirement of a Project Description document - or Protocol. If a Project Description is developed and written before commencing the HREA the application process becomes even more streamlined as the applicant can answer some questions in the HREA by referencing sections of their Project Description document. A Project Description can also be referenced when completing a Short Form.

The Research office encourages the use of the HREA and will be happy to spend some time with you before you start your next ethics application to talk you through the changes.

The RSC Twitter Poster Conference is back #RSCPoster

9:00 (GMT) Tuesday 6 March to 9:00 (GMT) Wednesday 7 March 2018.
More information at http://blogs.rsc.org/rscpublishing/
The Royal Society of Chemistry Twitter Poster Conference is an online event held entirely over Twitter to bring members of the scientific research community together to share their research, network and engage in scientific debate.

Following on from the success of the previous events, we are excited to announce that the 4th RSC Twitter Poster Conference will be held from Tuesday March 6th (9am GMT) to Wednesday March 7th (9 am GMT).

How do I take part?
During the event simply tweet an image (e.g. JPEG) which will be a digital poster summarising your research along with #RSCPoster, the most appropriate subject area hashtag and the title of your work.
Staff presentations

Please let us know if you have collaborated or prepared a paper for, or presented at a conference or meeting recently


Staff presentations continued...

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Upcoming events

http://isppd.kenes.com/2018/Pages/default.aspx#.WgpaNnq3RMc


OZWATER '18, Australian Water Association 8-10 May 2018, Brisbane Qld. http://www.ozwater.org/


The International Conference on Chemistry Education (ICCE) 10-14 July 2018, University of Sydney, NSW. https://www.raci.org.au/events/event/icce2018


Don’t miss the World Science Festival Brisbane, 21-25 March 2018
Do you have a passion for research and continual improvement? Are you interested in deepening and sharing your expertise by working together with others to solve common problems? If you answered yes to either of these questions why not join the Research Community of Practice. The first meeting will be held in FSS Conference Room 102 on Wednesday 14 March between 1-2pm.

What is a community of practice? A group of people with a common sense of purpose; who agree to work together to solve problems, share knowledge, cultivate best practice and foster innovation.

How will members benefit by joining this group? Through the sharing, creation and management of knowledge around research and development issues, RCoP will enable individuals to:

- Continue learning and developing professionally
- Access expertise
- Improve communication with peers, network and enhance professional reputation.

How can RCoP benefit FSS?
- Reducing time/cost to retrieve information
- Reducing learning curves
- Improving knowledge sharing and distribution
- Reducing rework and reinvention

What are the problems/issues/goals that RCoP might address? These topics will be developed by the group around topics that have value to members. For example, topics may include learnings around publishing and non-traditional platforms; guidelines on sharing minimal metadata; lessons in supervising student research etc.

How will RCoP communicate, when, how often?
Meetings will be held on the second Wednesday of every month between 1-2pm in FSS Conference Room 102. Members will be asked to contribute regularly to the community, however do not have to attend every meeting. Members will be expected to share learnings from the RCoP with their peers at monthly team meetings.

Who should join the Research Community of Practice? Any staff member with a shared interest and/or expertise in research, who is willing to voluntarily work together with a group of like-minded peers to promote best practice and build capability in research and development across the organisation.

If after reading these questions you are still unsure if this group is for you and would like to discuss this further please contact Trish Murphy #2601 or Lucretia Angus #2609 who will be your RCoP coordinators.
Not stolen goods, but radioactive gemstones and jewellery. Radiation and Nuclear Sciences (RNS) were recently asked if a collection of gemstones were radioactive. Why would someone ask that? It is common practice to irradiate a wide range of gemstones to change their colour so they look like their more expensive natural counterparts. Diamond, zircon, sapphire, topaz and quartz are common targets for this practice.

As it turns out, the jewellery we tested were not radioactive. Most modern irradiation treatments leave the gemstone slightly radioactive for a few days before returning to their non-active state. Older practices were not so squeaky clean, early treatments involved packing the gems in radium salts resulting in long term contamination, and therefore potential for exposure to the wearer.

Rings made from recycled gold have been reported as being contaminated by radium decay products such as lead-210 and polonium-210. The gold was initially used for ‘radium treatment’ (the generic term used for radiotherapy), and manufactured into small radioactive ‘seeds’ that were implanted in patients to treat cancer. The internal surface of the gold seeds becomes contaminated, and once removed from the patient was sold for recycling, sometimes in jewellery. People wearing these rings presented with radiation burns to the skin under the ring. The practice of recycling gold from these sources has ceased, and ‘radium treatment’ superseded by safer and more efficient methods for treating cancer.

Scalar energy pendants, advertised as being manufactured from Icelandic, Japanese or Hawaiian volcanic ash, are sold as alternative medicine products claiming a number of healing properties. Gamma ray spectrometry performed by RNS indicated that the pendant tested contained significantly elevated levels of radioactive uranium and thorium (uranium and thorium are ‘natural’ elements after all).

ARPANSA, the federal government radiation agency, has issued a fact sheet (https://www.arpansa.gov.au/sites/g/files/net3086/f/legacy/pubs/factsheets/ScalarEnergyPendants.pdf ) on these products recommending that the pendant not be worn in proximity to unprotected skin.

There are a number of consumer products and materials that can contain elevated radioactivity levels, jewellery as described above, imported steel products containing cobalt-60, foods impacted by nuclear incidents, and many items incorporating naturally occurring radioactive materials (or NORM). RNS routinely provides analysis of these items to ensure radioactivity levels are below regulatory, prescribed limits and safe for general use within our community.