

# SMBE

APRIL  
2012



Thomas Cooper - Founder of  
Coopers Brewery

## Coopers Site Visit

On 2nd of February 2012, SMBE members and guests were invited to attend a site visit to the Coopers Brewery, Regency Park, Adelaide.

The tour was conducted by David Medlyn who is the Coopers Brewery Systems Integration Manager and has a background in control systems engineering with a degree in electrical engineering. He has nearly 10 years of experience at Coopers and had worked at the Leabrook site before the brewery relocated and expanded operations to Regency Park in 2001. For all who attended, David offered a good and

passionate engineering account of the brewery. Unfortunately, the regular tour guide Frank Akern was unavailable on the day, however, this did not curb any enthusiasm or interest during the tour.

The visit started in the Coopers Brewery Museum with a video that introduced the 150 year old brewery and explained the background of where and what ingredients are sourced, and how the brewery has operated to become globally recognised for its beer and its malt extract.

Following the video, David walked the tour throughout the brewery while generously answering questions and commenting on the brewery process and systems.

Since it relocated to Regency Park, the brewery has had a great opportunity to implement a large number of energy saving techniques, which has given the company a praiseworthy reputation

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The Australian Biomedical Engineering Conference (ABEC) 2012 conference will be held at the Greek Club in South Brisbane, Queensland, Australia from Monday 17 to Wednesday 19 September 2012.

More details on page 4.

During the site visit, and despite having no choice but to be over impressed with the brewery's engineering and automated control aspects, many interesting facts were discussed and disclosed to an otherwise assuming audience. It is the only brewery in Australia of its size and output that needs to store its product for two weeks before being trucked to distributors. This requires one amazingly large warehouse which also contains their only bottling line capable of handling all bottle sizes and shapes before being packaged. Yes, kegs are filled and stored under the same roof!

Stories of wasted produce due to Santos gas line explosions, the formation of home brewing kits and future expansions were all a part of an extremely interesting site visit. Fortunately, the group was also able to witness a run of Coopers Clear low carbohydrate beer being bottled and loaded into the pasteuriser along the bottle line.

The tour ended back at the museum with a great reward for those who worked up a thirst over the extended two and a half hour site visit with samples of any beer produced and poured into our own beer glass, which were offered as a token of the tour. It is safe to conclude that everyone's expectations were greatly fulfilled, regardless of anyone's preconception of the site visit. Cheers to Coopers and the SMBE!

#### ***...and stay tuned for upcoming events***

- BOC Torrensville Plant site visit
- New St Andrews Hospital Cardiac Suite site visit
- AS3003:2011 Road show

Refer to the SMBE (SA/NT) website or check your email for details.

Lachlan Eberhard



Coopers Brewery warehouse

## **Members News**

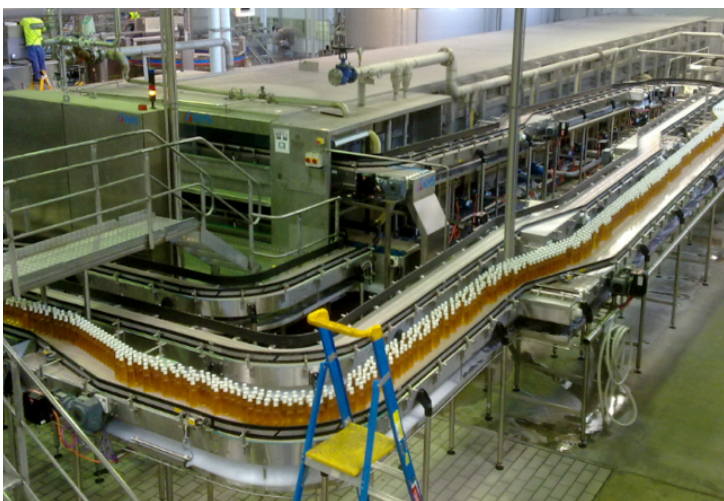
The SMBE (SA/NT) committee is pleased to congratulate Vice President Tony Carlisle for taking out 1<sup>st</sup> prize in the 2011 Student Papers Night held on Monday 5<sup>th</sup> December 2011 at Engineers Australia, King William St, Adelaide.

