

ASA

Australian Society for Antimicrobials
ABN : 31 081 739 370



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17th May 2012

Prepared by: Geoffrey Coombs
ASA Executive Officer

To: ohpflexiblefunds@health.gov.au
Department of Health and Ageing
Australian Government

Health Surveillance Fund RFQ No.2-2012
Quotation for the Provision of services for Antimicrobial Resistance Surveillance

The Australian Society for Antimicrobials (ASA) wishes to submit a quotation (RFQ) for the contract of services between ASA and the Commonwealth of Australia, represented by the Department of Health and Ageing, to assist the Australian Group on Antimicrobial Resistance (AGAR) to supply services for Antimicrobial Resistance Surveillance (Targeted) in Australia from July 2012 to June 2015. As per the RQF the 2012/2013 programmes quoted are:

Community Onset *Staphylococcus aureus*
Community Onset *Enterobacteriaceae*
Enterococcus sepsis

In 2013/2014 and 2014/2015 AGAR recommends the *Staphylococcus aureus* and *Enterobacteriaceae* programmes be more closely aligned with the European antimicrobial resistance blood culture surveillance programme "EARS-NET" (<http://ecdc.europa.eu/en/activities/surveillance/EARS-Net/Pages/index.aspx>). This will enable the three AGAR programmes to be bench marked against an international antimicrobial resistance surveillance programme and will allow Australian antimicrobial resistance rates to be compared to other countries.

The RFQ submission is therefore based on the following programmes:

2012/2013

- 2012 Community Onset *Staphylococcus aureus* Programme
- 2012 Community Onset *Enterobacteriaceae* Programme
- 2013 Community and Hospital Onset Enterococcus Sepsis Programme

2013/2014

- 2013 Community and Hospital Onset *Staphylococcus aureus* Sepsis Programme
- 2013 Community and Hospital Onset *Enterobacteriaceae* Sepsis Programme
- 2014 Community and Hospital Onset Enterococcus Sepsis Programme



2014/2015

- 2014 Community and Hospital Onset Staphylococcus aureus Sepsis Programme
- 2014 Community and Hospital Onset Enterobacteriaceae Sepsis Programme
- 2015 Community and Hospital Onset Enterococcus Sepsis Programme

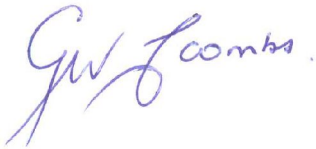
As per the RFQ the objectives and outcomes of the programme remain the same, ie to report on the level of antibiotic resistance in selected pathogens in the hospital and community settings in Australia.

The submission includes the following requested services:

Maintain the AGAR and its databases including administrative arrangements such as maintenance of the AGAR website and organisations of meetings.

Manage the reagents, samples, testing protocols, quality assurance and recording of results from each AGAR participating laboratory.

Kind regards



Geoffrey Coombs
ASA Executive Officer



Evaluation Criteria

1. Respondents Information

a. Name and Corporate status, including registration number if applicable

Name and Corporate Status (Corporate Summary Attachment)

Australian Society for Antimicrobials Incorporated

Registration Number: A1007608Z

State of Registration: Western Australia

Registration Date: 25/03/2009

Status: Registered

Company Type: Associations

Regulator: Department of Commerce, Western Australia



Corporate
Summary.pdf

b. Australian Business Number for GST purposes

ABN Details (ABN Details Attachment)

Entity Name: Australian Society for Antimicrobials

ABN: 31 081 739 370

ABN Status: Active from 01 November 1999

Entity Type: Other Incorporated Entity

Goods and Service Tax (GST): Registered from 01 July 2000

Main Business Location: WA 6000

Trading Name: Australian Society for Antimicrobials (from 25 May 2000)

Australian Society for Antimicrobials is a Charitable Institution endorsed to access the following tax concessions

GST Concession (from 01 July 2005)

FBT Rebate (from 01 July 2005)

Income Tax Exemption (01 July 2005)

Not entitled to receive tax deductible gifts



ABN Details.pdf

c. If registered with the Australian Securities and Investments Commission, any Australian Company Number or Australian Registered Body Number

Not Applicable

d. Proof of existing insurance and indemnity cover (worker's compensation, public liability, and professional indemnity), or a statement that the respondent will obtain if is successful



Public Liability: (ASA Certificate of Currency Attachment)
Class of Insurance: Public and Products liability
Insurer: Calliden Limited
Policy Number: MFC A0779
Period of Insurance: 01-Jul-11 to 01 Jul -12
Limit of Liability: \$10,000,000 any one occurrence and in the aggregate for products
Situation/Location: Anywhere in Australia



ASA Certificate of
Currency.pdf

If successful the limit of liability will be increased to \$20,000,000 and the requirement for professional indemnity will be investigated

Worker's Compensation

The Australian Society for Antimicrobials does not have any employees
The current AGAR Scientific Officer is employed by PathWest Laboratory
Medicine – WA, Royal Perth Hospital. All employee costs including worker's
compensation insurance are reimbursed by the Australian Society for
Antimicrobials.

e. Details of your representative during the RFQ

i. Name:

Geoffrey Coombs
ASA Executive Officer
ASA Treasurer
AGAR Secretary Treasurer

ii. Postal and physical address

Postal: PO Box 8266 Angelo Street South Perth, Western Australia. 6151
Physical Address: 16 Hogg Avenue Salter Point, Western Australia. 6152

iii. Telephone and facsimile numbers

Telephone: 08 9224 2446
Mobile: 0439 376 744
Facsimile: 08 9450 8553

iv. Email address

Geoffrey.coombs@health.wa.gov.au
info@asainc.net.au

2. RFQ Compliance

The Australian Society for Antimicrobials is fully compliant with all clauses of the RFQ as outlined in Attachment C.

Signed declaration in relation to compliance with the Fair Work Principles attached (Attachment F)





Attachment F .pdf

3. Conflict of Interest

If the Australian Society of Antimicrobials was contracted to provide the services for antimicrobial resistance surveillance no conflict of interest or potential conflict of interest would exist

4. Confidentiality Provisions

Ethics approval for each programme has been sought from each institution served by an AGAR participant.

Anonymity of the institutions providing data/bacterial isolates for a surveillance programme requested from each participating institution.

