

The Society for Free Radical Research

NEWSLETTER (May 2011)

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Obituary Harry Sutton (1926-2011)

The Australasian Society for Free Radical Research lost one of its longest standing members with the death of Harry Sutton in February. Harry was a traditional physical chemist who was one of the early recruits to the new field of radiation chemistry, which developed after the Second World War in order to understand the effects of nuclear radiation. This was essentially the study of free radicals, and the work carried out by Harry and his colleagues provided the foundation for the biological chemistry of free radicals that is studied today. Later in his



Harry Sutton 1968

career, I had the fortune of linking up with him and taking this chemistry into a more biological context.

Harry was born in a tiny country area in Southland. His mother died when he was born and his father soon after. He was brought up by his aunt, initially on a farm where they lived with his grandmother and uncle, then in Christchurch where he and his aunt moved so he could attend high school and study chemistry at Canterbury University. He then went to the UK for a PhD at Durham University and afterwards became a research fellow at Leeds University, which under the direction of Fred (later Lord) Dainton was one of the foundation centre's in the UK for nuclear science. Fred Dainton had an illustrious career as a practising scientist and as a government science advisor. One of his far reaching recommendations in the latter capacity, which I am sure was close to Harry's heart, was to make mathematics compulsory for all pupils until they left school, as training for logical reasoning as well as its value for science.

In 1952 Harry returned to Otago, but after a few years took up an academic position in Edinburgh. His first PhD student, Bill Seddon, remembers him with affection but also as a hard task master, especially for a student getting his head around the rigors of kinetic analysis. He recalls "The University had strict rules about PhD theses being entirely the student's own work. Although rarely enforced, Harry stuck to this by the letter. With no pre reading or editing, I was truly on my own. You can imagine my trepidation when I fronted up to Harry and my external examiner."

In the mid 1960s, Harry was persuaded to come back to New Zealand to the recently established DSIR Institute of Nuclear Sciences, set up with a linear accelerator for his use. A prime impetus behind his appointment was the government's interest in nuclear power and the need for expertise to explore its potential. As we know, the mood swing of the country meant this did not eventuate. Nevertheless, a significant part of Harry's time was taken up with political issues related to nuclear energy, for example risks associated with nuclear powered ships entering our harbours or eating irradiated food. An often frustrating endeavour when responses are dictated not so much by science as emotion. In between time, he was able to continue with his chemistry, for example producing papers on superoxide and bromine radicals that have found application in areas way outside their original context. He also produced what I believe to be one of the least cited significant papers in free radical biology. It was at a time of heated debate on whether superoxide was toxic, with one camp proposing that toxicity was due to hydroxyl radical production from a direct reaction between superoxide and hydrogen peroxide. Harry's paper reporting an extremely low rate constant provided, in my opinion, the best evidence that the reaction was a non-starter, although its surprisingly low impact (cited a whole 18 times) meant that it took some time for this to be widely accepted.

It was at DSIR, in the mid 1970s, that our collaboration started. I had been studying haemoglobin autoxidation and become excited when we identified superoxide as a product. This was shortly after SOD had been discovered, when superoxide was thought to be highly reactive and toxic, and I was

keen to see what bad things it would do in the red blood cell. In a chance meeting with Graeme Wright, my chemistry MSc thesis supervisor, he mentioned Harry as someone who knew about superoxide and suggested I contact him. So I was shortly on a plane to Wellington. He was to meet me off the airport bus. "How will I recognise you?" I asked. "I'll have a book." And there waiting was a man behind a very prominent physical chemistry text book. No problem. Harry was enthusiastic, we took my haemoglobin, bombarded it with superoxide in his linear accelerator – and disaster, nothing happened! Not to be deterred, we went on, found that there was a reaction, but as emerged with so much of superoxide chemistry, it was not nearly as fast as had been anticipated.

This led to a long-lasting collaboration, with further studies on superoxide, quinones, paraquat, and trying to sort out the nature of the product of the Fenton reaction. He was also the man to go to when anyone in the lab had a complex kinetic problem they could not solve. We approached him with problems relating to peroxide diffusion from inside neutrophils, quantifying bacterial killing and much more. This was a fun exercise. Harry was a physical chemist of the old school, used to working with rigorously controlled chemical systems. An enzyme was a black box, and mention of working with anything biological elicited his characteristic response of "that's impossible". Yet he was full of enthusiasm about applying his expertise to these systems, and after much animated discussion, this response would be replaced by "let's give it a go" and we would be underway. He tackled a number of projects in this way, often involving students who became charmed by his approach. He put an immense amount of time and effort in coming up with solutions, which usually required complex kinetic analysis, which Harry carried out without aid of a computer and frequently involved pages of logically set out handwritten equations.

As I learned from his family, Harry was the true scientist at home as well as at work. He constructed dolls' houses and garages with fully functional electrical systems for his children. His annual jam making, with the precision of highly controlled chemical synthesis, was legendary. He was also expert at knitting and sewing (perhaps picked up in childhood from his aunt) to the extent of making his daughter's wedding dress and constructing and upholstering much of his own furniture.

