

# **ANZMAG NEWS - NOVEMBER 2015**

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Dear all,

Welcome to the November ANZMAG e-newsletter for 2015. I hope most of the people reading this are getting ready for the ANZMAG conference (<u>http://anzmag2015.co.nz/</u>) at the end of the month; it's shaping up to be a really good one. I am also sure you all saw the recent call for Board members to be voted on at the meeting. Please do consider standing if you want to play a role in the society.

## ARC MAGNETIC RESONANCE GRANT SUCCESS

Those of you on this side of the ditch will know that the Australian Research Council (ARC) LIEF, DECRA, Discovery and Discovery Indigenous research projects came out at the end of last month. There were several successful grants for magnetic resonance equipment.

- Your editor was very happy to be a CI on a grant lead by Prof. Frances Separovic for the first DNP magnet in Australia.
- Another LIEF went to the team from UQ headed Prof. David Craik at UQ to enable the purchase of new NMR equipment.
- A team from Monash University headed by Associate Professor Martin Scanlon won LIEF funding for a facility for NMR based fragment drug discovery.
- MRI is also part of a DECRA project won by Dr Yu Chen of UQ on the topic of novel diagnostic and therapeutic nano-platforms for cancer treatment.

Well done to all and commiserations to those that missed out. The ARC has a neat new system for reviewing grant outcomes at <a href="https://rms.arc.gov.au/RMS/Report/Download/Report/a3f6be6e-33f7-4fb5-98a6-7526aaa184cf/8">https://rms.arc.gov.au/RMS/Report/Download/Report/a3f6be6e-33f7-4fb5-98a6-7526aaa184cf/8</a> if you are keen (just change the scheme round at the top right to get the relevant data). There is also a very interesting blog post discussion on the Discovery outcomes at <a href="https://pacificsoutheast.wordpress.com/2015/10/30/fixing-arc-discovery-projects/">https://pacificsoutheast.wordpress.com/2015/10/30/fixing-arc-discovery-projects/</a> that might be of interest.

## SYNTHESISING CUSTOM CHEMICAL STANDARDS WITH RESEARCH DIRECTIONS PTY

If you were lucky enough to get a grant last week then perhaps you have a tricky compound that you need a standard of but it is not sold by Sigma? If so then Research Directions (<u>www.researchdirections.com.au</u>), a small chemical manufacturing firm in Brisbane, could be what you need. The company has synthesised a collection of carnitine compounds used for diagnosis of metabolic disorders which you can see on their website. They would be pleased to hear of any compounds that you require but have been unable to source. Please send your wish list to CEO, Dr Stephanie Smith on stephanie@researchdirections.com.au and she will be happy to help you out. It is a clever idea so good luck to the team.

## **PUBLICATIONS CORNER**

There is a new book out this month that I think will be of interest. It is edited by Ronald J. Clarke from the University of Sydney and Mohammed A. A. Khalid from the University of Taif in Saudi Arabia. The title is "Pumps, Channels and Transporters: Methods of Functional Analysis" (see <a href="http://www.booktopia.com.au/pumps-channels-and-transporters-ronald-j-clarke/prod9781118858806.html">http://www.booktopia.com.au/pumps-channels-and-transporters-ronald-j-clarke/prod9781118858806.html</a>) There's one chapter in the book from Philip Kuchel on NMR and another from Louise Brown and Joanna Hare on EPR; plenty there to engage people interested in magnetic resonance.



# ACS PUBLICATIONS LECTURESHIP CALL

If you have any spare time it may be worth considering nominating someone for an ACS Publications Lectureship. These Lectureships offer a chance to recognize and share innovative research led by outstanding investigators at various career stages. Nomination requirements and winnings are specific to each lectureship, and each award is a salute to great science. The categories encompass some that are relevant to metabolomics. They are; Analytical, Applied, Biological, Organic/ Inorganic, Materials Science & Engineering and Physical. There is plenty of scope to include magnetic resonance in these areas and deadlines range from November 15, 2015 to April 6, 2016. So if you know someone who deserves a lectureship then why not nominate him or her at <a href="http://connect.acspubs.org/lectureship">http://connect.acspubs.org/lectureship</a>

## COMMUNITY FOR OPEN ANTIMICROBIAL DRUG DISCOVERY

I know this one is not directly magnetic resonance related but I think it is an important topic that will be of interest. The Community for Open Antimicrobial Drug Discovery is a global, non-for-profit, open access program for discovery and development of new therapies against multidrug-resistant bacteria funded by the Wellcome Trust. They are based at UQ's Institute for Molecular Bioscience and offer antimicrobial screening free of charge to academic researchers, and make no claims on results or IP. They test against 5 key pathogens, and 2 fungi from primary screening up to hit validation assays. They also back screen for cytotoxicity. To send compounds they ask for 1 mg of compound (or 50uL at 10mg/mL) and don't need structures. Please visit <a href="http://www.co-add.org">http://www.co-add.org</a> for more information.

## **STORIES FROM THE WEB**

#### http://www.nist.gov/pml/div683/20150714 micro esr.cfm

This link goes to a story about how researchers have come up with a way to shrink electron spin resonance (ESR) and make it useful for exploring tiny objects, or specific spots on large ones.

• <u>http://phys.org/news/2015-11-scientists-samples-industrial-conditions-tool.html</u>

I like this story. It reports on a clever new way to perform solid state NMR to look at reactions in real time using a solid state NMR rotor that doubles as reactor vessel.

• <u>http://www.diagnosticimaging.com/mri/mri-shows-women-and-men-hearts-age-differently</u>

Apparently the left ventricle of the heart ages differently between men and women. This has recently been shown using MRI studies on over 2,935 subjects. Click the link to read more.

## **NEW ZEALAND STORIES**

I'd like to finish off this month with a request to those members in New Zealand to please consider sending in any magnetic resonance related success stories for inclusion in the ANZMAG newsletter. I do my best to make said newsletter inclusive but as I'm based in Melbourne I know I may miss things on occasion. I can't promise everything will get included but I'll do my best. So if you have any news that you'd like to see on these pages please just send it to me at oliver.jones@rmit.edu.au. Thank you.

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See you all in New Zealand.