- 2012/2013 S aureus and Enterobacteriaceae Community Onset Programs

Surveillance data will be reported by region and not participant.

Reporting states and territories:

Australian Capital Territory (one participant)
New South Wales (eight participants)
Northern Territory (one participant)
Queensland (six participants)
South Australia (three participants)
Tasmania (two participants)
Victoria (six participants)
Western Australia (four participants)

- Community and Hospital Onset Sepsis Programmes

Surveillance data will be reported by region and not participant. States or territories with less than three participants will be combined into a region.

Reporting states and territories:

New South Wales (eight participants)/Australian Capital Territory (one participant)
South Australia (three participants)/Northern Territory (one participant)
Victoria (six participants)/Tasmania (two participants)
Queensland (six participants)
Western Australia (four participants)



Executive Summary of the Offer/Proposal

The Australian Group for Antimicrobial Resistance (AGAR) is a unique collaboration of clinicians and scientists from major microbiology laboratories around Australia. AGAR is able to test and gather information on the level of antibiotic resistance in bacteria causing important and life threatening infections around Australia. The group started in 1985 and currently involves 31 participants including 4 private laboratories ensuring a representative sample from all major population centres in Australia. In addition to performing surveillance programmes in the larger teaching hospitals in each State and Territory, AGAR also has the ability to monitor what is happening with resistance rates in private hospitals and in the community.

Summary of the Proposal

The proposal submitted enables 31 AGAR laboratories located around Australia to perform the following programmes:

2012/2013

- 2012 Community Onset *Staphylococcus aureus* Programme
- 2012 Community Onset Enterobacteriaceae Programme
- 2013 Community and Hospital Onset Enterococcus Sepsis Programme

2013/2014

- 2013 Community and Hospital Onset *Staphylococcus aureus* Sepsis Programme
- 2013 Community and Hospital Onset Enterobacteriaceae Sepsis Programme
- 2014 Community and Hospital Onset Enterococcus Sepsis Programme

2014/2015

- 2014 Community and Hospital Onset *Staphylococcus aureus* Sepsis Programme
- 2014 Community and Hospital Onset Enterobacteriaceae Sepsis Programme
- 2015 Community and Hospital Onset Enterococcus Sepsis Programme

The protocols for the 2013/2014 and 2014/2015 programmes are more closely aligned to the European antimicrobial resistance surveillance programme "EARS-NET"

(<http://ecdc.europa.eu/en/activities/surveillance/EARS-Net/Pages/index.aspx>). This will enable the Australian programme to be bench marked against a major antimicrobial resistance surveillance programme, allow Australian antimicrobial resistance rates to be compared to other countries

Isolates from the *Staphylococcus* and *Enterococcus* programmes will be forwarded to the Australian Collaborating Centre for Enterococcus and *Staphylococcus* Species (ACCESS) Typing and Research where they will be stored at -80C. ACCESS typing and Research will perform:

- *S aureus* epidemiological typing and detection of Panton Valentine –leucocidin
- Enterococcus identification, van gene detection, teicoplanin and vancomycin minimum inhibitory concentrations, and epidemiological typing

Isolates from the Enterobacteriaceae programmes will be forwarded to Department of Microbiology and Infectious Diseases, SA Pathology (Women's and Children's Hospital) where they will be stored at -80C. In addition molecular characterisation of ESBL, plasmid-borne AmpC and carbapenemases producers and detection of rRNA methylases or plasmid-mediated quinolone resistance genes will be performed.

The programmes will be managed by Professor John Turnidge (AGAR, Chair) and Mr Geoffrey Coombs (AGAR, Secretary/Treasurer). Collation and preparation of data for publication and for the website will be performed by two AGAR Senior Scientists (Ms Julie Pearson and Ms Jan Bell) and results will be reviewed by Members of the AGAR Executive.

To monitor the progress of the project the AGAR Executive will meet bi-annually (May and November) and the AGAR Committee will meet annually.



The Australian Society for Antimicrobials (ASA) will administer the financial accounts of AGAR, including the preparation of quarterly financial reports, submission of BAS statements, and preparation of the annual financial report to an independent accredited auditor.

A detailed description of the methodology proposed and the project plan, including milestones and completion dates are included in the proposal. The final report for the project will be submitted in April 2016.

Whole of Project Costs – GST Inclusive

2012/2013	\$538,479
2013/2014	\$562,703
2014/2015	\$592,226
Total	\$1,693,408

Study Requirements

Although members of the AGAR Executive and Committees have a good understanding of cultural and community issues relevant to this project, ethics approval has been sought from each participant.

Organisational issues, potential conflicts of interest, confidentiality provisions and RFQ compliance have been addressed

Major beneficiaries of the programmes

Resistance surveillance is essential to document trends in resistance levels, which serve as the basis for interventions to control rising resistance, and confirmation that interventions are working. Of the two main types of resistance surveillance, passive and targeted, the latter are used to provide detailed epidemiological information on key multi-resistant pathogens, how clones are moving around the country, and which resistance mechanisms are becoming prevalent. The last is important because it documents the spread of resistance at the gene level, which is just as important as the spread of resistant bacterial clones. Thus targeted resistance surveillance supplements passive surveillance (collected from laboratory information systems) and provides information that cannot be gleaned from passive surveillance systems. AGAR programs are all targeted surveillance programs.

The major beneficiaries of these programmes are:

- Federal and state government Health Departments and their management committees , to inform and assist multiresistant organisms (MRO) control programmes e.g.
 - the Antimicrobial Resistance Subcommittee (AMRSC) of the Australian Health Protection Principal Committee which reports to AHMAC; and
 - the Hospital-Acquired Infection program of the Australian Commission on Safety and Quality in Healthcare
- Public and private healthcare providers for benchmarking and prioritising resistance management interventions
- Clinicians, clinical microbiologists, infection control practitioners and epidemiologists for input into national treatment recommendations (Therapeutic Guidelines – Antibiotic) and local antibiotic stewardship programmes - selected data will be made available via a smart phone/tablet app.
- Patients – who will be managed by better informed clinicians, and will have reduced risk of exposure to MROs.



Detailed Description of the Methodology Proposed

1. 2012/2013 Surveillance Programme

As per the statement of requirement outlined in Appendix A

a. 2012 Community Onset Staphylococcus aureus Programme (31 Australian sentinel laboratories)

Objectives

- Determine the antimicrobial resistance rates and resistant phenotypes of community onset *S aureus* infections
- Determine the percentage of community *S aureus* infections caused by PVL positive and negative MRSA
- Monitor the emergence and spread of PVL positive and negative MRSA clones in Australia
- Determine the entry and spread of imported CA-MRSA clones in Australia
- Monitor the transmission of the PVL genes into naïve clones
- Provide detailed analysis of methicillin, vancomycin and teicoplanin resistant phenotypes
- Perform trending using data from previous community onset *S aureus* programmes trending data will be performed

Methodology



AGAR SAP12
Protocol.doc



SAP12 worksheet.xls

Molecular epidemiological characterisation and PVL determination on MRSA isolates will be performed by the Australian Collaborating Centre for Enterococcus and Staphylococcus Species (ACCESS) Typing and Research

b. 2012 Community Onset Enterobacteriaceae Programme (31 Australian sentinel hospitals)

Objectives

- Provide detailed analysis of carbapenem, fluoroquinolone, 3rd or 4th generation cephalosporin resistant phenotypes and ESBL/AmpC producers
- Determine the antimicrobial resistance rates and resistant phenotypes of community onset Enterobacteriaceae infections
- Determine the percentage of hospital Enterobacteriaceae infections caused by ESBL plasmid borne AmpC and carbapenemase producers
- Undertake molecular characterisation of ESBL, plasmid-borne AmpC and carbapenemase producers
- Perform trending using data from previous community onset Gram Negative Bacteria programmes

Methodology



AGAR GNB12
Protocol.doc



GNB12 worksheet.xls

All possible ESBL, (*E. coli* or *Klebsiella* spp. with ceftazidime or ceftriaxone MIC > 0.5 mg/L; *Enterobacter* spp. with cefepime MIC > 1 mg/L), AmpC (*E. coli* or *Klebsiella* spp. with ceftoxitin resistance), isolates with elevated meropenem MIC > 0.25mg/L, or isolates with possible rRNA



methylases or plasmid-mediated quinolone resistance genes will be forwarded to Microbiology and Infectious Diseases, SA Pathology for further testing and analysis using molecular techniques.

c. 2013 Community and Hospital Onset Enterococcus Sepsis Programme
(31 Australian sentinel hospitals)

AGAR participants will submit, on-line, basic demographic, risk factor and outcome data on patients with enterococcal sepsis seen at their sites from January 1 to December 31 2013.

Objectives

- Determine the antimicrobial resistance rates and resistant phenotypes of enterococcal sepsis
- Provide detailed analysis of glycopeptide, high level gentamicin/streptomycin resistance resistant phenotypes and β -lactamase producers
- Monitor the emergence and spread of vancomycin-resistant enterococcal clones in Australia.
- Determine the molecular classification of van genes

Methodology



2013 AESOP
Protocol.doc

Vancomycin and teicoplanin MIC, van gene determination and molecular epidemiological characterisation and on isolates will be performed by the Australian Collaborating Centre for Enterococcus and Staphylococcus Species (ACCESS) Typing and Research

For each programme the antimicrobial susceptibility data will be collated centrally by the AGAR Scientific Officers. Data will be compiled, analysed and published on the AGAR website (www.antimicrobial-resistance.com) as well as journals and presented at local, national and international scientific meetings.



2. 2013/2015 Surveillance Programme

As per the statement of requirement outlined in Appendix A

In 2013/2015 the surveillance programs methodology will be more closely aligned with the European Antimicrobial Resistance Surveillance Network (EARS-Net)

a. 2013 - 2014 Community and Hospital Onset *S aureus* Sepsis Programme (31 Australian sentinel laboratories)

AGAR participants will submit, on-line, basic demographic, risk factor and outcome data on patients with *S aureus* sepsis seen at their sites from January 1 to December 31 2013.

Objectives

- Determine the antimicrobial resistance rates and resistant phenotypes of *S aureus* sepsis
- Provide detailed analysis of methicillin, vancomycin and teicoplanin resistant phenotypes
- Monitor the emergence and spread of PVL positive and negative *S aureus* clones in Australia

Methodology



2013 ASSOP
Protocol.doc



2014 ASSOP
Protocol.doc

Molecular epidemiological characterisation and PVL determination on a subset of *S aureus* isolates will be performed by the Australian Collaborating Centre for Enterococcus and Staphylococcus Species (ACCESS) Typing and Research

b. 2013 - 2014 Community and Hospital Onset Enterobacteriaceae Sepsis Programme (31 Australian sentinel hospitals)

AGAR institutions will submit, on-line, basic demographic, risk factor and outcome data on patients with Enterobacteriaceae sepsis seen at their sites from January 1 to December 31 2013.

Objectives

- Determine the antimicrobial resistance rates and resistant phenotypes of Enterobacteriaceae sepsis
- Provide detailed analysis of carbapenem, fluoroquinolone, 3rd or 4th generation cephalosporin resistant phenotypes and ESBL/AmpC producers
- Determine the percentage of Enterobacteriaceae blood stream infections caused by ESBL plasmid borne AmpC and carbapenemase producers
- Undertake molecular characterisation of ESBL, plasmid-borne AmpC and carbapenemases producers

Methodology



2013 Ensop
Protocol.doc



2014 Ensop
Protocol.doc

All possible producers of ESBLs, AmpC, isolates with elevated meropenem MIC > 0.25mg/L, or isolates with possible rRNA methylases or plasmid-mediated quinolone resistance genes will be forwarded to Microbiology and Infectious Diseases, SA Pathology (Women's and Children's Hospital) for further testing and analysis using molecular techniques.



c. 2014 – 2015 Community and Hospital Onset Enterococcus Sepsis Programme
(31 Australian sentinel hospitals)

AGAR participants will submit, on-line, basic demographic, risk factor and outcome data on patients with enterococcal sepsis seen at their sites from January 1 to December 31 2014.

Objectives

- Provide detailed analysis of glycopeptide, high level gentamicin/streptomycin resistance resistant phenotypes and β -lactamase producers
- Determine the antimicrobial resistance rates and resistant phenotypes of enterococcal sepsis
- Monitor the emergence and spread of vancomycin-resistant enterococcal clones in Australia.
- Molecular classification of van genes

AGAR participants will submit, on-line, basic demographic, risk factor and outcome data on patients with enterococcal sepsis seen at their sites from January 1 to December 31 2014.

Methodology



2014 AESOP
Protocol.doc



2015 AESOP
Protocol.doc

In addition to providing data from the antimicrobial surveillance programmes outlined ASA will also maintain AGAR and its databases, including administrative arrangements such as maintenance of the AGAR website and organisations of meetings



Draft Project Plan (including proposed milestones and completion dates)

Programme	Start	Complete
2012 Community Onset Staphylococcus aureus Programme		
Susceptibility Testing of isolates	01/07/2012	30/11/2012
Data forwarded to AGAR Scientific Officer (WA)		31/12/2012
Isolates forwarded to ACCESS Typing and Research Molecular Characterisation of MRSA PVL PCR Storage of isolates		31/03/2013
Interim Report		31/01/2013
Final Report Available on website and submitted to DoH		31/08/2013
2012 Community Onset Enterobacteriaceae Programme		
Susceptibility Testing of isolates	01/07/2012	30/11/2012
Data forwarded to AGAR Scientific Officer (SA)		31/12/2012
Isolates forwarded to SA Pathology Molecular Characterisation Storage of isolates		31/03/2013
Interim Report		31/01/2013
Final Report Available on website and submitted to DoH		31/08/2013
2013 Community and Hospital Onset Enterococcus Sepsis Programme		
Commencement of Programme	01/01/2013	31/12/2013
On-line Data available to AGAR Scientific Officer (WA)	01/02/2013	31/01/2014
Isolates forwarded to ACCESS Typing and Research every three months Molecular Characterisation/MIC Testing Storage of isolates	01/04/2013	31/01/2014 31/03/2014
Interim Report		31/08/2013
Final Report Available on website and submitted to DoH		30/04/2014
2013 Community and Hospital Onset Staphylococcus aureus Sepsis Programme		
Commencement of Programme	01/01/2013	31/12/2013
On-line data available to AGAR Scientific Officer (WA)	01/02/2013	31/01/2014
Isolates forwarded to ACCESS Typing and Research every three months Molecular Characterisation/MIC Testing Storage of isolates	01/04/2013	31/01/2014 31/03/2014
Interim Report		31/08/2013
Final Report Available on website and submitted to DoH		30/04/2014
2013 Community and Hospital Onset Enterobacteriaceae Sepsis Programme		
Commencement of Programme	01/01/2013	31/12/2013
On-line data available to AGAR Scientific Officer (SA)	01/02/2013	31/01/2014
Isolates forwarded to SA Pathology every three months Molecular Characterisation Storage of isolates	01/04/2013	31/01/2014 31/03/2014
Interim Report		31/08/2013
Final Report Available on website and submitted to DoH		30/04/2014



Programme	Start	Complete
2014 Community and Hospital Onset Enterococcus Sepsis Programme		
Commencement of Programme	01/01/2014	31/12/2014
On-line Data available to AGAR Scientific Officer (WA)	01/02/2014	31/01/2015
Isolates forwarded to ACCESS Typing and Research every three months Molecular Characterisation/MIC Testing Storage of isolates	01/04/2014	31/01/2015 31/03/2015
Interim Report		31/08/2014
Final Report Available on website and submitted to DoH		30/04/2015
2014 Community and Hospital Onset Staphylococcus aureus Sepsis Programme		
Commencement of Programme	01/01/2014	31/12/2014
On-line data available to AGAR Scientific Officer (WA)	01/02/2014	31/01/2015
Isolates forwarded to ACCESS Typing and Research every three months Molecular Characterisation/MIC Testing Storage of isolates	01/04/2014	31/01/2015 31/03/2015
Interim Report		31/08/2014
Final Report Available on website and submitted to DoH		30/04/2015
2014 Community and Hospital Onset Enterobacteriaceae Sepsis Programme		
Commencement of Programme	01/01/2014	31/12/2014
On-line data available to AGAR Scientific Officer (SA)	01/02/2014	31/01/2015
Isolates forwarded to SA Pathology every three months Molecular Characterisation Storage of isolates	01/04/2014	31/01/2015 31/03/2015
Interim Report		31/08/2014
Final Report Available on website and submitted to DoH		30/04/2015
2015 Community and Hospital Onset Enterococcus Sepsis Programme		
Commencement of Programme	01/01/2015	31/12/2015
On-line Data available to AGAR Scientific Officer (WA)	01/02/2015	31/01/2016
Isolates forwarded to ACCESS Typing and Research every three months Molecular Characterisation/MIC Testing Storage of isolates	01/04/2015	31/01/2016 31/03/2016
Interim Report		31/08/2015
Final Report Available on website and submitted to DoH		30/04/2016



Quality or performance criteria which are appropriate to indicate success and/or progress of the project tasks

AGAR Participants

Each AGAR participating laboratory service has received NATA/RCPA pathology accreditation (ISO 15189).

Scope of accreditation includes:

Inoculation of cultures

Identification of organisms including antibiotic susceptibility testing

Referral Laboratories

The ACCESS Typing and Research, PathWest Laboratory Medicine – WA has received NATA/RCPA pathology accreditation (ISO 15189).

Scope of accreditation includes:

Detection and characterisation of bacterial DNA/RNA

Investigation of nosocomial infections in outbreaks and / or individuals

The ACCESS Typing and Research, PathWest Laboratory Medicine – WA is the Western Australian reference laboratory for the clone characterisation of *Enterococcus* and *Staphylococcus aureus*.

The Department of Microbiology and Infectious Diseases, SA-Pathology has received NATA/RCPA pathology accreditation (ISO 15189).

Organism Identification

Organism identification will be performed by accredited methods.

Susceptibility Testing

Susceptibility testing will be performed using Clinical Laboratory Standards Institute [CLSI] (<http://www.clsi.org/>) or EUCAST (<http://www.eucast.org/>) standards and guidelines.

Professor John Turnidge is a Member, CLSI Subcommittee on Antimicrobial Susceptibility Testing

Professor John Turnidge, Jan Bell and Geoffrey Coombs are members of the ASA National Antimicrobial Susceptibility Testing Committee (<http://www.asainc.net.au/NAC/National-AST-Committee>). The terms of reference of this Committee includes providing expert advice to laboratories and other stakeholders Australia-wide on all aspects of susceptibility testing (principally for but not necessarily restricted to antibacterial and antifungals).

The following phenotypic resistance will be confirmed by the referral laboratories using molecular methods:

S. aureus: methicillin resistance

Enterococcus spp: Vancomycin resistance

Enterobacteriaceae: Extended Spectrum β -Lactamases (ESBLs), plasmid-borne AmpC β -lactamases, carbapenemases, ribosomal methylases and plasmid-borne quinolone resistance.

Data Audit

Approximately 10% of submitted data will be audited.

Reporting Times

Interim and final reporting dates will be monitored by Professor John Turnidge and Mr Geoffrey Coombs.



Reports

Reports will be reviewed by the AGAR Executive prior to publication and submitting onto the AGAR website (www.antimicrobial-resistance.com) and mobile app.

AGAR Executive

The performance of the project will be assessed by the AGAR Executive who will have two face to face meeting a year (May and November) and will participate in teleconferences between these meetings.

AGAR Committee

To ensure milestones and completion dates are Met the AGAR Committee will meet annually (May).



Capacity and Capability

Specified personnel proposed for this project and details of their allocation to projects.

AGAR and its surveillance programmes will be managed by Professor John Turnidge (AGAR Chair, Clinical Director of Microbiology and Infectious Diseases, SA Pathology) and Mr Geoffrey Coombs (AGAR Secretary, Treasurer, Principal Scientist Department of Microbiology and Infectious Diseases, Royal Perth Hospital, PathWest Laboratory Medicine – WA).



John Turnidge
CV.pdf



Geoff Coombs
CV.pdf

Staphylococcus aureus and Enterococcus programmes

Collation and preparation of data for publication and for the website will be performed by Ms Julie Pearson (AGAR Senior Scientist).



Julie Pearson CV.pdf

Enterobacteriaceae programmes

Collation and preparation of data for publication and for the website will be performed by Ms Jan Bell (AGAR Senior Scientist).



Jan Bell CV.pdf

Members of the AGAR Executive will review the data from each programme and will assist in the writing of the reports. Members of the AGAR Executive include:

Professor John Turnidge, SA Pathology
Professor Graeme Nimmo, Queensland Pathology
Professor Peter Collignon, The Canberra Hospital
Associate Professor Keryn Christiansen, PathWest Laboratory Medicine – WA
Professor Thomas Gottlieb, Concord Hospital
Professor Iain Gosbell, Liverpool Hospital
Ms Narelle George, Queensland Pathology
Dr Peter Ward, Austin Hospital
Mr Geoffrey Coombs, PathWest Laboratory Medicine – WA

A description of any current commitments the nominated personnel are likely to have that may conflict with their availability at the time required

The collation and preparation of data for publication will be performed by two AGAR Senior Scientists (1.5 FTE).

The current commitments of Professor John Turnidge and Mr Geoffrey Coombs will not conflict with their availability at the time required.



Identification of backup personnel and senior consultants available for guidance

Ms Jan Bell and Ms Julie Pearson are highly experienced in all three programmes and will be available to support each other if required.

Members of the AGAR Executive will be available for ongoing guidance.

Examples of previous work performed

Please refer to the attached curriculum vitas.

The following antimicrobial resistance surveillance programmes are currently being performed by the specified personnel:

- AGAR National Surveillance

Reference: Information on AGAR and results from past surveillance programmes can be found on the AGAR website (www.antimicrobial-resistance.com)

Contact: info@asainc.net.au

- The Australian Collaborating Centre for Enterococcus and Staphylococcus aureus (ACCESS) Typing and Research
Western Australian Epidemiological typing of MRSA and VRE

Reference: <http://www.public.health.wa.gov.au/3/896/2/camrsa.pm>

Contact: keryn.christiansen@health.wa.gov.au

- SENTRY Surveillance in the Asia Pacific region and South Africa
JMI Laboratories

Reference: <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-pubs-cdi-2003-cdi27suppl-htm-cdi27supm.htm>

Contact: jan.bell@health.sa.gov.au

- Study for Monitoring Antimicrobial Resistance Trends
Merck Sharp & Dohme

Reference:

<http://www.globalmartsite.com/login.aspx?ReturnUrl=%2fdefault.aspx>

Contact: david.wanigesekera@merck.com



Whole of Project Costs

1. 2012/2013

- 31 participants participating in three AGAR surveillance programmes
 - 2012 Community Onset Staphylococcus aureus Programme
 - 2012 Community Onset Enterobacteriaceae Programme
 - 2013 Community and Hospital Onset Enterococcus Sepsis Programme
- Epidemiological typing of MRSA and Enterococcus species
- PCR detection of Panton-Valentine leukocidin (PVL) in MRSA
- Molecular Characterisation of resistance mechanisms in Enterobacteriaceae

AGAR Scientific Officers (1.5FTE)

Cost based on a P2.3 Senior Medical Scientist position plus on-costs (as per the Western Australian Enterprise Bargaining Agreement with the WA Hospital Salaried Union)

1.0 FTE Scientific Officer (Julie Pearson)

Based at: Department of Microbiology and Infectious Diseases
Royal Perth Hospital, PathWest Laboratory Medicine – WA, Western Australia

Collate, analyse and prepare data from the S aureus and Enterococcus programmes for publication and for the website

Responsible for coordinating AGAR activities, printing of the minutes and procedures, and maintaining the AGAR website (www.antimicrobials-resistance.com).