When Harry retired from the DSIR some 20 years ago, this did not diminish his interest in science. He took up tutoring high school chemistry and physics, I understand with the rigor that he applied to his own science and with the outcome of many appreciative students. He was a frequent visitor to our lab whenever he came to Christchurch, always keen to know what was new, and full of wonder at what people were doing and how his field had developed. "You're a bloody marvel" was his catch phrase as he heard how someone was applying his type of science to what to him was a seemingly impossible situation. Although understated in promoting his own work, Harry made a number of significant contributions to the free radical field, and was something of a marvel himself.

Christine Winterbourn University of Otago, Christchurch

Christchurch Earthquake

On February 22 at 12.51 pm Christchurch was struck by an earthquake of magnitude 6.3. While lower magnitude than the September earthquake, this one struck within 10 km of the centre of the city, at a shallow depth. Local geographical factors combined to generate some of the largest vertical land accelerations in recorded history, with eyewitness accounts of people being thrown into the air and the raising of the Port Hills by 40 cm. Severe destruction and loss of life followed. Comments from affected society members follow.

Steven Gieseg, University of Canterbury

In July we started moving into a brand new research building which after some initial design problems was starting really work really well. Then the earth moved on September 4th. Like many buildings we suffered damage to various seismic wall joints but most damaging was the loss of power for over 12 hours. All of our fridges and one of our -20 freezers defrosted resulting in a very long insurance list from our lab alone. I lost count of how many hours were taken up with the insurance process. Thankful all the equipment came through without damage. Since the laboratory designers had decided shelves made a lab look messy there was very little to fall down. After about 4 weeks we were given the go ahead to clean up and by late October were starting to bring up various cell lines and reorder lost chemicals. The ongoing aftershocks prevented us running the Ultracentrifuge so Sally McCormack's Laboratory in Dunedin had been preparing the LDL for us. We had to shut down operations over Christmas for four weeks so the builders could repair and paint all the cracks. By February we were looking pretty good and had just completed a series of meetings trying to work out what we were actually doing research wise. Not sure why we bothered. February the 22nd was a beautiful late summer day. I was just ordering the large combination sushi in the coffee shop next door to the research building when the ground shot violently from under my feet. The sound of a 10 story building shaking above my head is one I am unlikely to forget. My research students working in their offices on the 4th floor had one hell of a ride but nothing to those at the top of the library tower.

The initial reports for our building looked rather grim but further inspection by the Engineers resulted in it being given the green sticker allowing use to return on the 5th of April, six weeks after the quake. We now our in the process of cleaning up, having our equipment rechecked and getting MAF approval to start PC2 work. The mould in the incubators was impressive. Current estimates on the repairs suggest we will be operation by mid May. In total we have lost over eight months of productive research time which means in a number of key research areas our data is no longer publishable. This has been very frustrating especially for the research students who are having to be given massive extensions and in some case whole new projects. However, we are the lucky ones. No one in our laboratory team was injured or had their house destroyed. For that we are very thankful. We are also very humbled by the many emails from colleagues and friend offering help and support.

Anna Chapman, University of Otago, Christchurch

Most of the Free Radical Research Group were on the 7th Floor of the University of Otago, Christchurch building when the February earthquake occurred. Fortunately the building had been well designed and swayed with the impact so that we were all able to walk out unharmed. Initially we were unaware of the severity of the quake, then the ambulance bay next door became busy and phone calls to family and friends informed us of what had happened. Some of us have lost friends, some have lost homes, almost everyone's home has suffered some damage but everyone is coping.

An initial assessment of labs looked very promising, with no obvious damage and very little mess to clean up. Unfortunately a more thorough inspection found some significant structural damage and

as a result we are currently unable to work in the building. While repair work is being carried out we have had to find alternative accommodation or face a lengthy period of down time. A group of us have been fortunate enough to move into the lab space at Canterbury Scientific, a private company that produces hemoglobin standards. They have been very welcoming and we are starting to get back to work again after moving a considerable amount of equipment and reagents. Some people are working from University provided office space and many people are working from home. We are getting used to the new "normal", with members of our group spread across the city but it will be great to get back into our building soon.

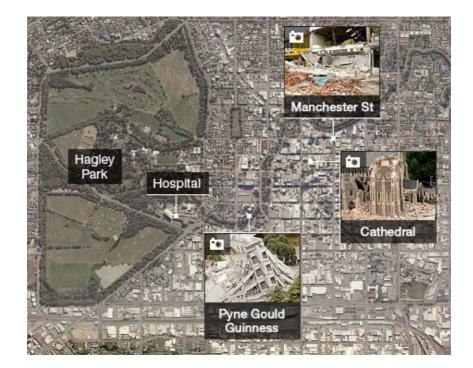
Paul Pace and Rufus Turner, University of Otago, Christchurch

On Tuesday 22nd February, our usual group meeting on the 7th floor was violently disrupted by the 6.3 quake. No one said a word as everyone dived under desks whilst the building swayed from side to side in an eerie silence for about 30 seconds. The intensity of the swaying increased dramatically giving the impression that if it continued the building would collapse. Thankfully the shaking tailed off and everyone streamed out of the room and downstairs, commenting on the new cracks all the way down the stairwell. From the state of the road outside, it was evident that this earthquake's epicentre was close this time.