The College of Biomedical Engineers (CBmE), in conjunction with the Australasian College of Physical Sciences in Engineering and Medicine (ACPSEM) and Society for Medical and Biological Engineering (SMBE) hosted the annual event, aimed at Honours, Masters and PhD students. There are two categories; biomedical engineering and medical physics, and each speaker is given 15 minutes to present their work (standard PowerPoint presentation format), plus 5 mins question time. Speakers were short listed to four per category and judged on their delivery, presentation slides, scientific content and ability to answer questions.

Tony, a PhD student and part time lecturer at Flinders University, presented his biomedical research topic on neonatal thermoregulation. He continues to impress and reward himself with great academic achievements, which includes 1<sup>st</sup> prize in the 2008 IET Rex Johns Student Presentation for his Biomedical Engineering honours project; creating a nasogastric tube insertion simulator.

On behalf of the SMBE (SA/NT) committee, we wish Tony all the best of success as he continues his research and studies.

Lachlan Eberhard



Freshly filled and unlabeled Coopers Clear beer bottles on the bottling line



# Paying Our Respects

## Ross Mangano 1932 - 2012

Ross passed away on the 14 January from cancer. He will be greatly missed by all who worked with him and knew him.

Ross Mangano dedicated more than 60 years of service to Queensland Health supporting the Royal Brisbane and Women's Hospital and the Royal Children's Hospital by sourcing and maintaining medical equipment availability for clinical service delivery.

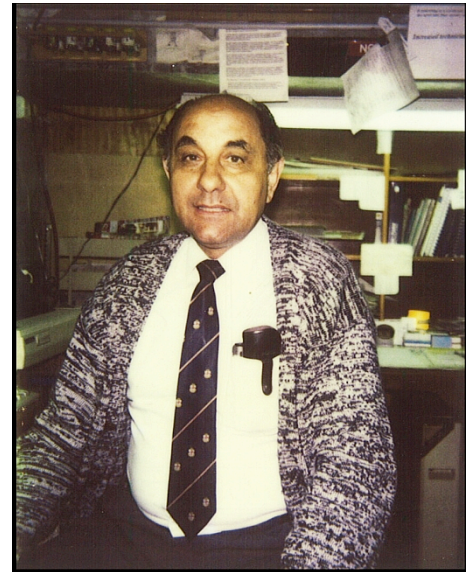
In 1950, at the age of 18, a young Ross commenced an electrical apprenticeship at the Brisbane Hospital. He travelled across town to work by tram every day. His first job was to change the light bulbs at Rosemount Hospital and bring back the lunches for the tradesmen.

Following his apprenticeship, Ross completed an Applied Electronics course at the Queensland Institute of Technology. It was then the hospital gave him the opportunity to set up the first biomedical maintenance team at Herston. The team, headed by Ross, was to focus on the needs of the new emerging medical technologies.

He became involved with many societies and colleges, and attended many of the Biomedical Engineering conferences that were held in Australia. Over the past 50 years he:

- Became an Associate of the Australian Branch of the Institute of British Surgical Technicians in 1966 and in 1972 received a Diploma of Membership from the Australian Institute of Surgical and Dental Technicians.
- Became a member of the Institution of Biomedical Engineering in 1976
- Completed a Certificate in Hospital Administration and was a member of the Australian College of Health Service Administrators. He became an Associate Fellow in 1985
- In 1981 was the Federal President for the Dialysis Society of Australasia and the Renal Society of Australasia
- President of the Society for Medical and Biological Engineering from 1987 to current times
- In 1993 was elected as an Associate of The Institution of Engineers, Australia and Fellow of The Society of Engineering Associates.
- In 2011 received an Engineers Australia Medal in recognition of his contribution to the engineering profession.