Salary	\$94,712
On Costs	
Annual Leave Loading (1.73%)	\$1,638
Long Service Leave (3.04%)	\$2,879
Worker's Compensation (3.19%)	\$3,021
Superannuation (9.00%)	\$8,524
Total	\$110,774

0.5 FTE Scientific Officer (Jan Bell)

Based at: Department of Microbiology and Infectious Diseases
Women's and Children's Hospital, SA-Pathology, South Australia

Collate, analyse and prepare data from the Enterobacteriaceae programme for publication and for the website

Salary	\$47,356
On Costs	
Annual Leave Loading (1.73%)	\$819
Long Service Leave (3.04%)	\$1,439
Worker's Compensation (3.19%)	\$1,511
Superannuation (9.00%)	\$4,262
Total	\$55,387

Total \$166,161



Reagents

2012 Community Onset Staphylococcus aureus Programme (31 laboratories)

Vitek Antimicrobial Susceptibility Cards (Supply and delivery)	\$14,233
Testing (\$10 per isolate)	\$31,000 (Based on 3,100 isolates)

2012 Community Onset Enterobacteriaceae Programme (31 laboratories)

Vitek Antimicrobial Susceptibility Cards (Supply and delivery)	\$14,233
Testing (\$10 per isolate)	\$31,000 (Based on 3,100 isolates)

2013 Community and Hospital Onset Enterococcus Sepsis Programme (31 laboratories)

Testing (\$20 per isolate)	\$30,000 (Based on 1,500 isolates)
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Epidemiological typing of MRSA from the 2012 Community Onset Staphylococcus aureus Programme

Pulsed Field Gel Electrophoresis 600 @ \$35 per isolate	\$21,000
Coagulase PCR-RFLP 100 @ \$10 per isolate	\$1,000
SCCmec PCR 20 @ \$140 per isolate	\$2,800
MLST 18 @ \$200 per isolate	\$3,600
Urea Broths 600 @ \$1 per isolate	\$600
Resistogram 100 @ \$3 per isolate	\$300
Mupirocin 200 Disc 100 @ \$1 per isolate	\$100
Cefoxitin Discs 600 @ \$1 per isolate	\$600
Total	\$30,000

Panton-Valentine leukocidin PCR Screening of community MRSA isolates from the 2012 Community Onset Staphylococcus aureus Programme

PCR 600 @ \$5 per isolate	\$3,000
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Molecular Characterisation of Resistance Mechanisms in Enterobacteriaceae from the 2012 Community Onset Enterobacteriaceae Programme

Epidemiological Characterisation \$10,000

Epidemiological typing of Enterococcus from the 2013 Community and Hospital Onset Enterococcus survey

Pulsed Field Gel Electrophoresis 1,500 @ \$35 per isolate	\$52,500
MLST 100 @ \$200 per isolate	\$20,000
Van gene PCR 500 @ \$5 per isolate	\$2,500
Vancomycin and teicoplanin Etests 1500 @ \$10 per isolate	\$15,000
Total	\$90,000

Meetings

November 2012 (Sydney)
AGAR Executive Meeting (All day)

Attendance: One representative from each participant and the Executive Delegates: 11
Airmiles required: 9 (\$4,735)
Accommodation/Breakfast required: 4 (\$1,000)
Venue: Qantas Meeting Rooms (Friday) (\$1,265)

\$7,000

May 2013 (Sydney)
AGAR Executive Meeting/AGAR Committee Meeting

Attendance: AGAR Committee
Delegates: 63
Airmiles required: 47 (\$23,380)
Accommodation/Breakfast required: 20 (\$5,000)
Qantas Meeting Rooms (Thursday) (\$1,265)
Venue: Novotel Brighton Beach (Friday) (\$5,355)

\$35,000

Isolate Long Term Storage (-80°C)

Centralised Storage

Western Australia

1 Freezer Shelf (\$2,500)
4,600 isolates @ \$2 (\$9,200)

South Australia

1 Freezer Shelf (\$2,500)
3,100 isolates @ \$2 (\$6,200)

\$20,400

Liability and Professional Indemnity Insurance \$7,500

Liability insurance is required by the Department of Health.



2012/2013 Budget

Item	Cost	GST	Total
November 2012 Meeting	7,000	700	7,700
May 2013 Meeting	35,000	3,500	38,500
MRSA Typing	30,000	3,000	33,000
MRSA PVL	3,000	300	3,300
Enterococcus Typing	90,000	9,000	99,000
Enterobacteriaceae Characterisation	10,000	1,000	11,000
Scientific Officers	166,161	16,616	182,777
S aureus			
Vitek Cards	14,233	1,423	15,656
Laboratories	31,000	3,100	34,100
Enterobacteriaceae			
Vitek Cards	14,233	1,423	15,656
Laboratories	31,000	3,100	34,100
Enterococcus			
Laboratories	30,000	3,000	33,000
Storage of Isolates	20,400	2,040	22,440
Insurance	7,500	750	8,250
TOTAL	489,527	48,952	538,479



2. 2013/2014

- 31 participants participating in three AGAR surveillance programmes
 - 2013 Community and Hospital Onset Staphylococcus aureus Sepsis Programme
 - 2013 Community and Hospital Onset Enterobacteriaceae Sepsis Programme
 - 2014 Community and Hospital Onset Enterococcus Sepsis Programme
- Epidemiological typing of S aureus MRSA and Enterococcus species (Subset)
- PCR detection of Panton-Valentine leukocidin (PVL) in S aureus (Subset)
- Molecular characterisation of resistance in Enterobacteriaceae

AGAR Scientific Officers (1.5FTE)

Cost based on a P2.3 Senior Medical Scientist position plus on-costs (as per the Western Australian Enterprise Bargaining Agreement with the WA Hospital Salaried Union)

1.0 FTE Scientific Officer (Julie Pearson)

Based at: Department of Microbiology and Infectious Diseases
Royal Perth Hospital, PathWest Laboratory Medicine – WA, Western Australia

Collate, analyse and prepare data from the S aureus and Enterococcus programmes for publication and for the website

Responsible for coordinating AGAR activities, printing of the minutes and procedures, and maintaining the AGAR website (www.antimicrobials-resistance.com)

Salary	\$98,501
On Costs	
Annual Leave Loading (1.73%)	\$1,704
Long Service Leave (3.04%)	\$2,994
Worker's Compensation (3.19%)	\$3,053
Superannuation (9.00%)	\$8,865
Total	\$115,117

0.5 FTE Scientific Officer (Jan Bell)

Based at: Department of Microbiology and Infectious Diseases
Women's and Children's Hospital, SA-Pathology, South Australia

Collate, analyse and prepare data from the Enterobacteriaceae programme for publication and for the website

Salary	\$49,250
On Costs	
Annual Leave Loading (1.73%)	\$852
Long Service Leave (3.04%)	\$1,497
Worker's Compensation (3.19%)	\$1,526
Superannuation (9.00%)	\$4,432
Total	\$57,557
Total	\$172,674



Reagents

2013 Community and Hospital Onset Staphylococcus aureus Sepsis Programme (31 laboratories)

Testing (\$20 per isolate) \$60,000 (Based on 3,000 isolates)

2013 Community and Hospital Onset Enterobacteriaceae Sepsis Programme (31 laboratories)

Testing (\$20 per isolate) \$110,000 (Based on 5,5000 isolates)

2014 Community and Hospital Onset Enterococcus Sepsis Programme (31 laboratories)

Testing (\$20 per isolate) \$30,000 (Based on 1,500 isolates)

Epidemiological typing of S aureus from the 2013 Community and Hospital Onset Staphylococcus aureus Sepsis Programme Subset of 500 isolates (250 MSSA and 250 MRSA)

Pulsed Field Gel Electrophoresis 500 @ \$35 per isolate \$17,500

Coagulase PCR-RFLP 50 @ \$10 per isolate \$500

SCCmec PCR 10 @ \$140 per isolate \$1,400

MLST 10 @ \$200 per isolate \$2,000

Urea Broths 500 @ \$1 per isolate \$500

Resistogram 50 @ \$3 per isolate \$150

Mupirocin 200 Disc 75 @ \$1 per isolate \$75

Cefoxitin Discs 500 @ \$1 per isolate \$500

Total \$22,625

Panton-Valentine leukocidin PCR Screening of S aureus from the 2013 Community and Hospital Onset Staphylococcus aureus Sepsis Programme Subset of 500 isolates (250 MSSA and 250 MRSA)

PCR 500 @ \$5 per isolate \$2,500

Molecular Characterisation of Resistance in Enterobacteriaceae from the 2013 Community and Hospital Onset Enterobacteriaceae Sepsis Programme

Epidemiological Characterisation \$20,000



Epidemiological typing of Enterococci from the 2014 Hospital and Community Onset Enterococcus survey
Subset of 300 isolates

Pulsed Field Gel Electrophoresis 300 @ \$35 per isolate	\$10,500
MLST 20 @ \$200 per isolate	\$4,000
Van gene PCR 50 @ \$5 per isolate	\$250
Vancomycin and teicoplanin Etests 300 @ \$10 per isolate	\$3,000
Total	\$17,750

Meetings

November 2013 (Sydney)
AGAR Executive Meeting (All day)

Attendance: One representative from each participant and the Executive
Delegates: 11
Airmiles required: 9 (\$4,735)
Accommodation/Breakfast required: 4 (\$1,000)
Venue: Qantas Meeting Rooms (Friday) (\$1,265)

\$7,000

May 2013 (Melbourne)
AGAR Executive Meeting/AGAR Committee Meeting

Attendance: AGAR Committee
Delegates: 63
Airmiles required: 49 (\$24,380)
Accommodation required: 20 (\$5,000)
Qantas Meeting Rooms (Thursday) (\$1,265)
Venue: Park Royal Hotel (Friday) (\$5,355)

\$36,000

Isolate Long Term Storage (-80°C)

Centralised Storage

Western Australia

1 Freezer Shelf (\$2,500)
4,500 isolates @ \$2 (\$9,000)

South Australia

1 Freezer Shelf (\$2,500)
5,500 isolates @ \$2 (\$11,000)

25,000

Liability and Professional Indemnity Insurance

\$8,000



2013/2014 Budget

Item	Cost	GST	Total
November 2013 Meeting	7,000	700	7,700
May 2014 Meeting	36,000	3,600	39,600
S aureus Typing	22,625	2,262	24,887
S aureus PVL	2,500	250	2,750
Enterococcus Typing	17,750	1,775	19,525
Enterobacteriaceae Characterisation	20,000	2,000	22,000
Scientific Officers	172,674	17,267	189,941
S aureus Laboratories	60,000	6,000	66,000
Enterobacteriaceae Laboratories	110,000	11,000	121,000
Enterococcus Laboratories	30,000	3,000	33,000
Storage of Isolates	25,000	2,500	27,500
Insurance	8,000	800	8,800
TOTAL	511,549	51,154	562,703



3. 2014/2015

- 31 participants participating in three AGAR surveillance programmes
 - 2014 Community and Hospital Onset Staphylococcus aureus Sepsis Programme
 - 2014 Community and Hospital Onset Enterobacteriaceae Sepsis Programme
 - 2015 Community and Hospital Onset Enterococcus Sepsis Programme
- Epidemiological typing of S aureus MRSA and Enterococcus species (Subset)
- PCR detection of Panton-Valentine leukocidin (PVL) in S aureus (Subset)
- Molecular characterisation of resistance in Enterobacteriaceae

AGAR Scientific Officers (1.5FTE)

Cost based on a P2.3 Senior Medical Scientist position plus on-costs (as per the Western Australian Enterprise Bargaining Agreement with the WA Hospital Salaried Union)

1.0 FTE Scientific Officer (Julie Pearson)

Based at: Department of Microbiology and Infectious Diseases

Royal Perth Hospital, PathWest Laboratory Medicine – WA, Western Australia

Collate, analyse and prepare data from the S aureus and Enterococcus programmes for publication and for the website

Responsible for coordinating AGAR activities, printing of the minutes and procedures, and maintaining the AGAR website (www.antimicrobials-resistance.com)

Salary	\$98,501	
On Costs		
Annual Leave Loading (1.73%)	\$1,704	
Long Service Leave (3.04%)	\$2,994	
Worker's Compensation (3.19%)	\$3,053	
Superannuation (9.00%)	\$8,865	
Total	\$115,117	
Plus 3% (estimated)		\$118,570

0.5FTE Scientific Officer (Jan Bell)

Based at: Department of Microbiology and Infectious Diseases

Women's and Children's Hospital, SA-Pathology, South Australia

Collate, analyse and prepare data from the Enterobacteriaceae programme for publication and for the website

Salary	\$49,250	
On Costs		
Annual Leave Loading (1.73%)	\$852	
Long Service Leave (3.04%)	\$1,497	
Worker's Compensation (3.19%)	\$1,526	
Superannuation (9.00%)	\$4,432	
Total	\$57,557	
Plus 3% (estimated)		\$59,283

Total \$177,853



Reagents

2014 Community and Hospital Onset Staphylococcus aureus Sepsis Programme (31 laboratories)

Testing (\$20 per isolate) \$60,000 (Based on 3,000 isolates)

2014 Community and Hospital Onset Enterobacteriaceae Sepsis Programme (31 laboratories)

Testing (\$20 per isolate) \$120,000 (Based on 6,000 isolates)

2015 Community and Hospital Onset Enterococcus Sepsis Programme (31 laboratories)

Testing (\$20 per isolate) \$30,000 (Based on 1,500 isolates)

Epidemiological typing of S aureus from the 2014 Community and Hospital Onset Staphylococcus aureus Sepsis

Subset of 600 isolates (300 MSSA and 300 MRSA)

Pulsed Field Gel Electrophoresis \$21,000
600 @ \$35 per isolate

Coagulase PCR-RFLP \$600
60 @ \$10 per isolate

SCCmec PCR \$2,100
15 @ \$140 per isolate

MLST \$2,000
10 @ \$200 per isolate

Urea Broths \$600
600 @ \$1 per isolate

Resistogram \$180
60 @ \$3 per isolate

Mupirocin 200 Disc \$80
80 @ \$1 per isolate

Cefoxitin Discs \$600
600 @ \$1 per isolate

Total \$27,160

Panton-Valentine leukocidin PCR Screening of S aureus from the 2014 Community and Hospital Onset Staphylococcus aureus Sepsis

Subset of 600 isolates (300 MSSA and 300 MRSA)

PCR \$3,000
600 @ \$5 per isolate

Molecular Characterisation of Resistance in Enterobacteriaceae from the 2014 Community and Hospital Onset Enterobacteriaceae Sepsis Programme



Epidemiological Characterisation \$20,000

Epidemiological typing of Enterococci from the 2015 Hospital and Community Onset Enterococcus survey
Subset of 400 isolates

Pulsed Field Gel Electrophoresis 400 @ \$35 per isolate	\$14,000
MLST 25 @ \$200 per isolate	\$5,000
Van gene PCR 75 @ \$5 per isolate	\$375
Vancomycin and teicoplanin Etests 400 @ \$10 per isolate	\$4,000
Total	\$23,375

Meetings

November 2014 (Melbourne)
AGAR Executive Meeting (All day)

Attendance: One representative from each participant and the Executive
Delegates: 11
Airmiles required: 9 (\$4,735)
Accommodation/Breakfast required: 4 (\$1,000 @ \$250pp)
Venue: Qantas Meeting Rooms (Friday) (\$1,265 @ \$115pp)
\$7,000

May 2015 (Sydney)
AGAR Executive Meeting/AGAR Committee Meeting

Attendance: AGAR Committee
Delegates: 63
Airmiles: 49 (\$24,380)
Accommodation/Breakfast required: 20 (\$5,000)
Qantas Meeting Rooms (Thursday) (\$1,265)
Venue: Park Royal Hotel (Friday) (\$5,355)
\$36,000

Isolate Long Term Storage (-80°C)

Centralised Storage	
Western Australia	
1 Freezer Shelf (\$2,500)	
4,500 isolates @ \$2 (\$9,000)	
South Australia	
1 Freezer Shelf (\$2,500)	
6,000 isolates @ \$2 (\$12,000)	
	26,000

Liability and Professional Indemnity Insurance \$8,000



2014/2015Budget

Item	Cost	GST	Total
November 2014 Meeting	7,000	700	7,700
May 2015 Meeting	36,000	3,600	39,600
S aureus Typing	27,160	2,716	29,876
S aureus PVL	3,000	300	3,300
Enterococcus Typing	23,375	2,337	25,712
Enterobacteriaceae Characterisation	20,000	2,000	22,000
Scientific Officers	177,853	17,785	195,638
S aureus Laboratories	60,000	6,000	66,000
Enterobacteriaceae Laboratories	120,000	12,000	132,000
Enterococcus Laboratories	30,000	3,000	33,000
Storage of Isolates	26,000	2,600	28,600
Insurance	8,000	800	8,800
TOTAL	538,388	53,838	592,226

Whole of Project Costs – GST Inclusive (Summary)

2012/2013 \$538,479

2013/2014 \$562,703

2014/2015 \$592,226

Total \$1,693,408

The corporate costs of running AGAR are provided gratis by the Australian Society for Antimicrobials



PARTICIPANTS (31)

State	Participant	Medical	Scientific
Qld (6)	Pathology Qld Central Laboratory	G Nimmo	N George
	Pathology Qld Princess Alexandra Hospital	J Faoagali	G Lye
	Pathology Qld Gold Coast	P Derrington	S Dal-Cin
	Sullivan Nicolaides Pathology	J Robinson	G Peachey
	Pathology Qld Prince Charles Hospital	C Coulter	S Coulter
	Pathology Qld Cairns Base Hospital	E Binotto	B Thomsett
NSW (8)	SWAPS	I Gosbell	A Le Cordier
	Royal North Shore Hospital	G Kotsiou	P Huntington
	Royal Prince Alfred Hospital	C McLeod	B Watson
	Westmead Hospital	D Mitchell	L Thomas
	Nepean Hospital	J Branley	D Barbaro
	Concord Hospital	T Gottlieb	G Robertson
	John Hunter Hospital	J Ferguson	J Anderson
	Douglass Hanly Moir Pathology	M Paul	TBA
VIC (6)	Alfred Hospital	D Spelman	M Huysmans
	Royal Women's Hospital	S Garland	G Gonis
	St Vincent's Hospital	M-J Waters	L Joyce
	Gribbles Pathology	J Andrew	D Olden
	Austin Hospital	B Howden	P Ward
	Monash Hospital	T Korman	D Kotsanas
ACT (1)	Canberra Hospital	P Collignon	S Bradbury
NT (1)	Darwin Hospital	R Baird	J Hennessy
Tas (2)	Royal Hobart Hospital	L Cooley	R Peterson
	Launceston Hospital	M Rele	K Wilcox
SA (3)	IMVS	M Warner	F Manno
	Flinders Medical Centre	K Papandoum	N Wells
	Women's and Children's Hospital	J Turnidge	J Bell
WA (4)	PathWest Royal Perth Hospital	K Christiansen	G Coombs
	PathWest Fremantle Hospital	D McGeachie	R Wake
	PathWest QEII	R Murray	B Henderson
	Saint John of God Pathology	V D'Abrera	S Budalich