After the initial trauma and making it outside, a subsequent aftershock 10 minutes later told us that it was time to leave. Anxiety intensified for people, as with mobile phone networks overloaded it was very difficult to contact loved ones. Trying to get home was time consuming for a lot of people as traffic was heavily congested due to power outages on traffic lights and major buckles, floods and liquefaction on the roads. It took some people over 4 hours to get home!

Most people were relatively fortunate with only minor or moderate damage to buildings and no personal injuries to friends & family. Unfortunately for some colleagues, upon arrival their home no longer appeared to be liveable.

The city and work remained closed for the remainder of that week. With significant damage to the medical school, we were fortunate to be able to find two separate sites to perform limited research from in the meantime. The medical school is forecast to be fully open by August.



Conference Reports from SFRRI/SFRBM meeting Orlando, Florida Nov 2009

Nicholas Gad - Macquarie University, Sydney

In November 2010, I had the wonderful opportunity to attend the joint 17th Annual SFRBM and 15th Biennial SFRRI November 2010 conference in Orlando, Florida, USA at the 4-star Caribe Royale. The conference attracted over 800 participants from all over the world, and thanks to SFRRA and Macquarie University I was one of the participants from Australia.

Many facets of the free radical research were explored, beginning with a pre-meeting workshop 'New approaches for examining nitrative and oxidative stress in biology' (featuring our own Mike Davies from HRI) on Wednesday November 17th, climaxing with a banquet and awards night on Saturday and finishing midday Sunday. An invaluable professional development opportunity was incorporated into the program and each day began early with the 'Sunrise Free Radical School' session and ended with the immensely popular 'Hospitality' session (American style professional networking gathering, with open bar).

As SFRBM has a medicinal aspect to its scope, a wide gamut of topics was explored, relating to the effect oxidative species, nitrous oxides and free radicals have both in the laboratory as well as in diseases. Two notable plenary lectures (one by Prof. Bruce Ames, the other by Prof. Etsuo Niki) related to the antioxidative effects of vitamins and micronutrients. Bruce Ames presented that the populations of developed countries like the US, are lacking in vitamins/micronutrients due to the excess consumption of refined processed foods, resulting in increased oxidative DNA damage. Interestingly, a connection has also been made between this deficiency and obesity, with increased hunger being a possible symptom. Etsuo Niki made some comparisons between the antioxidative properties of vitamins (notably C and E) and antioxidant rich foods that are claimed as beneficial. And yes, vitamin C is still generally the best.

Over 600 posters were presented at the conference, in three broad areas: 1) Oxidants/radicals in disease/aging 2) Generation of reactive species and their role in biological signalling, and 3) Chemistry of oxidants and reactive species. The diversity of excellent seminars and poster presentations held throughout the conference helped me gain a broad understanding of the directions free radical research is taking into 2011 and I thank SFRRA for financially supporting my attendance of this conference.

Nick Magon - University of Otago, Christchurch

I recently had the opportunity to attend the 17th Annual Meeting for the Society for Free Radical Biology and Medicine (SFRBM) (a joint meeting with the Society for Free Radical Research International (SFRRI)). The conference was held at the Caribe Royale All-Suite Hotel and Conference Center in Orlando, Florida.

The sessions covered an extensive range of topics including free radical chemistry and the role of oxidants in disease. Sessions were short (1-2 hours) with generous breaks which made it much easier for a jet-lagged attendee such as myself to stay focussed. The majority of the oral presentations from invited speakers were of a high standard and it was great to finally be able to put faces to names that I had previously heard of or read in journals.

I found the poster sessions to be extremely useful, all of which were well attended. During the sessions where I wasn't presenting I was able to interact with other students and discuss experiences with different methodologies and come away with lots of new ideas. I presented a poster detailing a

novel modification that is formed on the neutrophil protein calprotectin following neutrophil activation. My poster was well received with an almost constant flow of people discussing my results with me over the 2 hour session. I came away with many new ideas and different perspectives on my work.

Overall I thought the conference was very well organised and managed and enabled me to get a good insight into research that is happening outside of my area and also gave me many new ideas for my own work. I would like to thank the SFFR(A) for providing financial support in the form of the 'Young Investigator Travel Award' and allowing me to attend and present my work at this conference.

Conference Reports from SFRRA meeting in Akaroa, New Zealand, Dec 2009



Melina Glasson – University of Melbourne

The 19th Annual Conference of SFRRA Australasia was a very different conference than the other conferences I had attended in 2010. Upon scanning the programme for the three days I was, admittedly, nervous and felt like an imposter or in the very least an odd novelty. Here were some serious researchers presenting their work that, ultimately, can help save lives and there was I with my little poster about art...

But areas of interest aside, after listening to the first few presentations, it became clear to me that it was the same free radicals and underlying chemical principles involved in biological systems as in works of art. So I settled back, relaxed and tried to keep up with all the unfamiliar acronyms.

I found the two early morning Education Sessions very informative but it certainly was a struggle making sure I was there on time! Session 8, on the Thursday afternoon, was by far my favourite block of presentations though and our research group were very pleased to hear that Corin had finally won an award for his talk. I found it inspiring to hear about the work achieved by students completing their PhD- as a recently confirmed student it's nice to see the light at the end of another's tunnel.

Highlights of the week include the harbour cruise, playing "500" with Carl, Stefanie and Corin into the late hours and of course having a boogie on the dance floor with the HRI group.

