

FACULTY OF SCIENCE – RESEARCH BULLETIN

ISSUE 2: SEPTEMBER 2016



Welcome to the September issue of the Faculty of Science's Research and Graduate Studies Bulletin, where we outline all things research and science related!

The bulletin is produced the first week of every month and profiles all aspects of research being undertaken within the Faculty of Science. This bulletin outlines current opportunities for both staff and students including professional development, research tools and news about great achievements.

The bulletin will be emailed every month to all staff and HDR candidates in the Faculty of Science. If you have a news item, a resource, announcement or a great achievement related to research or HDR candidature you'd like to share, please send it to [Deborah](#) or [Melanie](#) for inclusion in the next bulletin.

In this month's bulletin:

- [FOS Seed Grants – Now Open](#)
- [ARC Linkage Grants – Continuous Rounds](#)
- [Mid-Career Researcher Workshops](#)
- [Crowdfunding Research Presentation](#)
- [CRC Projects – Now Open](#)
- [FOS Ethics Dates for 2016](#)
- [Australian Policy Online](#)
- [Predatory Publishers – A Timely Reminder](#)
- [Dehydration and its Impacts on Defence Personnel](#)
- [Advances in Medical X-Ray Imaging Lead to Patent](#)
- [CSU Research Office – Internal Deadline 10 days](#)
- [Research Data Management Plan – Minimum Information](#)
- [Journal Impact](#)
- [National Science Week – Drones, Droids and Robots](#)

HDR NEWS

- [Writing Up Awards](#)
- [Approved for Graduation](#)
- [New Candidates](#)
- [Hugh Kearns Workshop](#)

FOS Seed Grants – Now Open



FOS Seed Grants for early-career CSU researchers or those researchers who are relatively new to the research grant system.

There is a maximum of \$10,000 for one year, non-renewable, per application

Applications close **16 September 2015**.

If you would like to receive a copy of the guidelines and form please contact Deborah Munns, Research Liaison Officer, dmunns@csu.edu.au

[Back to top](#)

ARC Linkage Grants – Continuous Rounds



The Australian Research Council (ARC) has moved the Linkage Project scheme to continuous rounds, instead of annual rounds, from 1 July 2016. Decision-making on applications will take no more than six months from lodgement.

The Linkage Projects scheme involves collaboration between researchers and business to benefit the business, the economy and broader society. The change is intended to remove all barriers to collaboration.

[Back to top](#)

Mid-Career Researcher Workshops



The Research Office Professional Development Program has three training workshops for Mid-Career Researcher in the series which was launched in June. These workshops are designed for research active staff looking to take the next step in developing their research career. The workshops are being presented by four Professorial research leaders within CSU with substantial experience in their topic area. The planned workshops are as follows:

Tues 13th September – Prof Robyn Watts – “Establishing and managing research projects with multiple partners, particularly government agencies”

Tues 11th October – Prof Sharynne McLeod – “Balancing research capacity and excellence with professional engagement”

Tues 18th October - Prof Lee Baumgartner – “Establishing and managing large international research projects in developing countries”

For more information: <http://www.csu.edu.au/research/professional-development/program-calendar>

[Back to top](#)

Crowdfunding Research Presentation - 28 September



The Faculty of Arts and Education and School of Information invite all researchers to a Crowdfunding for Research workshop by Professor Deb Verhoeven, Chair of Media and Communication at Deakin University. In 2013 Professor Verhoeven initiated the Research My World collaboration between Deakin University and the crowdfunding platform pozible.com to pilot the micro-financing of university research. Professor Verhoeven is one of Australia's leading proponents of Digital Humanities research.

Wednesday 28 September 2016 – 11.30 – 12.30 followed by lunch. National Wine & Grape Industry Centre – Wagga – RSVP: wkelly@csu.edu.au

[Back to top](#)

CRC Projects Selection Round

The 2nd CRC Projects selection round is open for applications. Applications will close at 5:00pm AEDT (Canberra time) on **Wednesday 26 October 2016**.

CRC-Ps are small collaborations working on short project timelines with simple governance and administration arrangements. They are intended to deliver a short term, industry-identified and industry-led collaborative research project to develop a product, service or process that will solve problems for business and deliver tangible outcomes. Projects should benefit SMEs and increase their capacity to grow and adapt in changing markets.

