

Upcoming event

CS&M SIG Meeting

Date: Wednesday 13th July 2011

Venue: Symbion-Laverty Pathology

Time: 5.30pm light refreshments; 6.30-8.00pm talks

RSVP: Deane Byers (02) 9779 5915 or email serology@rcpaqap.com.au

Please note the following deadline for submissions to Syntrophy Volume 12:6:2011 **closes 21st July 2011**. Email all contributions, as well as any suggestions or comments, to the Administrative Officer, Natasha Pavic, at natashapavic@hotmail.com.

Syntrophy is distributed to members via details recorded on the National office database. Print copies are available upon request.

Editorial board: Syntrophy is produced via the combined efforts of Natasha Pavic and the committee. The editorial is rotated amongst the editorial board members. The board members solicit the lead articles.

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From the Editor

Greetings all Microbiologists. Next week 4-8 July 2011 **ASM 2011 Hobart - Microbiology on the Edge** is on at the Hotel Grand Chancellor in Hobart. So make sure you take those winter woollies, learn lots and enjoy! Remember to try to get to the National AGM and National SIG meetings to support and see what's happening & enjoy the food, wine, song and dance that our southern colleagues and hosts provide.

And it's this time of the year that sees the **ASM NSW-ACT Branch Annual General Meeting** also arrive with a new financial year upon us (tax time!) It will be on Wednesday 17 August at the Botany Bay Seafood Restaurant, Brighton Le Sands. Time: 6.00 – 7.00pm for the AGM Meeting and 7.00pm onwards for Dinner. This year's speaker is **Professor Nick Hunt** from the

University of Sydney. Bio says "Nick Hunt is well-known for his studies of the severe illness caused by malaria infection and his interest in free radical biology and inflammation. Meningitis is a recent area of interest." So we await in anticipation of his presentation. Our Focus article this month is from Nestor Solis & Stuart J. Cordwell from the School of Molecular Bioscience at the University of Sydney on the "Surface proteomics of *Staphylococcus aureus* employing cell shaving and hypergeometric and Bayesian models".

Notices for meetings this month are for the **CS&M Special Interest Group** - again very active with 'A parasite, a couple of viruses and a novel program?' on Wednesday 13 July 2011 at Symbion - Laverty Pathology, and **CAPSIG** will present a talk on cross contamination and how it can

happen within any environment, be it in the manufacturing plant, in hospitals or food processing. The date is Wednesday 10 August 2011 in the Main Auditorium, Canterbury Hurlstone Park RSL.

The notice for **BacPath 11 - Molecular Analysis of Bacterial Pathogens** will hit the NSW Central Coast this year on September 25 - 28 2011 at a fantastic venue – Mantra Kooindah Waters Resort, Wyong, NSW.

We also have the following awards to be won by those who qualify and enter: **James Vincent Scholarship, ASM NSW-ACT Branch Mycology Award and NSW-ACT ASM Branch Members Review Award**.

So strap yourselves in for ASM Hobart, the AGM, more great SIG microbiology talks, an Intensive Care symposium, Hamilton Island Mycology and your future. Ian Carter.

Focus

Surface proteomics of Staphylococcus aureus employing cell shaving and hypergeometric and Bayesian models

By Nestor Solis & Stuart J. Cordwell, School of Molecular Bioscience, The University of Sydney, Australia 2006

Surface proteins are a class of molecules that play an important role in the recognition of the environment of a cell and initiate a multitude of signals that directly impact on the capability of an organism to survive and grow. As such, the comprehensive characterisation of these

species is paramount for our understanding of pathogenesis and immunity. Yet, the characterization of these proteins remains problematic due to their inherent physico-chemical properties – high hydrophobicity in the case of integral membrane proteins that results in poor solubility for biochemical analyses, and generally low abundance. Hence, their study in the field of proteomics has been somewhat limited.

We utilised a method for the identification of these recalcitrant proteins utilising proteomics and statistical analyses that differentiate the identification of 'true' surface proteins to potential contaminants resulting from sample preparation. This technique, termed cell surface 'shaving' [1], was applied to the human pathogen *Staphylococcus aureus* and its response to adaptation to high levels of oxacillin and salt.