Akaroa is a beautiful coastal town and having never been to New Zealand before, I found the scenery to be picturesque and unforgettable. So thankyou to the organisers- Liz and Mark, I learnt a lot and thoroughly enjoyed the conference. I would also like to thank the SFRRA for providing financial support through the "Young Investigator Travel Award."

Shane Antao – University of Sydney

I attended "the Society for Free Radicals Research -Australasia" (SfRR-A) 19th annual conference, over November 29-December 3rd 2010. This was the only conference I chose to attend in 2010 and it proved to be a noteworthy highlight. The conference allowed me to become familiar with some of the most prominent researchers within my field, and as a young researcher myself; I felt this experience was very valuable.

I was given the opportunity to orally present the novel key findings of my PhD data to an open audience, and although this wasn't my first international presentation, the parity of research themes focused on within the conference meant that the questions I was asked had proven insightful and topically relevant. SFRR(A) enables collaborations between researchers contained within a very specialised field of interest. I was thus able to exchange methods & future directions of my work with both basic & medical scientists in the multitude of specialties of the human nervous system

Attending this conference allowed me to improve my networking possibilities with the aim to forge collaborations with researchers who will be for the most part geographically adjacent & thus more likely to share future projects.

Tessa Barrett – Heart Research Institute, Sydney

The 19th annual Society for Free Radical Research (Australiasia) conference was held in the picturesque harbour-side town, Akaroa, New Zealand. The conference brought together a variety of local and international delegates to share their research, encompassing the wide area of free radical research. The conference combined a good mix of both early career, and established scientists, along with an entire session dedicated to PhD student presentations.

Sessions covered emerging research areas from defining the role oxidative stress plays in mitochondrial dysfunction and disease, to new research based on conventional themes including the essential role of ascorbate and the multi-facet role of nitric oxide. The biological role of the various peroxiredoxins and oxidised low-density lipoprotein was explored, in addition to studies that demonstrated how applied knowledge of free radical processes can assist in the conservation of artworks, and in the development of antioxidant therapies.

In both the oral and poster sessions there was a large emphasis on the role of myeloperoxidase (MPO), and the oxidants catalytically produced by this enzyme. Presented research explored the role MPO and it's oxidants play in the modulation of redox processes and endothelial function, to deleterious effects in promoting cellular dysfunction and ultimately their links to inflammatory diseases including rheumatoid arthritis, gout and cardiovascular disease. Paracetamol, hydrazide, nitroxide and ceruloplasmin-based therapies were presented as proposed inhibitors of the often undesired, uncontrolled effects of MPO observed in clinical settings.

Studies were presented alongside emerging technologies developed to further assist in the interpretation of the in vivo role, and consequence of free radicals. Presented applications included ratiometic mass spectrometry and green fluorescent proteins, tools capable of identifying the locality of oxidative biochemical reactions. Further development and implementation of these techniques are proposed to enhance understanding of the role of oxidants in both global and local cellular settings.

Prof. Christine Winterbourn and Prof. Tony Kettle provided an educational and entertaining introduction to each day, whilst providing us with some of the essential fundamentals and history of the field. Additionally, Prof. Roland Stocker gave an interesting Lifetime Achievement Award Lecture that provided an insightful look at the growth of free radical research over the past few decades, and the increasing need for an interdisciplinary approach to scientific research. The meeting covered a cohesive, yet diverse range of research areas, and I am grateful to have been provided the opportunity to attend and present at the conference.



Dhakshinari Hulugalle - Victor Chang Cardiac Research Institute, Sydney

The only French outpost in the south island of New Zealand, Akaroa, provided the perfect backdrop for the 19^{th} annual conference of the Society for Free Radical Research, Australasia, held from the 30^{th} of November to the 2^{nd} of December, 2010. The quiet town with its small friendly resident population rubbed off on the participants, with the atmosphere being collaborative throughout the conference.

There were two education sessions based on the 'Biological chemistry of hydrogen peroxide' by Prof. Christine Winterbourn and 'The radical history of oxygen' delivered by Prof. Tony Kettle. It was a delight to listen to these lectures, which were very informative.

I also found the oral and poster sessions to be very interesting and educational. The quality of the speakers allowed for many of the sessions to be very lively. Personally, the high point was the opportunity to present a talk on several recent findings from my PhD project, which suggests a potential role for forbidden disulfides in Zn finger proteins, to a panel of highly respected senior scientists and peers in the field of redox biology.

As my PhD project is intensely focused on a structural and computational aspect of the influence of redox activity on proteins, the suggestions and feedback I received during the conference provided me with the prospect of looking at my project from an additional viewpoint.

The participants were taken on a cruise around the Akaroa harbour which provided a break from the Gaiety Hall, and a chance to enjoy some of the best gifts of nature plus the opportunity to make new friends. The highlight of the trip included Hector's dolphins, a small variety of dolphin found mainly around the west coast of New Zealand and some fur seals. Three days of intensive yet educational days came to a fitting end with a gala dinner followed by dancing to our hearts content. I would like to make this an opportunity to thank the SFRR(A) organizing committee for granting me a travel award that enabled me to experience this great conference.