Ross had a vision for the biomedical industry and he campaigned tirelessly for its development and professional recognition. He supported Engineering students in vacation practice training positions during the 1970s, was involved in the introductory training of many technicians that continue to work in this area and supported many of the suppliers to work through the process of selling medical equipment to the Queensland Government. He never lost his dedication to helping patients. Ross was often heard saying "I'm off to save lives".





## 2012 Australian Biomedical Engineering Conference

The Australian Biomedical Engineering Conference (ABEC) 2012 conference will be held at the Greek Club in South Brisbane, Queensland, Australia from Monday 17 to Wednesday 19 September 2012.

The Call for Abstracts is open and you are invited to submit an abstract and participate in this year's conference.

This three-day conference will be invaluable for all those involved in the biomedical sector, including professionals, technologists and associates, in areas such as:

- Clinical Engineering
- Medical Technology Servicing
- Medical Technical Development
- Medical Technology Education and Research
- Biomechanics of Impact Injury
- Humanitarian Technical Aid
- Rehabilitation Engineering

The theme 'Health Through Engineering' will explore challenges currently facing the health sector in Australia and discuss new ideas and approaches. It will focus on the way Biomedical Engineering plays a vital role in providing quality health outcomes for people.

Supporting Health through Engineering we are seeking presentations covering discipline specialities as well as key themes including;

- The Biomedical Engineering Workforce
- Innovation through Biomedical Engineering in Health
- Managing Health Technology

Further details regarding the above and the abstract submission guidelines and abstract template can be found online at [www.abec2012.iamevents.com.au/abstracts/](http://www.abec2012.iamevents.com.au/abstracts/)

**Call for papers concluded at 5pm Friday March 2012. SMBE (SA/NT) is awarding one travel scholarship to a successful applicants participating in the conference. Details included within the newsletter, page 7.**

Registration is via website;

[www.abec2012.iamevents.com.au/registration.php](http://www.abec2012.iamevents.com.au/registration.php)

Full 3 day conference fee is only \$375 for students or \$550 for early bird EA members if paid before 1<sup>st</sup> July 2012.

Should you have any questions regarding the registration, call for abstracts or any other conference query, please do not hesitate to contact the conference organiser,

Anthony at I Am Events on ++61 7 3834 3333 or by email: [anthony@iamevents.com.au](mailto:anthony@iamevents.com.au)

## Introducing SA BME

The South Australian Government, as part of the State Budget, announced the consolidation of Biomedical Engineering (BME) services.

SA Health has commenced the project across the public health sector, with the aim of implementing the consolidated SA BME Service by 1 July 2012.

Responsibility for progressing this project has been allocated to Director Corporate and Clinical Support, Adelaide Health Service.

The consolidation of biomedical engineering services will:

- improve efficiency and maximise opportunities for efficient resource utilisation
- provide a cohesive, consistent, and accessible statewide service.

Information herein has been taken from the SA Health SA BME Service Review *Frequently Asked Questions* pamphlet. This, including more information, can be found at the SA Health website [www.inside.sahealth.sa.gov.au](http://www.inside.sahealth.sa.gov.au)

### 1. Why are Biomedical Engineering Services across the State changing?

SA Biomedical Engineering (SA BME) is being created as part of the long term reform of South Australia's health system to create a truly integrated health service focussed on the health needs of the South Australian community.

As part of the 2010 State Budget announcements, it was identified that BME services will be consolidated in order to improve efficiency and provide a cohesive and consistently accessible statewide biomedical engineering service to meet demand.

The project involves two phases:

- **Phase 1: Review**  
Includes a due diligence process and development of a proposed service model for the new statewide service.  
SA Health engaged KPMG to undertake the review which is now complete.
- **Phase 2: Implementation**  
Involves the development and implementation of a project management plan to establish the new service model within the necessary timeframe.

## **2. Can I comment on the review?**

The SA BME Review was out for consultation with staff, unions and other stakeholders from 28 July until 25 August 2011. The review consultation phase has now finished.

## **3. What has happened with the consultation feedback?**

Feedback received during the consultation phase has been carefully considered by the SA BME Steering Committee. Feedback is reflected in the SA Health response to the SA BME Review, and is now available to staff on SA Health's Operations Division intranet.