Please note that a CRC-P must have at least:

- Two Australian industry organisations including at least one small or medium-sized enterprise (SME) and one of these entities must lead the application.
- One Australian research organisation.

For more information: <https://www.business.gov.au/assistance/cooperative-research-centres-programme/2nd-crc-p-selection-round>

[Back to top](#)

FOS Ethics – New Contact Details and Committee Dates for 2016

The Faculty of Science Ethics Committee meets on the second Thursday of each month. The FOS-FHEC meeting and submission closing dates for the remainder of 2016. **Note: Submissions must be received by 5pm on the date of closing.**

Submission Deadline	Meeting Date
Thursday 1 September	Thursday 8 September
Thursday 6 October	Thursday 13 October
Thursday 3 November	Thursday 10 November
Thursday 1 December	Thursday 8 December



Please send any correspondence or applications to the **new email address**: FOS-FHEC@csu.edu.au.

The **new contact address** for use on information sheets and other documents:

The Executive Officer
Faculty of Science, Human Ethics Low Risk Committee
C/ School of Exercise Sciences
Allen House, Building 1431
Bathurst, NSW 2795

Tel: + 61 2 6338 6168

ALL applications must be signed by the relevant Head of School.

Queries can be made to the FOS-FHEC Executive Officer: Deborah Munns FOS-FHEC@csu.edu.au

[Back to top](#)

Australian Policy Online – Access to up-to-date Research Documents



Are you conducting research in fields of rapid policy development – such as climate change, migration, terrorism, education, health or refugees? You may be interested in subscribing to Australian Policy Online (APO).

Policy Online is a research database and alert service providing free access to full text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand. APO can also be used to show the broader impact of your research.

APO provides access to research resources from local, and global, universities, governments and other organisations about a range of current topics.

<http://apo.org.au/about>

[Back to top](#)

Predatory publishers – A Timely reminder!

A [lawsuit](#) has been filed in the U.S.A. against the OMICS International publishing group, who publish hundreds of open access academic journals. This publisher has been charged with deceptive practices around review processes, fees, and membership of its editorial boards.

**WRITER
BEWARE**

This serves as a timely reminder to all to exercise caution in selecting a publishing outlet for your research. Predatory or deceptive publishers have become prolific in academic publishing and it can be difficult to determine the quality of a journal or publisher at face value. Your choice of publisher could have a direct impact on the eligibility of your publication for government submissions such as the internal [Research Outputs Collection \(ROC\)](#) and [ERA](#), and for internal processes such as applications for academic promotion.

If you are new to the publishing process or would like more information about finding an appropriate outlet and maximising the impact of your research, the Division of Library Services have a guide to assist you. This guide covers topics such as:

- Journal relevance and discoverability (including indexing and open access)
- Peer review status of a journal
- Predatory or deceptive publishers
- Resources to assist in selecting a publisher
- The consequences of publishing your work with questionable publishers

To view more information, please view the [Where to Publish](#) section of the [Research Impact Library Guide](#). Library [faculty liaison staff](#) can also often provide advice about publishers to avoid.

[Back to top](#)

Dehydration and its Impacts on Defence Personnel

A group of HDR researchers from the School of Exercise Science, Sport and Health, led by Professor **Frank Marino**, have been studying the impact of dehydration in the defence forces. The research will be used to provide local information to develop guidelines for hydration for Australian troops.

The research, based at the exercise and sports science laboratories on the Bathurst campus, tests civilian subjects as well as army reserve volunteers from the local region to study their performance when dehydrated.

The researchers check their USG (urine specific gravity) when they first go into the labs, and then participants cycle in a heat chamber [which is set at] 35-38 degrees Celsius and 60 per cent humidity. Participants cycle for two to three hours during which they lose two to three per cent of their body weight.

Once dehydrated, participants are not allowed to drink water until they have done a series of cognitive tests on a computer. Participants were fitted with a headset that uses near infrared spectrometry probes to analyse brain function.

The research is funded by a Spitfire Memorial Defence Fellowship. *The Spitfire Memorial Defence Fellowship Scheme* was established by ex-wartime Spitfire pilots and their ground crews for research in areas of defence.



Professor Frank Marino with an army reserve volunteer



Researcher and PhD graduate, Nicole Vargas with a participant

(Photos courtesy of Melanie Pearce, ABC Central West).