Anu Shanu – University of Sydney

The SFRR Australasia 19th Annual Conference held in Akaroa, NZ during 30 Nov- 2 Dec, 2010 was an unforgettable experience, owing to the exquisite location and enlightening presentations. I was fortunate to attend the meeting and present my work as a poster, thanks to the travel support from SFRRA.

The programme interestingly assorted educational sessions covering the basics of redox chemistry and oral and poster presentations showcasing free radical research undertaken across Australasia. Of particular interest to me was some fascinating data presented by Prof. MJ Davies from Heart research Institute, suggesting 'selenium residues are major target for myeloperoxidase (MPO) derived oxidants'. This concept is significant in my work, which I presented as a poster titled 'Selenium supplementation as a potential therapy for acute renal failure associated with severe burns'. Although MPO has been widely described as an oxidative stress marker, its implication in my project has gained momentum since attending this conference. The informal and formal poster sessions were also helpful, providing opportunities to network with researchers of similar interests. Also, the final lecture by Prof. Roland Stocker who received the Lifetime Achievement Award was inspirational for beginners like me.

The conference was rendered remarkable also by the picturesque location chosen. The organizers took special care in providing delegates with plenty of opportunities to explore Akaroa, among which the harbour cruise was noteworthy. Overall, attending the SFRRA conference was a great experience and I would like to thank the organizers for arranging it so well and also for the generous travel support.



Tracey Kajer – Heart Research Unit, Sydney

I recently had the pleasure of attending the 19th annual meeting of the Society for Free Radical Research Australasia, held in Akaroa, New Zealand, from 30^{th} November -2^{nd} December 2010. This was my first international conference and I was given the chance to give an oral presentation entitled "Paracetamol metabolism by myeloperoxidase: an important marker and inhibitor of damage in inflammatory diseases". The interest I received from audience members was encouraging and also made me think outside the square.

The conference was a great opportunity for networking and learning about research going on outside of our lab. I was very interested in the talks concerning inhibition of myeloperoxidase as they're directly related to my work. Prof Tony Kettle's educational history session, complete with live experimental demonstrations, kept us all entertained. I found the talk by Assoc Prof Alicia Kowaltowski, about the effects of various calorie restriction diets on glucose metabolism, to be particularly interesting. Besides the experimental data, the point made regarding the broad use of the term 'calorie restriction', which can refer to a number of different diets, highlighted the need to be more critical when analysing the literature to ensure that fair comparisons are made. I would like to thank the society for providing me with a travel award and the opportunity to present my work.

Dates for your Diary

2011

May 22 – 25, 2011

Location: 7th International Human Peroxidase Meeting, Brussels, Belgium. Website: <u>http://www.brussels-peroxidases-meeting-2011.com/</u>

August 17 - 20, 2011

VII Meeting of the South American Group of the Society for Free Radical Biology and Medicine Location: Sao Paulo, Brazil Website: <u>http://www2.iq.usp.br/redoxoma/frb2011</u>

August 31 – September 4, 2011

5th Biennial Meeting of Society for Free Radical Research-Asia, 8th Conference of Asian Society for Mitochondrial Research and Medicine and 11th Conference of the Japanese Society for Mitochondrial Research and Medicine Location: Kagoshima University, Kagoshima, Japan Website: www.hal.kagoshima-u.ac.jp/dentrad/sfrra-asmrm-j-mit/

September 4 - 9, 2011

ESF-EMBO Symposium: Glutathione and Related Thiols in Living Cells Location: Sant Feliu de Guixols, Spain Further information: <u>http://www.esf.org/index.php?id=7159</u>

September 7 - 10, 2011

SFRR-Europe meeting "Redox biology and micronutrients: from signaling to translation and back" Location: Istanbul, Turkey For further information email: <u>nkozer@marmara.edu.tr</u> Website: <u>www.sfrr-europe2011.org</u>

October 27 – 29, 2011

Mitochondria, Apoptosis and Cancer (MAC) 2011 Location: Singapore. Website: <u>http://www.med.nus.edu.sg/phys/Pervaiz_lab/MAC2011/index.html</u>

November 16 – 20, 2011

Society for Free Radical Biology and Medicine 18th Annual Meeting Location: Sheraton Atlanta Hotel, Atlanta, Georgia, USA Website: <u>http://www.sfrbm.org/annualMeetings.php</u>

December 2 – 4, 2011

Redox Chemistry and Biology for Our Health The 6th Joint Meeting of the Societies for Free Radical Research Australasia and Japan 2-4 December, Tokyo University of Technology, Kamata, Tokyo, Japan Chairman: Yorihiro Yamamoto and Yuji Naito

2012

September 6 – 9, 2012

SFRR-International 16th Biennial Meeting Location: Imperial College London, South Kensington, London, Great Britain Website: <u>http://www.sfrrimeeting.org</u>

November 14 – 18, 2012

Society for Free Radical Biology and Medicine 19th Annual Meeting Location: Hilton San Diego Bayfront Hotel, San Diego, California, USA Website: http://www.sfrbm.org/annualMeetings.php



Society for Free Radical Research International

16тн **BIENNIAL MEETING**

Imperial College London 6-9 September 2012 South Kensington London, UK

Join your peers at Imperial College London in 2012 for four days of exciting scientific discussion and education bringing the international free radical research community together to hear and share the latest.



www.SFRRImeeting.org



The 16th biennial **Society for Free Radical Research International** (SFRRI) meeting will be held at Imperial College London in the heart of South Kensington in London. This meeting will be a premier forum for the latest advancements in free radical research. International experts from a broad range of disciplines including chemistry, biology and medicine will gather in 2012 to discuss the impact of current research, concepts and applications of free radicals and antioxidants in medicine and pharmaceutical industry.