Continued on page 14



ASM NSW-ACT BRANCH 51st ANNUAL GENERAL MEETING

WEDNESDAY 17TH AUGUST 2011

AGM: 6:00 – 7:00pm

**The Botany Bay Seafood Restaurant,
128 The Grand Parade, Brighton-Le-Sands, Sydney 2216**

AGENDA

1. Apologies
2. Minutes of the 50th Annual General Meeting
3. Chairperson's Report
4. Treasurer's Report
5. National Council Report
6. Reports from Special Interest Groups
7. Branch Award Winners 2010 – 2011
8. Election of Office Bearers and Auditors for 2011 – 2012

POST-AGM SPEAKER

Professor Nick Hunt

Topic TBA

Dinner and Speaker from 7pm

Cost: The AGM is free of charge

Post-AGM Dinner & drinks: \$35 members; \$50 non-members

Pay at the door – CASH ONLY – no credit or eftpos.

RSVP: 8th August 2011

Kerry Varetas: Ph: (02) 9113 3325

Email: Kerry.Varetas@sesiahs.health.nsw.gov.au



2011–2012 NSW-ACT Committee Nomination Form

It's that time of the year again when we begin to prepare for the ASM NSW-ACT Branch Annual General Meeting. **Nominations are required for the Secretary and Committee members.** The Committee has been very active over recent years in raising the profile of the ASM and bringing back value to its members. If you feel there is more you can do, now is a good time to fill out the Nomination form and become part of an energetic and motivated Committee.

Don't hesitate - actions speak louder than words!

Please send all nominations to the Branch Secretary Kerry Varetas:

EMAIL: Kerry.Varetas@sesiahs.health.nsw.gov.au

PHONE: (02) 9113 3325 FAX: (02) 9113 3349

Please note that all nominations must be in writing.

Nominations WILL NOT be taken from the floor on the night of the meeting.

Only ASM members may nominate and be nominated.

We, the undersigned, wish to nominate:

Print Name.....

For the position of (please tick)

☐ **Secretary (2 year term)**

☐ **Committee member (1 year term)**

Proposer:

Print Name.....

Signature.....

Seconder:

Print Name.....

Signature.....

I accept this nomination:

Print Name.....

Signature.....

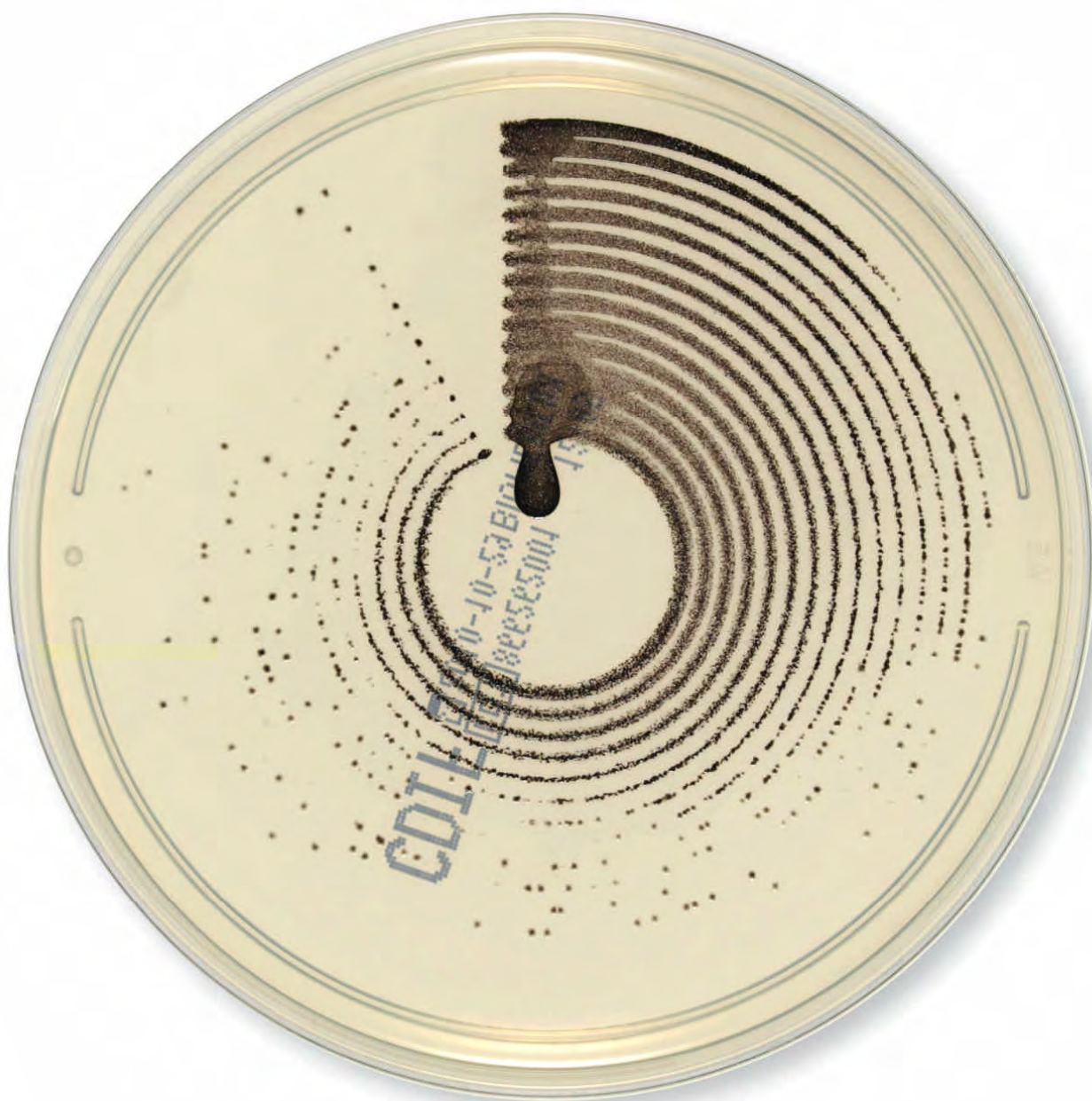
Phone.....