Professor Marino can be contacted fmarino@csu.edu.au

For more information about the dehydration research refer to the stories on the CSU Latest News and ABC Central West websites:

<http://news.csu.edu.au/latest-news/science/dehydration-and-military-performance>

<http://www.abc.net.au/news/2016-07-27/dehydration-in-defence-forces-wwii-spitfire-pilots-fund-research/7662026>

[Back to top](#)

Advances in Medical X-Ray Imaging Lead to Patent

Dr Xiaoming Zheng, Senior Lecturer, Medical Radiation Science, in the School of Dentistry and Health Sciences, has successfully filed a patent titled 'A Method and System for Automating Radiation Dose Parameters'. The patent was based on my paper "Attenuation Based Governing Equations for Automatic Exposure and Peak Voltage Controls in Medical X-ray CT Imaging" which was accepted for publication by the (Journal) "CT Theory and Applications" (2015) pending the patent application.

Dr Zheng recently presented a paper at the 5th International Conference on Biomedical Engineering and Biotechnology, Hangzhou, China (1 – 4 August 2016). His paper title was "Dose correction in medical X-ray imaging in low dose regime" which has been accepted for publication in "Journal of Medical Imaging and Health Informatics" (currently in press).



Participants at the 5th International Conference on Biomedical Engineering and Biotechnology.

Dr Zheng has a number of papers currently in press and is presenting at a number of conferences later this year.

Dr Zheng can be contacted via xzheng@csu.edu.au

[Back to top](#)

CSU Research Office – Internal Deadline 10 days



All research grant and consultancy applications, unless otherwise stated by the Research Office, **must be submitted a minimum of ten (10 working days) prior to the external submission date.**

Fully completed applications (including required number of copies) should be forwarded to the Research Office with any source documents (guidelines, terms and conditions or letters of invitation - either in hard copy or web reference) for general review and authorisation by DVC (Research, Development & Industry).

Applications for research or consultancy funding must be submitted through the Research Office and must be accompanied by a signed and completed [Notice to Submit](#) form.

If you are seeking *leverage funding* this also needs to have been signed off prior to submitting the application to the Research Office.

[Back to top](#)

Research Data Management (RDM) Plans – What to include?

As a minimum you will be asked:

- Some details of the project and researcher(s)The type(s) of data being collected / created / used
- How and where you will analyse your data
- If you will be collaborating with researchers outside the university
- If the data is subject to an ethics approval, is sensitive or confidential
- How much data storage is required during 'active research'
- Your plans for long term archive, reuse and potential sharing

Finding Information on Journal Impact



As CSU no longer has access to Journal Citation Reports (JCR) the Library has received many queries about how to find information on the relative quality of journals. There are two tools that can be used to gain information either derived from or similar to JCR.

The first option is to use ISI Web of Science (WoS) to discover the category and quartile rank of a journal in JCR.

The second option is to use Scimago Journal and Country Rank (SJR), which is based on Scopus data, to get various journal metrics, including one that approximates a JCR impact factor.

For more information about journal ranking refer to the **Library Resources Guide: Research Impact: Journal Ranking**

<http://libguides.csu.edu.au/c.php?g=139596&p=913240>

[Back to top](#)

Drones, Droids and Robots celebrate National Science Week 2016.

The Wangaratta Regional Study Centre recently participated in the-STEM Careers Expo aimed at exciting the next generation of scientists.



The STEM expo was organised by CSU, local schools, GOTAFE and others to generate more interest in science studies and careers. Drawing support from across Victoria, over 20 exhibitors interacted with over 400 students from 12 schools, and 230 community members, with participants from as far afield as Yea and Yarrawonga learning about programming spheroids, augmented reality, drones in agriculture, robotic therapy and more.

A teacher's aid at Milawa Primary School who attended the event wrote:

"I was telling the teachers how exciting it was, and how it has inspired me. I was telling the teachers and they are trying to incorporate STEM into their programs"

A photo competition with the CSU Lego-man was a hit, with the winning photo being CSU man with NAO the programmable humanoid robot.



[Back to top](#)

Writing Up Awards - Congratulations

Writing-Up Awards for Higher Degree by Research (HDR) Students are designed to assist them during the preparation of research articles or books which are based on their thesis submitted for a PhD, Research Doctorate or Masters by Research. The objective of the award is to support the increase of publication rates of HDR students at CSU. This year the round was very competitive with many high quality applications being received.