Topics include:

- Aging
- Antioxidants and Novel Therapeutics
- Cancer
- Cardiovascular Diseases
- Chemistry and Reaction Mechanisms
- Diabetes-Metabolic Syndrome
- Generation and Action of
 Reactive Species
- Inflammation and Immunity

- Neuroscience
- Nitric Oxide and its Interactions
- Nutrition and Health
- Oxidation of Macromolecules
- Proteomics and Genomics
- Pulmonary Diseases
- Signal Transduction and Gene Expression



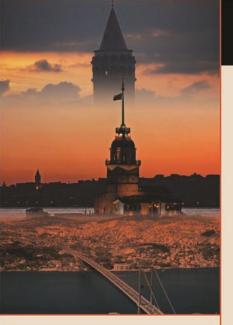
Sign up for updates now, visit **www.SFRRImeeting.org**



SFRR - Europe 2011 Meeting

Redox Biology and Micronutrients: From signaling to translation and back

The Marmara Taksim Hotel, Istanbul - Turkey September 7-10, 2011



Organization Committee

Nesrin Kartal Özer (Turkey) Stathis Gonos (Greece) Tilman Grune (Germany) Giovanni Mann (UK)

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Organization Secretariat



Phone: +90 (216) 428 95 51 Fax: +90 (216) 428 95 91 E-mail: sfrr-europe@k2-events.com Web-page: www.k2-events.com Dear Colleagues,

On behalf of the Organizing Committee it is a pleasure to invite all our colleagues to attend the SFRR-Europe 2011 Meeting "Redox Biology and Micronutrients: from signaling to translation and back" in Istanbul from September 7-10, 2011. Please visit website of the meeting for detailed information <u>www.sfrr-europe2011.org</u>

We are proud to announce that the program will include the Informa Lecture to be delivered by Prof. Michael Karin (Distinguished Professor of Pharmacology, UC San Diego, La Jolla, USA),

IUBMB Jubilee lecture will be delivered by Prof.Aaron Ciechanover (Israel, Nobel Prize in Chemistry 2004). His lecture is entitled "Why our proteins have to die so we shall live".

We look forward to seeing you in Istanbul.

Yours sincerely,

Professor Nesrin Kartal Ozer Chair of the Organizing Committee

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www.sfrr-europe2011.org

MINUTES OF 2010 AGM

Held on Wednesday 1st December 2010, 6.00 pm at Gaiety Hall, 105 Rue Jolie, Akaroa, New Zealand

Present: Mark Hampton, SFRR(A) Secretary, David Pattison, SFRR(A) Treasurer, and c.a. 40 members of SFRR(A). The meeting was chaired by Mark Hampton.

1. Apologies:

Chris Easton, SFRR(A) President, Clare Hawkins, SFRR(A) President Elect, Kevin Croft, Trevor Mori.

2. Minutes from 2009 AGM:

The minutes from the last meeting, as circulated in November, were accepted. No matters arising from the previous minutes were discussed.

3. Treasurer's Report – David Pattison

Membership Summary

Current Financial Members as of 26/11/2010:

- 2010: TOTAL = 143 (94 Full, 49 Student); Country of origin: 95 Australia, 19 New Zealand, 18 Japan, 4 South Korea and 1 each from India, Brazil, China, USA, Singapore, Hong Kong.
- 2009: TOTAL = 100 (70 full, 30 student); Country of origin: 80 Australia, 14 New Zealand,
 3 Singapore, 1 United States, 1 South Korea, 1 Russia.

Comments Regarding Membership

- 1) High membership numbers this year are due to large attendance in Sydney 2009. Thank you
- to all members that did not attend Sydney meeting for rejoining the Society this year.
- 2) Reminder: All registrants of the Akaroa meeting are financial members of SFRR(A) for
- 2011. Non-attendees of the Akaroa meeting should pay their 2011 membership directly to the
- Treasurer (see www.sfrra.org for details). Full, A\$40/NZ\$45; Student, A\$20/NZ\$22.

Summary of Accounts Activity (as of 31st October, 2010)