## **4. Which services are in scope and which services are out of scope for SA BME?**

SA BME will incorporate BME services provided by the Central Adelaide Local Health Network; Northern Adelaide Local Health Network; Southern Adelaide Local Health Network; Children, Youth and Women's Health Network; Country Health SA Local Health Network; and SA Pathology.

SA Ambulance Service is out of scope.

## **5. What does the proposed SA BME Service model look like?**

The KPMG recommendations detail a model for the statewide service that is designed to provide:

- Continuation of onsite services at major metropolitan sites, with the consolidation of the multiple BME groups travelling and serving non-metropolitan sites.
- A governance structure that aligns with the establishment of the Local Health Networks.
- Implementation of an effective and sustainable SA BME asset replacement program will be developed and maintenance of an appropriate asset register will be in place.
- Significant workforce benefits including greater flexibility and back-up across the system, career opportunities and succession planning as well as consolidated training and capability development.

## **6. Who will lead the new service?**

Following an extensive recruitment process Mr John Robson was appointed to the role of Director SA BME and commenced on 20 June 2011. Appointment to this role has been a key component of the consolidation project in order to drive service change.

John will lead the formation and continuing development of services provided by SA BME with responsibility for governance and the overall leadership of strategic planning and operational management in the delivery of BME programs across SA Health.

## **7. Who will be responsible for undertaking the implementation phase?**

A project team has been established to support the Director SA BME plan and roll out the new service model. The project team will report to the SA BME Steering Committee.

## **8. Where will the consolidated SA BME Service be based?**

The proposed service model outlines the continuation of onsite services at major metropolitan sites, with the consolidation of the multiple BME groups travelling and servicing non-metropolitan sites.

## **9. When will the new service be established and the changes implemented?**

Transition to the new structure will occur over the 2011-12 financial year and it is intended that SA BME will be established by 1 July 2012.

## **10. Has consultation occurred?**

A governance structure was established to support the project and the review phase.

This structure included:

- SA BME Steering Committee (inclusive of representation from all BME Services currently provided across the state and a BME clinical user representative).
- Internal Stakeholders Group.
- Expert Reference Panel (ensuring recommendations made by the Consultants are challenged, robust and pragmatic when it comes to implementation).

Throughout the review process, KPMG consulted with key staff nominated by the regions to gain an understanding of the current BME services and to discuss options for the consolidated statewide service.

As part of ongoing consultation, the Director Corporate and Clinical Support and Director SA BME have presented 'Information Roadshows' to BME staff at each service. These presentations have provided an opportunity for staff and key stakeholders (inclusive of unions) to ask any questions or provide direct feedback.

## **11. What will be the impact on BME Service staff?**

It is anticipated that the establishment of the SA BME Service will provide significant workforce benefits including greater flexibility and back-up across the system, career opportunities and succession planning as well as consolidated training and capability development.

The management of any staffing changes in the establishment of the Statewide BME Service will be based on fairness and equity as outlined in SA Health's HR Principles and Procedures.

## **12. How will people be transitioned into roles in the consolidated SA BME Service?**

Human Resource Principles will be developed through discussions with the relevant unions and the filling of positions will be consistent with these.

The transitioning process may include assignment of staff to unchanged roles in the new structure, or alternatively, may in some circumstances require expressions of interest of applications from staff.



## SMBE Awards

### SMBE (SA) Encouragement Award

Do you know someone who deserves to be recognised for their endeavour and enthusiasm within the field of Biomedical Engineering?

If you know of a worthy recipient who would benefit from the recognition, or if you think you are that person, we encourage you or a peer to submit a SMBE Encouragement Award nomination form. They are available on line at

[www.smbe.asn.au](http://www.smbe.asn.au). The award is open to all Biomedical

Engineering practitioners and incorporates one year free membership to SMBE as well as a funded visit to a Biomedical Engineering conference or seminar.