Congratulations to the following students who are the lucky recipients of the **\$10,000** tax exempt scholarship to support the preparation of research outputs which are based on their submitted thesis.



- Parul Srivastava
- Paris Grant-Preece
- Luisa Perez Mujica
- Paul Amoateng

[Back to top](#)

Congratulations - Approved for Graduation

Congratulations to the following students who have recently been approved for graduation:

- ❖ **Hasan Zubair**, thesis title is *“Allelopathy in Lucerne (Medicago sativa L)”*
- ❖ **Karma Tenzing**, thesis title is *“The Role of Property Rights in Natural Resource Management: The Case of High Altitude Rangelands of Bhutan”*
- ❖ **Fady Akladios**, thesis title is *“Selective Induction of Oxidative Stress in Cancer Cells via Novel Therapeutic Approaches”*
- ❖ **Alistair Murphy**, thesis title is *“Load Monitoring in High Performance Youth Tennis Players: Preparation for Competition Readiness”*
- ❖ **Sinhabhu Abayawickrama**, thesis title is *“Environmental, Grain Ultrastructural and Biochemical Properties Influencing Rice Milling Quality”*
- ❖ **Paul Amoateng**, thesis title is *“The Changing Spatial Extent of Rivers and Floodplains and its Implications for Flooding: The Case of Kumasi, Ghana”*
- ❖ **Naveed Aslam**, thesis title is *“Aflatoxins, buffalo dairy production and milk quality in Pakistan”*
- ❖ **Ronnie Dotaona**, thesis title is *“The Potential of Metarhizium Anisopliae as a Biological Control Agent for Sweet Potato Weevil, Cylas formicarius”*
- ❖ **Subhashini Abeysinghe Mudiyansele**, thesis title is *“Interactive Response of Temperature and Light on Vegetative and Reproductive Growth of Grapevines (Vitis vinifera cv. Shiraz) under Field and Controlled Environment Conditions”*
- ❖ **Michelle Olivier**, thesis title is *“Exploring the Relationship between Localisation and Sustainability”*
- ❖ **Buddi Poudel**, thesis title is *“Effects of Pastoralism on Foraging and Behaviour of Himalayan Marmot (Marmot himalayana) in High Altitude Rangelands in Nepal”*
- ❖ **Hamish Carver**, thesis title is *“The Paramedic Preceptor Experience: Improving Preparation and Support”*

[Back to top](#)

Welcome to our New Candidates



David Campbell – School of Environmental Science, working with Paul Humphries and Nicole McCasker. David commenced this session. David will be based on the Albury Campus on a full-time basis.

Pierluigi Reveglia – School of Agricultural and Wine Science, working with Sandra Savocchia and Regina Billones-Baijens. Pierluigi commenced this session on a full-time basis and will spend a portion of each year on the Wagga Campus.

Please make these new candidates welcome.

[Back to top](#)

HDR & Supervision Workshops by Hugh Kearns



Recently HDR students and supervisors at CSU had the fantastic opportunity of attending two workshops by world-renowned speaker and educator Hugh Kearns. Hugh is the author of the highly popular *'Seven Secrets of Highly Successful Research Students'* among other books. Both workshops discussed practical strategies to deal with common problems faced by HDR students and their supervisors and included discussions on;

- Supervisor/student relations
- Dealing with writer's block
- Attitude (or lack thereof!) in relation to the RHD – it's not a Nobel prize
- Getting your student to seek help when they are stuck
- The student who never has enough time
- Treating the RHD like a job
- Keeping on going when the going gets tough

You can read more about Hugh's expertise on his webpage at <http://www.ithinkwell.com.au/hugh-kearns>, follow him on Twitter at @ithinkwellHugh or borrow his books from the CSU library. If you missed the workshops the books are highly recommended.

[Back to top](#)

Next Issue: If you would like to contribute a story to the next issue please submit it to Deborah or Melanie by the **26th of September**. The next issue will be released in the first week of October.

Until next month.

Dr Sandra Savocchia
Sub-Dean Graduate Studies
ssavocchia@csu.edu
02 6933 4341

Deborah Munns
Faculty Research Liaison Officer
dmunns@csu.edu.au
02 6338 6168

Melanie Snell
Faculty Graduate Studies Liaison Officer
msnell@csu.edu.au
02 6933 4173