A. Cheque Account Bearing Interest

Deposits				
Membership fees:	Sydney meeting + recruitment in 2010	\$4,820		
Interest Accrued:	from Term Deposit	\$1,425		
	-	\$8,593.13		
	Aeeting profits:from Sydney meeting in 2009Repayment:cash advance for Sydney meeting			
Repayment:	\$2,000 <u>\$16,838.13</u>			
<u>Expenditure</u>	Income $(1/11/09 - 31/10/10)$:	<u>\$10,838.15</u>		
SFRR(I) 2009 Dues	(June 2010)	\$844.55		
Travel Awards:	(<i>401.000</i>		
	(Aus awardees) @ \$250	\$500		
1 for Sydney (NZ awardee) @ \$500		\$500		
Startup loan for Sydr		\$2,000		
Austbrokers Liability Insurance (Dec 2009)		\$640		
ASMR Affiliate membership (July 2008 – July 2011)		432.83		
Account Service Fees		\$120		
		φ 1 =0		
Total	Expenditure (1/11/08 – 31/10/09):	<u>\$5,037.38</u>		
<u>B. Term Deposit</u>				
Opening Balance	<u>\$30,000</u>			
On 25/01/10: Intere	\$1,425.00			
Currently invested @	9 4.75% (matures 23/01/2011)			
Total Interest Accrued (1/11/09 - 31/10/10): \$1		<u>\$1,425.00</u>		
C. Summary of Activ	vity $(1/11/09 - 31/10/10)$			
Opening Balance (1/	11/09) of Australian accounts:	<u>\$45,280.67</u>		
Cheque Acco	ount Bearing Interest:	\$15,280.67		
Term Deposi	t	\$30,000		
Total Income		¢16 020 12		
Total Income:		\$16,838.13 \$5,037.38		
Total Expenditure:	(vnonditure)			
Balance (Income – E		+ \$11,800.75		

Closing Balance (31/10/10) of Australian accounts:

\$57,081.42

Cheque Account Bearing Interest: Term Deposit		\$27,081.42 \$30,000
Term Deposit	4	\$30,000
D. Summary of Holding Account in New Zealand		
Opening Balance (1/11/09) of New Zealand account:]	NZ\$107.28
Deposits	_	
Membership fees collected throughout 2010:	I	NZ\$0
Expenditure None		
Balance (Income – Expenditure):	<u> </u>	NZ\$0
Closing Balance (31/10/10) of New Zealand account:	<u>1</u>	NZ\$107.28
E. Items outstanding since (31/10/10):		
Balance (31/10/10) of Australian accounts:\$57,0		.42
Deposits		
None	ġ	\$0
Expenditure		
Austbrokers Liability Insurance (paid Nov 2010)	(\$629.11
Engraving costs for Distinguished Service Award	4	\$32.00
SFRR(I) Travel Award, Orlando	4	\$1,000
(further award to NZ recipient to be paid out of profits of Akaroa m	eeting)	
9 x SFRR(A) Travel Awards, Akaroa \$4,500		
Current Balance of Australian accounts (29/11/09):	، ح	<u>\$50,920.31</u>
F. Budget Considerations for 2010		
Estimated Income for 2011:		
Membership fees	(\$3,000
(based on registration details for Akaroa of ca. 100 registrants)		
Profits from Akaroa meeting	ι	unknown
Interest from term deposit	9	\$1,400
TOTAL	> 5	\$4,400
Estimated Expenditure for 2010:		
ASMR Affiliate Membership	(\$150
Account service fees	9	\$120
Upgrade of SFRR(A) website	9	\$1,000

SFRR(I) 2010 membership fees (due Jan 2	2011)			
143 members x US\$7 (ca. A\$7) = US\$1,000				\$1,000
Refundable advance for 2012 meeting			up to	\$5,000
	TOTAL		ca.	\$7,300
OPENING BALANCE (26/11/10):		<u>\$50,92</u>	20.31	
Estimated Income for 2011:	ca.	\$4,500)	
(NB. not including Akaroa profits)				
Estimated Expenditure for 2011:	ca.	\$7,300)	
ESTIMATED BALANCE (NOV 2011)		<u>> \$48,0</u>	000	
Travel awards required for 2011 conferences:				
Support for SFRR(J)/SFRR(A) meeting in Tokyo (Dec 2011)				
Funds available ca. \$5,000-\$6,000				

4. Travel Awards

Following delivery of the treasurer's report and the continued improvement of the society's financial position, there was a general discussion on increasing the level of financial support offered to students each year versus ensuring a strong financial platform for the long-term viability of the Society. There was no consensus of opinion.

The proposal to offer a new post-doctoral travel award, first discussed at the 2009 AGM, was revisited. It was proposed to offer one travel award to a SFRR(A) member less than 5 years post-Ph.D. Michael Davies suggested that in 2011 the value of this award be A1,200 and 6 Ph.D. travel awards of A800 be offered to attend the SFRR(J)/SFRR(A) meeting in Tokyo (total cost of awards = A6,000). Both proposals were accepted by unanimous vote.

5. Conferences

2011

Redox Chemistry and Biology for Our Health The 6th Joint Meeting of the Societies for Free Radical Research Australasia and Japan 2-4 December, Tokyo University of Technology, Kamata, Tokyo, Japan

Chairman: Yorihiro Yamamoto, Ph.D. School of Bioscience and Biotechnology Tokyo University of Technology

Yuji Naito, M.D., Ph.D.Department of Molecular Gastroenterology and HepatologyKyoto Prefectural University of Medicine Graduate School of Medical Science

<u>2012</u>

Two possibilities for the 2012 conference were presented to attendees. Mark Hampton relayed an offer from Chris Easton to hold the conference in Canberra. Roland Stocker also stated that he had spoken with Greg Anderson and Martin Lavin, and they had offered to hold the meeting in Brisbane. By majority vote the decision was made to accept the Brisbane offer. Roland suggested that Jiri Neuzil also assist in the organisation of the 2012 meeting. Subsequent correspondence has confirmed an organisation team of Anderson, Lavin and Neuzil.

