

## **3. Learning Contract for the Work Placement Project (WPP) Unit for the Masters Degree in Biostatistics with the University Of Sydney**

### **3.1 Introduction**

The Learning Contract describes the requirements, to be submitted as a Portfolio of Evidence, that the Trainees need to fulfil to satisfy the NSW Department of Health and the assessment for the WPP unit in the Masters Degree in Biostatistics with the University of Sydney.

The learning contract has the following sections:

#### **Introduction**

- The introduction describes the NSW Biostatistical Officer Training Program and the function of the competency standards.

#### **Information for Trainees**

- The information gives pointers on how to prepare a Portfolio of Evidence and describes what should be included in it.

#### **Portfolio of Evidence**

- These are the evidence requirements described in the Competency Standards organised in a format that makes it easy for Trainees to monitor what they have to collect for the portfolio.

#### **Cover Page**

- This is the page to be attached to each document included in the Portfolio.

#### **Supervisor's Validation Sheet**

- This is the sheet that needs to be completed by the Trainee's supervisor at the time the work described in the portfolio was undertaken. It simply validates the information provided by the Trainee and verifies the accuracy of the description of the work undertaken.

#### **Placement Information**

- This is the documentation to be completed by the supervisor and the Trainee at the beginning of each placement.

## 3.2 Information For Trainees

The learning contract specifies the assessment activities that are required to be completed to satisfy:

- the competency requirements of the NSW Department of Health;
- the requirements for the WPP Unit of the Masters Degree in Biostatistics of the University of Sydney.

The learning contract is based on the competency standards for a biostatistician given in Section 2 of this report. The competency standards describe the skills and knowledge required to work as a biostatistician in the health industry. They include a statement called the Evidence Guide which explains what needs to be done to prove that one has satisfied the standards.

The learning contract will be assessed on the basis of the presentation of a **Portfolio Of Evidence** that includes the assessment items identified in these competency standards. Presentation of a Portfolio of Evidence that is assessed as satisfactory by a panel with representation from the NSW Department of Health and Sydney University means that the requirements of the learning contract have been fulfilled.

The specific assessment requirements given in this learning contract are those of the NSW Department of Health. Other organisations employing biostatistical trainees would be expected to develop a set of specific requirements appropriate for someone working in their organisation.

To satisfy the assessment requirements, the Portfolio of Evidence should contain pieces of evidence that demonstrate that the assessment requirement has been satisfied. For example if the Trainee has written a conference paper, then a copy of this paper can be included in the Portfolio of Evidence against the assessment item BIO 4-1. One workplace activity may satisfy several assessment requirements. For example, if the paper has been delivered at a conference, details of when and where it was delivered should be added, and it would also satisfy BIO 4-2. In addition, the work that resulted in the conference paper may satisfy the assessment requirements of other areas as well. If the paper were based on a project that analysed biostatistical data, using appropriate software, the analysis could be used to satisfy assessment item BIO 2-1. If the work had been done as part of a team then it could be used to satisfy BIO 5-1.

Most of the assessment requirements reflect the actual work that is done as an integral part of the day-to-day work of a biostatistician, but in some cases it will be necessary to reflect on the assessment requirements and produce a brief document explaining how the requirements have been satisfied during the work placements.

The documents included in the Portfolio of Evidence should be given a number and the cover page for each document should be filled in. The validation page should also be completed and attached to the document.

It is absolutely essential that Trainees study the standards and assessment requirements thoroughly very early in the traineeship so that they know what is

expected and are able to take every opportunity to collect appropriate materials to included in the portfolio. It is the responsibility of the Trainee to provide adequate evidence to prove that they have satisfied the requirements of the NSW Department of Health given in the Evidence Guide of the standards.

When Trainees are preparing documents for the Portfolio of Evidence, the following points need to be included:

- each piece of evidence has a cover page giving details and stating which assessment item or items it relates to;
- there is also a page for supervisor validation and this needs to be signed by the person who was your supervisor at the time the work was done. It is a good idea to get the validation page signed during the work placement, but this may not always be possible;
- if the work was carried out as a member of a team, your role needs to be clearly stated;
- one practical workplace activity, for example a workplace project that involves analysing and writing the result up as a report or conference paper and presenting the results at a conference or seminar, may satisfy several of the assessment requirements across a number of units. The cover sheet must clearly state which of the assessment items the materials relate to. Where the document relates to a number of assessment items, the validation page must be completed for each item and signed by the person who was the supervisor at the time;
- when preparing the assessment items, check back to the competency standards to make sure that the relevant elements and performance criteria have been satisfied;
- the Portfolio of Evidence should be presented in a way that makes it easy to follow, shows exactly how each piece of evidence relates to the learning contract assessment items and include a contents page listing and numbering all the documents in the portfolio.