Email.....

Date: / /2011



chromID™ **C. difficile**



FIRST chromogenic medium for rapid isolation
& identification of **Clostridium difficile**

24 hours AnO_2 incubation - **No alcohol shock**

Dates for your Diary

4 – 8 July

ASM National Conference
Hotel Grand Chancellor Hobart
www.asm2011.org

10 – 13 July

Australian Society for Parasitology
Annual Scientific Meeting, Cairns
<http://www.parasite.org.au>

14 – 17 July

Parasitology Masterclass 2011,
Strongyloidiasis Workshop,
ACTM/QTHA Meeting, Cairns
www.parasitologymasterclass.org

Wednesday 13 July

CS&M SIG Meeting

A parasite, a couple of viruses and a novel program?

Venue: Symbion-Lavery Pathology, 60 Waterloo Road, North Ryde, Training Room.

Time: 5.30pm light refreshments; 6.30-8.00pm talks

RSVP: Deane Byers (02) 9779 5915
 or email serology@rcpaqap.com.au

See flyer below for more details

Wednesday 25 July

The Director of the Ramaciotti Centre, Professor Marc Wilkins invites you to the official launch of our **Illumina HiSeq 2000 sequencing service**.

We are pleased to have **Professor Hazel Mitchell** from the School of Biotechnology and Biomolecular Sciences, UNSW present her research on "**The Genome Sequence of Campylobacter Associated with Chron's Disease.**"

The details for your diary are:

Monday 25th July 2011, 4pm to 5pm.

Hugh Dixon Theatre, AGSM Building, UNSW

Refreshments will be provided after the seminar.

Please RSVP by Friday 15th July.

Attendees will go in to the draw to win one of two free lanes on the HiSeq 2000.

(Maximum of 2 samples per lane, standard DNA or RNA sequencing, 100bp read length). One of these lanes is generously sponsored by Illumina.

Wednesday 10 August

CAPSIG Meeting

X Contamination

Venue: Main Auditorium, Canterbury-Hurlstone Park RSL, 20-26 Canterbury Road, Hurlstone Park

Time: Registration from 5.15pm

Cost: \$75 pp. Payment must be cheque or direct deposit. Cheques payable to CAPSIG – NSW.

Enquiries: Ms. Des Hadjimichael on 0412 121 872.