Jiri Neuzil noted the error in the Akaroa conference booklet, stating that the 2005 conference was held on the Gold Coast, not Brisbane.

2009 Conference Survey

Mark Hampton presented the results of a survey emailed to SFRR(A) members following the 2009 conference in Sydney. Twelve replies were received and collated. Ratings were 1-5, with 5 being highest and 1 the lowest.

- 1. Overall satisfaction with the 2009 Conference: 4.2
- 2. Appropriateness of partner societies (Yes or No for each)

MEPSA – 64% Yes SFRR Japan – 92% Yes ASCEPT – 83% Yes

- 3. Appropriateness of Session Topics: 4.1
- 4. Quality of Plenary Speakers (30 min presentations): 4.3
- 5. Quality of Invited Speakers (20 min presentations): 4.3
- 6. Quality of Abstract Selected Speakers (15 min presentations): 3.8
- 7. Ratio of Selected to Plenary + Invited Speakers: 3.9

8. For future meetings, would you like 'Selected Speakers' to be decided based on blinded abstract review?: 54% No

- 9. Quality of Session Chairs: 3.7
 10. Overall usefulness of Education Sessions: 4.3
 11. Selection of Educational Topics: 4.2
 12. Choice of Speakers for Educational Sessions: 4.1
 13. Timing of Educational Sessions: 3.3
 14. Duration of Conference: 4.2
 15. Lengths of Sessions: 4.3
 16. Time for discussions: 3.3
 17. Quality of poster sessions: 3.7
- 18. Organization of Conference (lecture theatres, IT, discussion time, poster room, etc): 3.8

A range of specific comments were also obtained from respondents. The introduction of education sessions generated strong positive feedback. The inability of chairs to keep speakers to time, particularly in a meeting with parallel sessions, was a common criticism. All of this material was made available to the 2010 conference organisers, and will be collated into an information package for future organisation teams. The low number of survey respondents was noted.

6. SFRR International report – Mike Davies (Secretary-General of SFRR International)

Mike Davies outlined progress with the organisation of the next International meeting, which will be held in London, UK between 6-9th September 2012. People are encouraged to attend this meeting and travel grants for younger scientists to attend the meeting will be available.

The location of the following meeting in 2014 has yet to be decided and Mike encouraged the audience to think whether a bid for the meeting by the region was possible and advisable. Such a bid would involve a considerable amount of work and would require an enthusiasm for holding the meeting from all of the region, in order for this to be successful. The pros and cons of such a bid were discussed at length. Whilst it was felt that this would be very good for the profile of the region, the relatively small size of the region and its limited finances would be a major problem. As such it was felt that such a bid would not be sensible at the present time, especially as the current strength of the AU \$ makes a meeting in Australia very expensive for overseas scientists.

Mike requested that we update the two Australasian representatives on the SFRR International committee (currently himself and Tony Kettle). After brief discussion Clare Hawkins and Mark Hampton were nominated and voted into the position.

7. Next election date

It was confirmed that the next SFRR(A) elections will occur at the 2012 conference. This will take the elections out of cycle with the joint meeting with Japan, which is held in Japan once every four years. This will result in a three-year term for the current executive.

8. Other Business

In agenda item 6 Roland Stocker commented on the disappointing number of people present at the SFRR-I annual general meeting, held during the well-attended joint meeting of SFRR-I and SFRBM in Orlando (Nov, 2010). This led to a general discussion on the perceived relevance of the Society, and how we can specifically promote and improve the visibility of SFRR Australasia. David Pattison stated that their have been problems associated with the hosting of our website, but they should be resolved shortly and a major upgrade will occur. This will provide an opportunity to improve our visibility. Mark Hampton stated that while there was a delay in the 2010 newsletter, this format would continue to be used to distribute information to members.

Meeting closed: 6.55 pm (Minutes taken by Mark Hampton)

Society for Free Radical Research (Australasia) 2011 MEMBERSHIP APPLICATION/RENEWAL FORM

Title:	Name:	
Address:		
Phone:		Fax:
e-mail:		
Research Interest	s (short description for	the 2011 membership directory):
Annual Fees: Note:	All delegates of the 2010 SFR	R(A) meeting in Akaroa are financial members of the Society for 2011.
[] Full Members	hip Aus\$40 / NZ\$45	[] Student Membership Aus\$20 / NZ\$22
[] Electronic Fu	nds Transfer	Account name: SFRR Australia Account number: 06 2284 10178136 BSB: 06 2284 (Commonwealth, Univ of Sydney, NSW)

Please tick the appropriate box above to indicate category of membership. For payment please make an electronic funds transfer (preferred option) to the account detailed above, or send a cheque payable to "Society for Free Radical Research (Australasia)" in <u>Australian dollars</u> * to :

Dr David Pattison, Treasurer, SFRR (Australasia) Heart Research Institute 114 Pyrmont Bridge Road Camperdown NSW, 2050 Australia

*Note: New Zealand members can contact Mark Hampton for alternate payment options.

Signature:	_
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Date: _____

(Student membership only - ask your supervisor to complete the declaration below)

I confirm that the above applicant is at present a student under my supervision.

Name:

Signature: Date:

Institution: