



EXTERNAL EXAMINER ANNUAL REPORT FORM

Guidance notes are available to support the completion of this Report and is available at <http://learning.cf.ac.uk/quality/review/external-examiners/reports/>

	For completion by External Examiner:		
Name of External Examiner:	Professor Mark Stevens		
Home Institution / Employer of External Examiner:	The Roslin Institute & Royal (Dick) School of Veterinary Studies, University of Edinburgh.		
Programme and / or Subjects Covered by this Report including any dissertation stage reports	Master of Research in Biosciences (Part I)		
Academic Year / Period Covered by this Report:	2015/2016	Date of Report:	27.1.2016

For completion by External Examiner in the spaces provided. Please extend spaces where necessary. **Please note this Form will be published online and should not make any reference to any individual students or members of staff.**

1. Programme Structure

This was my first assignment as External Examiner of the MRes in Biosciences. Stage I comprises three intensive modules: Research Techniques in Biosciences (BIT002), Data Handling [with specialisation in Advanced Statistics or Bioinformatics] (BIT010) and Key Skills in Research Practice (BIT011). Within each of these I found welcome diversity of teaching and assessment methods and evidence that the modules and wider programme achieved the objectives specified in the course handbook. There was an appropriate balance of lectures, workshops, small-group discussions and self-directed learning, as well as some exposure to practical methods in cloning and imaging. Taught material was not examined but the topics and timetable appear consistent with expectations at early postgraduate level. Portfolios for BIT002 included a write-up of cloning experiments, a News & Views article on gene editing and four essays spanning analysis of gene function, ecology, stem cells and neuroscience. This is naturally challenging for specialists in a single discipline, but also gives a wider perspective of research in the biosciences and embeds lasting skills in independent review of literature and scientific writing. BIT010 provides valuable training in data handling appropriate to level 7 study, with the opportunity to specialise in advanced statistics (taken by 17/21 this session) or bioinformatics, with short assignments and a mini-project. BIT011 involves oral and poster presentations related to projects to be undertaken in Stage 2, as well as preparation of a grant proposal. The latter must be passed to progress to Stage 2 and is an excellent initiative as it requires scrutiny of literature, formulation of hypotheses and objectives, selection of experimental approaches and planning (inc. time management, contingency plans, ethical review, risk assessments etc.). It will be hugely valuable to those considering long-term research careers and provides a great opportunity for students to refine plans with their supervisors. There appeared to be little critical review of whether projects pose risk to the candidates at this stage. It may be appropriate for future assessors to comment on whether proposed projects pose low/medium/high risk (e.g. owing to inter-dependence of objectives, expertise available in support of the project, feasibility in timeframe with available resources

etc.). BIT011 also provides training in bioethics, abstract writing and public engagement via preparation of a lay article. Collectively, Stage I provides an excellent foundation for the research phase. On the whole student experience of Stage I appeared very positive. MRes students at other universities typically have access to courses in scientific writing, presentation skills, ethics, statistics and so on, but few are mandatory and summative assessments in such areas are lacking. In this context the MRes in Biosciences at Cardiff may be considered a beacon of good practice. Arguably less time is available for the research phase of the MRes than at other universities; however it is not possible for me to gauge the impact of this on the quality of dissertations until Stage 2 is complete.

2. Academic Standards

I was able to review the research portfolios for the three modules of Stage I and was provided with all materials required to make a detailed assessment of standards. All 21 students (17 MRes and 4 Ph.D) passed all modules. Overall standards for Stage 1 appear to be high (Of 21 students, 3 Distinction, 14 Merit, 4 Pass; Mean Stage 1 mark 64.3%) and show modest improvement on Stage 1 students in the 2014/15 session (Of 14, 3 Distinction, 5 Merit, 6 Pass; Mean Stage 1 mark 62.3%). Standards are comparable with other Master of Science degrees I have examined and at my own Institution. The difference in quality of work in pass, merit and distinction categories was clear, and in many areas was supported by written feedback to students. It was not always obvious where marks had been allocated but one accepts a detailed rubric for every assignment may not be feasible.

3. The Assessment Process

Methods for assessment of research portfolios are generally robust and are largely supported by clear marking criteria. There was evidence of moderation of marks for the grant proposal in BIT011, but given its importance in progression to Stage 2 it may be appropriate for it to be second marked blind, with the mean taken where variance in marks is <10% and moderation or a third marker required if variance exceeds 10%. Some disparity existed in the amount of feedback provided between modules. All pieces of work for all students in BIT011 were annotated with constructive feedback, both through the text and summarised at the end. In contrast some portfolios in BIT002 contained a single brief summary, though one accepts that students may have received in-course feedback during assignments and the formative assessment. This was not a universal issue in BIT002 as one marker provided constructive summaries on each portfolio component in support of the marks awarded. It may be appropriate to share good practice and agree expectations for Stage 1 next year, in particular where demonstrators may be involved in assessments. In most instances marks had been accurately transcribed from marked work to spreadsheets. Where an error was identified this was promptly acknowledged and corrected. The Examination Board meeting was conducted professionally and in accordance with established procedures. Extenuating circumstances were identified for a small subset of students/assignments and appropriate actions were taken.

4. Year-on-Year Comments

Not applicable.

5. Preparation / Induction Activity (for new External Examiners only)

I was appointed as External Examiner of MRes in Biosciences in December 2015. I was provided with the course handbook for 2015/16, External Examiners Handbook for taught programmes and was well-briefed in advance of the Part I interim Exam Board, both in respect of arrangements for the day but also the expectations of me. An existing External Examiner (Dr Sait) provided valuable advice both ahead of the interim Exam Board and throughout. Administration related to my visit was highly efficient and appreciated.

6. Noteworthy Practice and Enhancement

There were many examples of good practice and innovation (above). In feedback to the External Examiners the students raised some concern regarding the intensity of assignments, with many being due in a narrow window. It was acknowledged that some students managed time more effectively than others, and that the time management workshop was helpful. It may be appropriate to revisit the phasing of lectures relative to essays, though it is accepted that a key part of level 7 learning is the ability to independently research topics and construct cogent essays with high-level reasoning, including in unfamiliar subjects. As assignments are submitted as a portfolio rather than sequentially students felt they may benefit from interim marks and feedback to gauge progress, however it is accepted that this would place substantial demands on the time of assessors and be hard to manage in practice given the number of elements to be collected. Some concern was expressed by the students in relation to advanced statistics (BIT010). Some found it necessary to seek independent advice on R from the Statistics Clinic, and considered they had been penalised if they had deviated from taught material of the module. Premature disclosure of marks owing to an incorrect posting-date had caused some anxiety, in particular when marks were largely revised down. This appears to have affected confidence, but was one of relatively few issues raised. Specific reference was made to marks lost for not applying a re-levelling correction in a general linear model and it may be appropriate to explore this with the teaching staff involved. It is reassuring that the lecturer and teaching approach were unchanged from last year, when very few issues of concern were raised. It could be argued that the mini-project in BIT010 should require a mandatory pass. The increased workload in double-marking (for consistency with the mandatory grant proposal) could perhaps be offset by reducing the number of smaller assignments.

In the Key Research Skills module, consideration could be given to training in preparation and critical review of manuscripts. This could involve a critique of a paper as well as good practice in manuscript writing and an explanation of peer review and editorial processes.

It was helpful that the Internal Exam Board provided the External Examiners with a summary of their discussions, including issues raised by module coordinators and potential solutions. It was evident from this and the conduct of module organisers throughout that they care greatly about the quality of teaching, standards and student experience.

7. Appointment Overview (for retiring External Examiners only)

Not applicable.

8. Annual Report Checklist

Please include appropriate comments within Sections 1-7 above for any answer of 'No'.

		Yes (Y)	No (N)	N/A (N/A)
Programme/Course Information				
8.1	Did you receive sufficient information about the Programme and its contents, learning outcomes and assessments?	Y		
8.2	Were you asked to comment on any changes to the assessment of the Programme?			N/A
Draft Examination Question Papers				
8.3	Were you asked to approve all examination papers contributing to the final award?			N/A
8.4	Were the nature, spread and level of the questions appropriate?			N/A
8.5	Were suitable arrangements made to consider your comments?			N/A
Marking Examination Scripts				
8.6	Did you receive a sufficient number of scripts to be able to assess whether the internal marking and classifications were appropriate and consistent?			N/A
8.7	Was the general standard and consistency of marking appropriate?			N/A
8.8	Were the scripts marked in such a way as to enable you to see the reasons for the award of given marks?			N/A
8.9	Were you satisfied with the standard and consistency of marking applied by the internal examiners?			N/A
8.10	In your judgement, did you have the opportunity to examine a sufficient cross-section of candidates' work contributing to the final assessment?			N/A
Coursework and Practical Assessments				
8.11	Was the choice of subjects for coursework and / or practical assessments appropriate?	Y		
8.12	Were you afforded access to an appropriate sample of coursework and / or practical assessments?	Y		
8.13	Was the method and general standard of assessment appropriate?	Y		
8.14	Is sufficient feedback provided to students on their assessed work?	Y		
Clinical Examinations (if applicable)				
8.15	Were satisfactory arrangements made for the conduct of clinical assessments?			N/A
Sampling of Work				
8.16	Were you afforded sufficient time to consider samples of assessed work?	Y		
Examining Board Meeting				
8.17	Were you able to attend the Examining Board meeting?	Y		
8.18	Was the Examining Board conducted properly, in accordance with established procedures and to your satisfaction?	Y		
8.19	Cardiff University recognises the productive contribution of External Examiners to the assessment process and, in particular, to the work of the Examining Board. Have you had adequate opportunities to discuss the Programme and any outstanding concerns with the Examining Board or its officers?	Y		

		Yes (Y)	No (N)	N/A (N/A)
Joint Examining Board Meeting (if applicable)				
8.20	Did you attend a Composite Examining Board, i.e. one convened to consider the award of Joint Honours degrees?		N	
8.21	If so, were you made aware of the procedures and conventions for the award of Joint Honours degrees?			N/A
8.22	Was the Composite Examining Board conducted according to its rules?			N/A

Please return this Report, preferably in a Microsoft Word format, by email to:

ExternalExaminers@cf.ac.uk

Your fee and expenses claim form and receipts, should be sent electronically to the above email address or in hard copy to:

External Examiners, Registry & Academic Services, Cardiff University, McKenzie House, 30-36 Newport Road, Cardiff, CF24 0DE