If Trainees have any queries about what needs to be done to satisfy the assessment requirements, they should consult the traineeship coordinator or their work placement supervisor.



<b>Unit Number and Title</b>	<b>Competency Unit Descriptor</b>	<b>Evidence Required / Assessment Items</b> To meet the requirements of the NSW Department of Health, a Portfolio of Evidence should be prepared including:	<b>Documents in the Portfolio of Evidence</b> (Documents need a title and should be given a document number. The portfolio should have an index)	<b>Comment—Trainee and or supervisor</b>
BIO 1— <i>continued.</i>		<p>Assessment Item Number: BIO 1-3 Documented examples of at least two situations involving different applications of methods and data sources in which advice has been given on the collection, management or analysis and interpretation of health data.</p> <p>Assessment Item Number: BIO 1-4 Evidence that a successful consultancy service was provided to an internal or external client. The evidence needs to have a clear statement of the client's needs and expectations, the problems, issues and scope of the consultancy and the outcome</p> <p>Assessment Item Number: BIO 1-5 At least one example of a review of an application to a National Health and Medical Research Council accredited ethics committee.</p>	<p>Document No. Title of document</p> <p>Document No. Title of document</p> <p>Document No. Title of document</p>	



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BIO 2 — <i>continued</i>		Assessment Item Number: BIO 2-4 Documented examples of use of data sources to describe some aspect of the health of the population including the use of HOIST or Health Wiz. This must include a clear statement of the purpose and structure of the data source, the major classifications and coding systems and standard formats.	Document No. Title of document	

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BIO 3— Develop and apply professional practice and industry knowledge to work in the health industry	This unit specifies the outcomes required by someone working the health industry. It includes working within the industry guidelines, legislation, and accepted industry practice and demonstrating an ethical approach at all times. It also includes working within the policy and procedures of an organisation.	<p>At least one example of each of the following as they apply in the workplace.</p> <p>Assessment Item Number: BIO 3-1</p> <p>How the health industry guidelines, legislation and practice impact on the work they have done in at least one of their work placements. This assessment item requires a brief document of a page or less that includes the identification of the legislation or guidelines or practice, that impacted on their work, how it affected their work, what action they took as a result, and the rationale for their actions.</p> <p>Assessment Item Number: BIO 3-2</p> <p>The operation of the Code of Conduct of the Department in their section of the workplace, and how it applies to a workplace situation or a job that they have done. This assessment item requires a brief document of a page or less that includes a description of a workplace situation or job where they needed to refer to the Code, what the requirement of the Code of Conduct was, and how it affected what they did.</p>	<p>Document No. Title of Document</p> <p>Document No. Title of Document</p>	









### 3.4 Portfolio Document Cover Page

The cover page needs to be attached to the front of every document in the Portfolio of Evidence

<b>Trainee Name</b>	
<b>Document Number</b> (give each piece of evidence a number and include a contents page for the portfolio)	
<b>Document Title</b>	
<b>Assessment Item</b>  <b>List the numbers and the descriptions of the Assessment Item/s given in the learning contract. For example:</b> Assessment Item Number: BIO 4-1 At least one example of a report or briefing document or conference paper in which they have used appropriate software to support the communication of information and ideas.	
<b>Student Declaration</b>	
<b>Supervisor's Comment</b>	

### 3. 5 Supervisor’s Validation Sheet

**Trainee Name:** .....

Assessment Item Number	Supervisor	Work Placement	Project Title	Is the information given in the Portfolio of Evidence an accurate picture of what the Trainee has done in the workplace activity? Please explain briefly why or why not.	Comment
Supervisor's Signature		Date:			
Supervisor's Signature		Date:			
Supervisor's Signature		Date:			

## 3.6 Placement Information

### Placement Profile

#### UNIT DETAILS

*Name:*  
*Street Address:*  
*Postal Address:*  
*Telephone:*  
*Facsimile:*  
*E-mail:*