As a recipient of the then Draeger sponsored SMBE award in 2004, I have been fortunate to actively progress with my responsibilities within the society, have opportunities to meet people with similar interests and promote the career I enjoy. At the time of receiving the award, I was studying the undergraduate Bachelor of Science, Bachelor of Engineering (Biomedical) at Flinders University part time and working fulltime at the Royal Adelaide Hospital Biomedical Engineering Department. As a result of the award, I was offered registration for the 2005 Australian Biomedical Engineering Conference and the recognition of the award helped me to concentrate and continue to perform during my studies while managing a full time work load for the next 7 years. This encouragement and recognition can help someone you know and I strongly recommend taking the time to submit a nomination for that person.

Lachlan Eberhard, President SMBE (SA/NT)

### \$1000 Biomedical Engineering Scholarship

Don't forget that you may be entitled to apply and be selected for being subsidised up to \$1000 to attend or present a paper at a conference or institution selected by you! The scholarship is open to all SMBE (SA/NT) members who have been members for at least three years. Please refer to the website [www.smbe.asn.au](http://www.smbe.asn.au)



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## Member Certificates

Are you a SMBE member without a Membership certificate?

Would you like to update your email or contact details?

If so please email the SMBE secretary: [secretary@smbe.asn.au](mailto:secretary@smbe.asn.au)

A membership certificate will be made for you and formally presented at our next technical meeting.



# Society of Medical & Biological Engineering

## 2012 ABEC Conference Scholarship



**\$1,500**  
**Conference**  
**travel grant**  
**for students**



SMBE (SA/NT) is offering a conference travel grant of up to \$1,500 for a student or postgraduate in SA and NT to present either an oral paper (preferred) or poster at the 2012 EPSM/ABEC conference in Brisbane 17<sup>th</sup> to 19<sup>th</sup> September 2012. Students must be SMBE members to apply so join now.

**\*\*\*\*\*SMBE Student Membership is ONLY \$15\*\*\*\*\***

**Membership form online – SMBE (SA) website**

**Completed applications to be received by 30 June 2012**

**All applicants will be notified by email early to mid July 2012**

Australian website  
SMBE (SA/NT) website  
Conference details:

[www.smbe.asn.au](http://www.smbe.asn.au)  
[www.smbe.asn.au/SMBE\\_SA/SMBE\\_SA.html](http://www.smbe.asn.au/SMBE_SA/SMBE_SA.html)  
[www.abec2012.iamevents.com.au](http://www.abec2012.iamevents.com.au)

Forward to: [Secretary@smbe.asn.au](mailto:Secretary@smbe.asn.au)

# Application for SMBE (SA/NT) Biomedical Engineering Travel Scholarship ABEC 2012

The SMBE (SA) Biomedical Engineering Travel Scholarship is provided to advance knowledge amongst Biomedical Engineering students in South Australia and Northern Territory. The scholarship is for financial support (up to \$1500) for a student or postgraduate to present an oral (preferred) or poster session at the 2012 Australian Biomedical Engineering Conference in Brisbane 17-19<sup>th</sup> September 2012.

## APPLICANT DETAILS

Name:	Phone:
Student ID:	Institution:
Address:	
Email:	

- I have attached a copy of my submitted abstract
- I have received and attached confirmation of my abstract acceptance
- I am still waiting for abstract notification

Other funding applied for / received:

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Completed applicants to be received by 30<sup>th</sup> June 2012

All applicants will be notified by email in early to mid July 2012

To be eligible for this scholarship, the applicant must:

1. Be a member of SMBE (SA/NT) – can join immediately to be eligible. Refer to SMBE (SA/NT) website for application.
2. Accepted to present at the conference (preference given to students accepted for oral presentations).
3. Agree to write a report on the event and submit it for publication in the SMBE newsletter (no more than two A4 pages).
4. Submit relevant receipts for reimbursement up to the value of \$1500

Please attach any documentation that will support your application including formal conference abstract acceptance and a copy of your submitted abstract.

Note: preference will be given to non-committee members.

The SMBE (SA/NT) council reserves the right to reserve the award.

Signed ..... Date ...../...../.....