Bookings: Cheques and booking details to be sent to:
 Ms Des Hadjimichael, 37 Waterside Crescent,
 Earlwood NSW 2206

Email: info@capsig.com.au

See flyer below for more details

Dates for your Diary cont

Wednesday 17 August

ASM NSW-ACT Branch Annual General Meeting

Venue: Botany Bay Seafood
Restaurant, Level 1, 128 The Grand
Parade, Brighton Le Sands

Time: 6.00 - 7.00pm Meeting
7.00pm onwards for Dinner

Speaker:

Professor Nick Hunt

Topic TBA

*Annual General Meeting is free of charge
Cost for a 3-course meal including beverages:
\$35 members, \$50 partners and non-members
Pay at the door – CASH ONLY. No credit or EFTPOS*

RSVP by 8th August

**Kerry Varettas on (02) 9113 3325 or
Kerry.Varettas@sesiahs.health.nsw.gov.au**

27 – 30 October

Mycology Masterclass V Hamilton Island

This will be a 3-day advanced medical mycology course for specialists and trainees in Infectious Diseases, Microbiology, Haematology, Respiratory Medicine & Intensive Care Medicine and for Laboratory Scientists & Technicians specialising in Medical Mycology. One full-day will be devoted to Laboratory Practice. You may register and download the program through the links below, otherwise through Mycology Online. The three days includes conference sessions, catering on each day, and a social function in the evenings. **Numbers are limited to 80 places.**

Registration:

https://events.sapmea.asn.au/iEBMS/req/req_p1_for_m.aspx?oc=10&ct=FULLREG&eventid=5090

*The Scientific Program and List of
Faculty may be downloaded at:*

<http://www.mycology.adelaide.edu.au/masterclass.html>

ASM Sponsors 2011

Platinum



www.biomerieux.com.au

Gold



www.merck-chemicals.com.au

Silver



www.thermofisher.com.au

Bronze



www.diagnosticttechnology.com.au



www.bd.com

ASM CS&M SPECIAL INTEREST GROUP

NSW-ACT Branch of the Australian Society for Microbiology,
Clinical Serology and Molecular Special Interest Group

Convenor: Deane Byers tel:(02) 9779-5915, Email: serology@rcpaqap.com.au
Treasurer/Secretary: David Dickeson tel:(02) 9845-6861, Email: david.dickeson@swahs.health.nsw.gov.au

Date: Wednesday 13th July 2011

Time: 5.30pm light refreshments; 6.30 - 8pm talks.

'A parasite, a couple of viruses and a novel program?'

Speakers:

Charlotte Webster
[Hospital Scientist,
Concord Hospital]

A Clinical Case of Leishmaniasis

Emi Spranzi
[Corporate Marketing Manager -
- Infectious Disease DiaSorin S.p.A.]

HSV Serology – what, how, when and why

Joanna Gray
[Program Manager,
RCPA BioSecurity QAP]

**RCPA BioSecurity QAP – A novel
proficiency testing program**



Venue: *Please note change from usual venue*

Symbion - Lavery Pathology
60 Waterloo Road, North Ryde
Training Room

RSVP:

Deane Byers Telephone: (02) 9779-5915
or Email: serology@rcpaqap.com.au

This meeting is kindly sponsored by: ASM NSW-ACT Branch



CAPSIG NSW

(COSMETICS AND PHARMACEUTICAL SPECIAL INTEREST GROUP)
ABN 20 932 313 797

X CONTAMINATION

Cross contamination can happen within any environment be it in the manufacturing plant, in hospitals or food processing. It can be in the form of biological or chemical and can cause many problems. This seminar will give you some industry based knowledge of how 2 very different areas have procedures in place to minimise cross contamination, and how they have gone about achieving this. So please come along and get some inside information to secure your place of employment from cross contamination.

Date: Wednesday 10th August 2011
Venue: Main Auditorium, Canterbury Hurlstone Park RSL
Canterbury Rd, Hurlstone Park.

PROGRAMME

5:15 pm – 6:00 pm **Registration**
6:00 pm – 6:10 pm **Introduction: Vijay Randev - Agilent**
6:10 pm – 6:40 pm **Belinda Whalen – Pfizer:** Cross Contamination Within a Pharmaceutical Manufacturing Plant – The Chemist's View.
6:40 pm – 7:25 pm **Mel Davis – Mel Davis & Associates:** Contamination Control in Hospital Dispensing
7:25 pm – 7:40 pm **Question Time**
7:40 pm – onwards Dinner
Cost: \$75.00 per person. **Cheques payable to CAPSIG – NSW** (CAPSIG is a non-profit group with annual turn-over less than the statutory limit and hence GST is not applicable)
RSVP: Monday 1st August 2011
Enquiries: Ms. Des Hadjimichael on 0412 121 872
Bookings: Cheques and booking details to be sent to:
Ms.Des Hadjimichael,
37 Waterside Crescent.,
Earlwood NSW 2206
E-mail: info@capsig.com.au

This seminar is proudly sponsored by:



BOOKING FORM

Names(s): _____

Company: _____

Address: _____

e-mail: _____ Telephone: _____

TERMS AND CONDITIONS

1. Prior booking and payment in full are essential for seminar attendance
2. Payment must be made by the RSVP date of the seminar.
3. Payment must be in cheque or direct deposit (make sure you include your company/ name in the transaction).
4. All cheques must be made payable to CAPSIG NSW.
5. Direct deposit details listed below.
6. Cancellations must be made by the RSVP date, otherwise full cost of the seminar must be paid.
7. CAPSIG NSW is a non-profit group with an annual turn-over less than the statutory limit and hence GST is not applicable or charged.
8. If you require an invoice please email Des at info@capsig.com.au

BANKING DETAILS

Account Name:	CAPSIG NSW
Account No.	043238414
BSB:	112-879
Bank:	St George

*The Westmead Association
Hospital Week*

INTENSIVECARESYMPOSIUM



Thursday 15th September, 2011

Education Block, Westmead Hospital

Chairperson:

A/Professor Yugan Mudaliar
(Intensive Care Physician, Westmead Hospital)

0900 – 0910

Opening Address.
Mr. Danny O'Connor
(Chief Executive, Western Sydney Local Health District).

0910 – 0930

Small Pox, Syphilis and Salvation.
Ms. Sheryl Persson (Journalist and Author).

0930 – 0945

Dead or Alive.
Dr. Tom Solarno (Intensive Care and Infectious
Diseases Specialist, Westmead Hospital).

0945 – 1000

Alive or Dead.
Dr. Martin Cullen (Intensive Care Physician, Westmead Hospital).

1000 – 1030

Critical Dose for the Kill: The ICU Story.
Professor Jeffrey Lipman (Director of Intensive Care
Medicine, Royal Brisbane and Women's Hospital).

1030 – 1100

MORNING TEA

1100 – 1120

Find them Bugs.
Dr. Michael O'Dwyer (Critical Care Infectious Disease
Fellow, Westmead Hospital).

1120 – 1150

Kill them Bugs.
Dr. Jason Roberts (Burns Trauma and Critical Care Research Fellow).

1150 – 1215

Septic Shock Research Roundtable.
Professor Stephen Leeder (Director, Research Network,
Western Sydney Local Health District).

1215 – 1230

Chair to Close.



The Westmead Association Hospital Week
INTENSIVECARESYMPOSIUM

This Symposium is sponsored by:



NAME: _____

ADDRESS: _____

Registration is Free

Please RSVP before the 2nd September, 2011

Send to: Ms Georgette Hanna - Executive Officer
Westmead Association PO BOX 119 Private Bag Wentworthville NSW 2145

Email: ghanna@med.usyd.edu.au **Phone:** 02 9845 7983 **Fax:** 02 9845 8030

Parking: Westmead Hospital. Cost: \$8.00 (in coins). Please note parking availability is very limited.

Pfizer Anti-Infectives



Conference Announcement

BacPath 11

Molecular Analysis of Bacterial Pathogens

<http://www.bacpath.org>

September 25 - 28 2011

Mantra Kooindah Waters Resort, Wyong, NSW

Invited Speakers

Prof. Maria Schumacher (Duke University, USA)

Prof. Richard Brennan (Duke University, USA)

Prof. Andrew Camilli (Tufts University, USA)

Prof. Gordon Dougan (Wellcome Trust Sanger Institute, UK)

Prof. Mark Walker (University of Queensland)

**Online abstract submission & registration is now open at
the conference web site - www.bacpath.org**

Abstract submission deadline: July 18 2011

Registration deadline: August 1 2011



Registration discount for ASM Members





JAMES VINCENT SCHOLARSHIP

AWARD: The scholarship may take the form of either a travel grant to attend a relevant national or international conference, to obtain skills available only at another institution in Australia or overseas, or to satisfy other specific requirements of their research programme for the higher degree.

ELIGIBILITY: Honours and postgraduate research students at USyd or UNSW (Students working in the area of symbiotic nitrogen fixation, the major research area of Professor Vincent, may receive preference).

MEMBERSHIP STATUS: Student. If not currently a student member of ASM, applicants must be eligible for membership and apply for membership at time of application for award.

