

**ST GEORGE'S, UNIVERSITY OF LONDON**

**PERIODIC REVIEW REPORT**

**PgCert Interpretation and Clinical Application of Genomic Data**

**14<sup>th</sup> July 2020**

**Panel Membership**

Dr Mark Bodman-Smith (Chair)	St George's, University of London
Prof Sarah Smithson	Lead Consultant in Clinical Genetics and Clinical Director WE Genomic Medicine Centre, University Hospitals Bristol NHS Foundation Trust
Dr Francesca Capon	Reader in Inflammation Genetics, King's College London, UK
Josie Palmer	Student Reviewer, St George's, University of London

**In attendance**

Glen Delahaye	Quality Assurance and Enhancement Manager, St George's, University of London
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**Introduction and context**

- 1) The Postgraduate Certificate in the Interpretation and Clinical Application of Genomic Data (PgCert ICAG) programme was validated in 2013 and recruited its first student cohort in 2014. The programme runs over two years and is thus coming to the end of its third cycle. Since 2017 the programme contributes modules to the MSc Clinical Genomics, which was designed as a combination of modules from the PgCert ICAG and MSc Genomic Medicine.
- 2) While offered initially to practitioners within the Pan Thames network, who had to complete the programme as part of their clinical genetics training programme, the PgCert went national in 2016 and now trains Clinical Geneticists from across the country. The curriculum is organised into four modules:
  - (1) "Understanding genetic technologies",
  - (2) "Clinical interpretation of genomic data",
  - (3) "Communication of genetic information and ethics",
  - (4) "Personal and professional development portfolio".
- 3) Module 1 is delivered as two massive open online courses (MOOCs), and the principal objective is to help students familiarise themselves with the latest genomics technologies and methods employed in diagnostic laboratories. The module is assessed through an online single best answer (SBA) assessment and an oral presentation.

- 4) Module 2 is a three-day face-to-face data interpretation workshop that is assessed through a 5000-word critical evaluation essay.
- 5) Module 3 is taught as a one-day online “hub-and-spoke” event consisting of centrally delivered lectures, decentralised small-group role play facilitated in centres in different cities, and an afternoon interactive online session on ethics and genomics. Assessments include an OSCE and the preparation of an information leaflet that explains a complex genomic concept.
- 6) For Module 4, which runs throughout the programme, students must apply the knowledge and skills acquired in the other elements of programme in their clinical practice and provide documentation in the form of an extensive portfolio.

### **Conduct of the meeting**

- 7) The periodic review event took place during the Covid-19 outbreak, while the University site continued partly closed, and was therefore held online, through Microsoft Teams.
- 8) Prior to the meeting, the Panel received the documents listed in Annex A. Documents were received twelve working days ahead of the review.
- 9) The Panel members held a private meeting at which they confirmed the range of issues that they wished to discuss with the course team. Meetings were then conducted by the Panel. These included a meeting with students and a meeting with the course team. At the conclusion of these meetings, the Panel members held a private meeting in which they agreed the outcome, including areas of good practice and action points. These are recorded in paragraphs 13 to 21.

### **Outcome of the meeting**

- 10) The Panel recommended to Senate that the period of approval of the PgCert Interpretation and Clinical Application of Genomic Data should be extended for five years. The programme would therefore next be reviewed (or revalidated) in the academic year 2024/25 to enable further intakes to enrol on the programme in the subsequent academic year 2025/26. The Panel agreed a number of action points and identified areas of good practice. The course team would be required to respond to the action points through the annual programme monitoring process.
- 11) This decision to approve the programme was subject to the approval of a business case, which the course team would be required to submit to the Education and Student Strategy Committee (ESSC).
- 12) The Panel also concluded that the PgCert was in principle compliant with the expectations of the UK Quality Code for Higher Education published by the QAA.

### **Good practice**

- 13) The following points were highlighted by the Panel as Good Practice:
- 14) The team was commended for the innovation within the programme, as well as its response to a recognised need. They considered that it was very well aligned with the St George’s, University of London mission statement.

- 15) The flexibility of the programme, which made it well suited to its students.
- 16) The varied assessment methods, which work to highlight different strengths within the programme's students.

### **Essential action points**

- 17) The following essential action point was agreed by the Panel:

#### Action 1

- 18) Ensure that assessment dates are clearly communicated to students as early as possible and that they remain easy for the students to access throughout the programme. Students need to be aware of the means through which any arising changes to deadlines will be communicated (paragraphs 30-31 and 39)

### **Desirable action points**

- 19) The following desirable action points were agreed by the Panel:

#### Action 2

- 20) In order to improve the timeliness of assessment feedback, increase the external examiner pool, ensuring that assessments are moderated by an educator, and communicate turnaround times for assessments with students and inform them when there is a delay (paragraphs 27 and 37).

#### Action 3

- 21) Complete the suggested survey with students on whether they would prefer their PgCert to be graded (paragraphs 29 and 38).

### **Meeting with students**

- 22) The Panel met with one student who had already completed the programme, as well as two students who were due to have completed the programme, but were facing delays as a result of Covid-19. They both expected to complete the programme within the next few months.

### Compatibility of the PgCert with training programmes

- 23) The students stated that the programme fit very well with their clinical training and provided the skills they required. They had found it easy to balance the programme with their training, particularly as the first module was completed online, meaning that they could complete the work at a time that suited them.
- 24) One of the students had taken an interruption of study for maternity leave and had initially been concerned about how this would affect her studies. However, she had found the interruption and return to studies to be very smooth and the course team very supportive.

### Experience of online modules

- 25) The flexibility provided by the online modules had been very helpful for the students, who were easily able to complete the online content around their other responsibilities. It also allowed them to complete the material at their own pace, focussing more on the material they were less familiar with and quickly moving through material they already knew. One of the students also highlighted the usefulness of being able to continue to access the MOOC throughout the full PgCert, allowing them to easily refer back to it at any time.
- 26) There was an online chat function provided to the students, through which they could submit questions. This provided further information through answers provided by the course moderators, who were effective at responding to the questions posted by students.

### Assessment

- 27) Feedback to students on their assessments was very detailed and helpful to them. They also appreciated the clear mark schemes that were provided for written assessments and felt the feedback was tailored to their needs. The students were less satisfied with the timeliness of feedback. They also weren't always aware of when they were going to receive their feedback.
- 28) One of the students expressed frustration over the MCQ/SBA examination in Module 1, which was timed and available only for a restricted period of time towards the end of the programme. The window was open only from 5pm to 9am the next morning and this was difficult for students who had families and other commitments.
- 29) The students also expressed disappointment that there was no grade for the PgCert.

### Communication

- 30) The students found communication to be the greatest weakness of the programme. They spoke of an occasion when a deadline published on Canvas had been incorrect, resulting in confusion amongst students of what the correct deadline was. Upon joining the programme, the start time of the face-to-face sessions was not clear, making it difficult to plan for. One student mentioned that they had booked a train to align with the start time and then learned that it had been changed. The students also found that emails were not always responded to in a timely fashion.
- 31) In general, the students had found it difficult to keep track of key information relating to the programme, such as deadlines. Information on Canvas was not organised in a way that was easy to navigate and they would have preferred all information to have been presented to them in a handbook and for Canvas to be used for submission only. They did not believe that Canvas added anything positive to their experience of the programme and would have preferred communication to be restricted to one or two platforms.

### Additional points

- 32) Overall, the students agreed that they would recommend the programme to others. They considered the content to be very valuable, particularly when taken early on during training, and that much of what they learned became a key part of their jobs going forward.

## **Meeting with the course team**

### Development of the PgCert

- 33) The programme had been developed to meet a need that previously hadn't been addressed by genetic curriculum and it also aimed to lead the medical workforce in understanding genomic technologies. The first iteration of the programme had been a pilot run together with London trainees and was delivered face-to-face. It was well received and development on the MOOC then began, which brought a greater consistency of high-quality teaching and meant that the programme would be easier to deliver internationally. There had been initial conversations within the team about launching the programme internationally, but there was a need to ensure time differences did not impact the student experience.
- 34) The course team intended to retain face-to-face elements of the programme, which they considered to be important for student cohesion. However, during the current Covid-19 pandemic, these face-to-face workshops could be delivered online.

### Attrition and interruption of study

- 35) The programme had a withdrawal rate of approximately 10%, which the team noted was higher than what would be expected on an MSc. The course team stated that the reasons for not completing the programme included personal reasons, changes in career and on rare occasions also failure. As students received funding for the programme, they may also be more likely to drop out than if they were paying for it themselves.
- 36) There was a high number of students taking interruptions of study, particularly for maternity leave. As the programme only runs every two years, students returning from an interruption must often wait two years to be able to re-join the programme at the correct point. There were measures in place on the programme to support maternity leave returners and the course team was not aware of any students dropping out as a result of difficulties in returning to the programme after an interruption. Local education supervisors also support the students when they reintegrate into their training.

### Assessment

- 37) Students were told to expect feedback within four weeks and the team considered feedback on essay assignments to be fairly timely. They noted that it was important to have assessments marked by external markers with the relevant knowledge and experience. They had been considering expanding the pool of external markers, but it was difficult to find suitably qualified markers. However, as former students of the PgCert became consultants, the team hoped to recruit them to join the assessment pool.
- 38) The PgCert was a pass-fail programme, as it was competency based. The team stated that they had considered polling past students to ask them if they would have preferred a grade.

### Communication

- 39) The course team acknowledged that changes to assessment dates had taken time to confirm and that they could consider providing a paper timetable to students to ensure that they were aware of

key dates. Currently all dates were posted on Canvas and the use of Canvas was being emphasised to students as part of induction.

*GD/August 2020*

### **Annex A: Documents**

Self-evaluation Document  
Programme Specification  
Programme Regulations  
Scheme of Assessment  
Module Descriptors  
Annual Programme Monitoring Reports  
External Examiner Reports

### **Annex B: List of Attendees**

Georgia Baines – Postgraduate Officer and Course administrator for PgCert ICAG  
Emma Embleton – Head of Postgraduate Administration  
Dr Maxine Esser – Programme Manager for Taught Postgraduate Programmes  
Dr Axel Nohturfft – Academic lead for the Periodic Review  
Dr Katie Snape – Course Director  
Prof Katrina Tatton-Brown – Course Director