#### STAFFING DETAILS

*Director:*  
*Senior Staff:*

#### PRIORITIES

*Professional Disciplines:*  
*Specific Interests:*  
*Major Achievements Last Year:*  
*Major Directions Next Year:*  
*Other Information:*

#### PLACEMENT DETAILS

*Biostatistical Officer Supervisor:*  
*Qualifications:*  
*Senior Biostatistical Adviser:*  
*Qualifications:*  
*Placement length:*

#### ATTACHMENTS

*Unit Organisational Chart:*   
*Area Organisational Chart:*   
*Annual Report:*   
*Unit Business Plan:*

### 3.7 Project Profiles

Please identify the following details and competencies for each project

#### PROJECT OUTLINE

*Project Title:*

*Role of Biostatistical Officer*

Project Manager/Chief Investigator

Project Officer/Support Role

Other (specify):

\_\_\_\_\_

Please provide a brief description of the project (approximately. 200 words)
Aim:
Rationale:
Context:
Project phases (include details of data sources, analyses and biostatistical methods):
Outcomes:

#### PROJECT RELATED COMPETENCIES

BIO 1 Key Words—Design & Advise	Apply biostatistical methods to the design of studies and use of health data <input type="checkbox"/>
BIO 2 Key Word—Analysis	Obtain, manage and analyse health data <input type="checkbox"/>
BIO 3 Key Word—Professional Practice	Develop and apply professional practice and industry knowledge to work in the health industry <input type="checkbox"/>
BIO 4 Key Word—Communication	Communicate with individuals and groups in formal and informal situations <input type="checkbox"/>
BIO 5 Key Word—Management	Apply management skills to work in the health industry <input type="checkbox"/>

## 3.8. Information For Supervisors—NSW Biostatistical Officer Training Program

The learning contract explains what the Trainees need to do to satisfy the NSW Department of Health requirements and the Sydney University requirements for the Work Placement unit of the Masters Degree in Biostatistics. The Masters Degree provides the formal educational program on which the skill development is based. The Trainee Biostatistical Officers are granted four hours of study leave per week during work time to undertake the coursework for the Masters of Biostatistics.

Assessment of the WPP unit is based on the presentation of a Portfolio of Evidence that contains materials that satisfy the assessment requirements of each of the competency standards units. The assessment items listed in the learning contract are specific to the NSW Department of Health, but each organisation employing a candidate for the Master Degree in Biostatistics would be expected to develop a similar document specifying the requirements for that organisation. A panel made up of a representative of the University of Sydney and a representative of the NSW Department of Health will assess the Portfolio of Evidence.

During the work placement there is a requirement that advice from a Senior Biostatistician is available to the Trainee on a day-to-day basis and with regular meetings. It is also essential that a computing system with appropriate hardware and software is provided for the Trainee.

Based on the details given in the learning contract, the supervisor is expected to discuss with the Trainee aspects of the work to be undertaken by the Trainee in that placement that would contribute to the Portfolio of Evidence taking the following into account:

- not all competencies will be developed during a particular work placement;
- at the beginning of each work placement, the supervisor should prepare projects for the Trainee and identify whether the projects relate to the assessments items, and agree on which of the assessment items will be completed during that work placement;
- for the Trainees in the NSW Department of Health, the assessment items may be produced at any time over the three year period through up to six work placements of six months each;
- within each work placement, it is the supervisor's responsibility to see that the Trainee has had the opportunity to complete the agreed tasks for that work placement;
- the validation page for each assessment item completed needs to be signed by the supervisor. The validation page is given in the Trainees learning contract.

## 3.9 Role of the Training Program Coordinator

The Coordinator of the Trainees would need to ensure that Trainees have the range of experiences during the six work placements that allow them to complete the required assessment activities. This would need to be reviewed at the beginning of the third year of the Traineeship to identify any areas that have not been covered so that arrangements can be made to cover them during the last two work placements.



## 4. References

1. Biostatistics Collaboration of Australia. *BCA Background*. Available at [www.bca.edu.au](http://www.bca.edu.au) (accessed 5 August 2003).
2. Dixon D, Legler J. Careers in Biostatistics: High demand and rewarding work. *STATS*, 2003; 37: 3–7.
3. Public Health Training and Development Unit. *Informing public health practice—Competencies of the Graduate Diploma of Applied Epidemiology. NSW Public Health Officer Training Program*. NSW Department of Health, March, 2000.
4. Last JM. *A Dictionary of Epidemiology. Fourth Edition*. Oxford: Oxford University Press, 2001.