CRITERIA:

1. The scholarship will be awarded by the Chair of the Academic Board of the University of Sydney, under the recommendation of the NSW-ACT Branch of the Australian Society for Microbiology.
2. Applicants should submit details of their academic record and two referee's reports to the ASM NSW-ACT branch committee
3. Applicants should briefly justify their proposal and suggested budget in terms of the object of the scholarship.
4. The value of the scholarship shall depend on the financial needs of the applicant subject to the availability of funding but shall not exceed the previous year's net income to the fund. The amount offered each year will be limited to the earnings generated from the funds held in the Vincent award, less 10% which will be added to the capital to allow for growth.
5. The scholarship is tenable for 1 year.
6. 1 award per year. No award may be given in the event that the NSW-ACT branch committee in consultation with the J Vincent reps at the USyd and UNSW feel there is no suitable applicant.

CLOSING DATE: 30TH JUNE 2011

APPLICATIONS TO:

Assoc. Prof. Andrew Holmes,
School of Molecular Bioscience,
University of Sydney, NSW 2006

Or

Prof. Brett Neilan,
School of Biotechnology and Biomolecular Sciences,
The University of New South Wales
The University of New South Wales
UNSW
SYDNEY NSW 2052



ASM NSW-ACT BRANCH MYCOLOGY AWARD 2011

AWARD: The ASM NSW-ACT Branch Mycology award will consist of a trophy and certificate. The award is given in recognition of the applicant's contribution to the field of Mycology. All areas of Mycology are eligible. A Trophy will be awarded at the AGM of that year and will be engraved with the recipient's details. The Trophy will be held by the recipient for 1 year, returned prior to the AGM to allow branch engraving of the next recipient's details.

ELIGIBILITY: Any member (not student) who resides in NSW or ACT. In order to apply for this award the applicant should have been a member of ASM at least 12 months prior to the AGM.

MEMBERSHIP STATUS: AASM, SASM, MASM, FASM.

CRITERIA:

Applicants are required to submit the following:

- (1) CV including a list of publications and presentations
- (2) A one page account covering their academic achievements and work experience to date, especially in the field of mycology

The applicant will be considered on the basis of their promotion of Mycology in Australia while based in NSW-ACT. This contribution may be assessed by publication record, community contribution or by a combination of both. Consideration will also be given to the applicant's contribution to the activities of the NSW-ACT branch. This may be through the organisation of branch activities, SIG activities or other similar contributions.

CLOSING DATE: 15TH JULY 2011

EMAIL APPLICATIONS TO:

Kerry Varettas

ASM NSW-ACT Branch Secretary

Email: Kerry.Varettas@sesiahs.health.nsw.gov.au

Ph: (02) 9113 3325



NSW-ACT ASM BRANCH MEMBERS REVIEW AWARD

AWARD: Up to three awards of \$500.00 each will be given in any one calendar year. The awards are to be used to further the applicant's career in microbiology e.g. used for travel to a conference, text books, ASM membership etc.

ELIGIBILITY: All ASM members except student members-should have been a member of ASM for at least 1 yr prior to applying for award. Applicant must be currently residing in NSW-ACT.

CRITERIA:

1. Applicants for the award are to submit a literature review in a topical microbiological subject of their choosing (supervisor's written approval is required if applicable)
2. The Literature review is to be of 2000 – 3000 words and in a standardised format e.g. Journal of Clinical Microbiology
3. A one-page summary of the work should also be provided for publication in the NSW-ACT Branch Newsletter, Syntrophy
4. Payment will be made only on presentation of invoice/s

CLOSING DATE: Round 1- 15th August, Round 2- 15th December

APPLICATIONS TO:

Kerry Varettas

ASM NSW-ACT Branch Secretary

Email: Kerry.Varettas@sesiahs.health.nsw.gov.au

Ph: (02) 9113 3325

Focus continued

Cell shaving is a peptide-centric approach that consists of incubating entire cells in a protease-containing buffer. The protease digests cell surface-exposed protein epitopes, releasing these peptides into the supernatant. Theoretically, the cells should remain intact, thus obtaining a complex peptide mixture exclusively representative of surface proteins. These peptides are then identified by liquid chromatography coupled to tandem mass spectrometry (LC-MS/MS). In practise, however, identification of proteins predicted to be cytoplasmic in location is prevalent, and the question as to whether their presence is due to surface location, non-specific binding from cell lysates in the media or simply artefacts induced by cell lysis and then relative abundance effects remains.

To address this issue we added a false positive control strategy that involved incubating cells under identical digestion conditions, with the absence of the protease. These supernatants were then digested after the removal of cells and used as a subtraction from the protease 'shaved' dataset [2]. This approach was taken to study the response of *S. aureus* to adaptation to high levels of oxacillin and salt.

S. aureus was grown under increasing concentrations of oxacillin and salt to form the strain termed APT (for adapted) and compared to its original counterpart (COL). Morphological differences could be determined between both strains after observation by scanning electron microscopy (Figure 1). APT cells exhibit altered cell wall morphology and appear larger than COL cells, which could possibly indicate a thicker peptidoglycan layer induced by osmotic stress. Additionally, APT also displays biofilm formation; despite COL being a biofilm negative mutant. In order to generate a statistically meaningful way of performing the false positive subtraction (as opposed to the manual subtraction initially employed [2]) from cell surface protease shaved peptide datasets, we employed a hypergeometric model based on the number of peptides identified for each protein in the shaved and control fractions. A probability based on the hypergeometric model was combined with bioinformatic predictions utilising Bayesian Inference. This resulted in a final probability that indicated the likelihood of an identified protein as surface-exposed. Applying such a methodology and appropriate threshold levels, 124 proteins (44 of which had signal sequences) were identified in *S. aureus* COL (corresponding to 1567 peptides; 1216 of which were derived from signal-containing proteins). Additionally, 38 proteins were identified in *S. aureus* COL APT (36 of which had signal sequences) deriving from 526 peptides (522 of which were from proteins containing signal-sequences).

The higher purity of *bona fide* surface proteins in the APT strain correlates with the idea that it has a thicker cell wall, and thus is more resistant to cell lysis during sample preparation. This also lends credence to our theory that most of the identified predicted cytoplasmic proteins in such studies result from contamination – however, this is not true for every such protein and it remains possible that some are truly surface-located or re-bound to the surface following secretion. Such protein species are therefore biologically interesting and may potentially play an important role in pathogenesis that has yet to be elucidated.

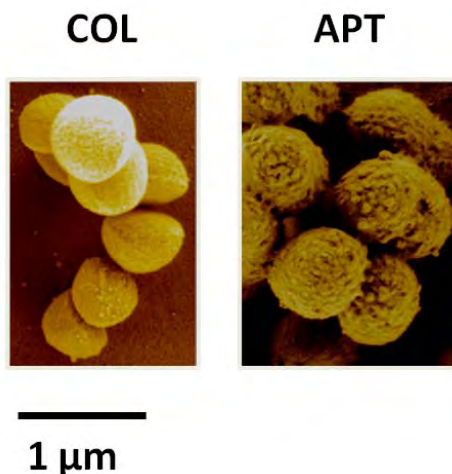


Figure 1. Morphological differences between APT and COL as determined by scanning electron microscopy.

APT cells show greater size and rougher cell wall morphology than COL. Possibly linked to osmotic resistance and thicker peptidoglycan.

References

- [1] Rodriguez-Ortega, M. J., Norais, N., Bensi, G., Liberatori, S., *et al.*, Characterization and identification of vaccine candidate proteins through analysis of the group A *Streptococcus* surface proteome. *Nat. Biotechnol.* 2006, **24**, 191-197.
- [2] Solis, N., Larsen, M. R. and Cordwell, S. J., Improved accuracy of cell surface shaving proteomics in *Staphylococcus aureus* using a false-positive control. *Proteomics* 2010, **10**, 2037-2049.

About the author

Nestor Solis is a PhD candidate at The School of Molecular Bioscience at The University of Sydney. He completed a Bachelor of Science (Molecular Biology and Genetics)(Honours I) in 2008 and has been working on surface proteomics of *Staphylococcus aureus* under the supervision of Associate Professor Stuart Cordwell.

Address for Correspondence: Nestor Solis, School of Molecular Bioscience, Building G08, Maze Crescent, The University of Sydney, Australia 2006. E-mail: nestor.solis@sydney.edu.au.

ASM CS&M SPECIAL INTEREST GROUP

NSW-ACT Branch of the Australian Society for Microbiology, Clinical Serology & Molecular Special Interest Group

Convenor: Deane Byers tel:(02) 9779-5915 Email: serology@rcpaqap.com.au

Treasurer/Secretary: David Dickeson tel:(02) 9845-6861 Email: david.dickeson@swahs.health.nsw.gov.au

Topic: ***'Detection using... POC, EWS & PLEX-ID'***

The latest CS&M SIG meeting was held on a chilly night in late May, at Douglass Hanly Moir Pathology with 75 in attendance, kindly supported by the ASM NSW-ACT Branch.

Attendees were spoilt with a presentation from international guest speaker, **Dr Penny Wilson** (Lead Specialist, Detection & Identification of Infectious Agents, Technology Strategy Board (TSB), UK), kindly joining us prior to speaking at the Association of Regulatory and Clinical Scientists Scientific Congress. Penny presented 'Point-of-Care Diagnostics for Infectious Diseases - Challenges & Opportunities', explaining the drivers for POC from traditional testing (technology, organisation, social, political and economic). Penny then covered factors to consider when developing a POC device capabilities/characteristics including ease of use, time to result, maximum achievable sensitivity/specificity, maximum achievable PPV & NPV, quality control, waste disposal, maintenance & decontamination, data capture and cost per test. The test considerations include test cohort, who will perform the test/where/when, level of training required, impact on disease management, impact on patient experience and regulatory requirements. Penny spoke about the complexity of NAT and discussed the alternatives. POC tests are disruptive, as they require a change in the status-quo, there are many players involved. The presentation was concluded with the thought 'Innovation is the ability to see change as an opportunity - not a threat'. [Further information: pennywilson@btinternet.com]

Our second speaker, **Ros Escott** (outgoing Manager, RCPA Serology QAP) presented 'Performance Monitoring Project (Early Warning System)'. Ros started by discussing what the Performance Monitoring Project is and why we need to introduce it. The project is about the real-time review of results, creating an early warning system, identifying suboptimal performance early to proactively notify laboratories and duty of care to patients. Ros explained that QC results may be precise but inaccurate and QA completes the picture. Ros then detailed how the Serology QAP is assisting with performance monitoring including changes to the current scoring system and the strategic use of serology reports to monitor performance. [Further information: serology@rcpaqap.com.au]

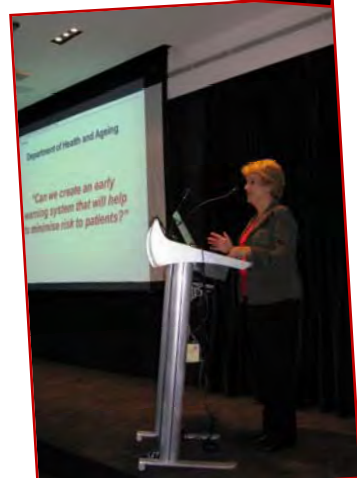
We then welcomed **Mark Van Asten**, (CEO, Diagnostic Technology, *bronze sponsor NSW-ACT Branch*), who presented 'PLEX-ID - A Novel Molecular Mass Spectrometry Pathogen Detection System'. Mark began by addressing the challenges in pathogen identification from both a clinical and laboratory perspective. In identifying a solution, Mark discussed the origins of Ibis Biosciences and the PLEX-ID technology (the molecular solution to culture). The functions of the PLEX-ID technology from Abbott Molecular, included broad identification, genotyping and drug resistance/virulence and the future applications were extensive. Mark reviewed the technology, comparing the weight of coins to different masses and therefore base compositions. Mark then discussed application in selected biological research, blood stream infections and respiratory viral infections including 2009 Novel H1N1. [Further information: www.diagnostictechology.com.au]

Ros was presented with a 'long-service' award pending her retirement in July.

Presentations were distributed via SerSIG 1st June 2011 where permission was granted.

Thank you to all of the speakers, attendees and the sponsors for an informative evening. Look forward to seeing everyone at the next meeting... in July..

Deane Byers ASM NSW-ACT Branch CS&M SIG Convenor



ASM Contact Details

ASM NSW-ACT Branch Secretary – Kerry Varettas

Tel: +61 2 9113 3325

Email: Kerry.Varettas@sesiahs.health.nsw.gov.au

ASM National Office

Suite 23, 20 Commercial Road

Melbourne VIC 3004, Australia

Tel: +61 3 9867 8699

Fax: +61 3 9867 8722

Email: admin@theasm.com.au

Submissions and enquiries can be directed to the Administrative Officer

Natasha Pavic at natashapavic@hotmail.com. Companies seeking to fill positions and ASM members seeking employment are welcome to place an advertisement in an upcoming issue of Syntrophy. Please contact the Administrative Officer with your details for inclusion.

Websites

National ASM:

www.theasm.org.au/

ASM NSW-ACT Branch:

www.asmnsw.com.au/

ASM National Conference Calendar

July 2011

ASM2011 Hobart