



Senate

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| Paper title | Research Degrees Programmes and Examinations Board Executive Summary June to September 2025 |
| Outcome requested | Senate is asked to note the executive summary of business considered by the Research Degrees Programmes and Examinations Board (RDPEB). |
| Points to note and further information | This paper summarises business considered by RDPEB at meetings held from June to September 2025: <ol style="list-style-type: none"> 1. Students' Businesses term of reference 2. RDPEB membership 3. RDPEB dates of meetings in 2025-26 4. Part 1 - Proposal for a new programme - ResM Gene Regulation 5. Clarification of Examiner Nomination Requirements for the ResM Programme 6. Clarification on the Appointment of External Examiners 7. Mandatory Cybersecurity training to research students 8. Amend Code of Practice references to Development Needs Analysis |
| Questions to consider | Senate is asked to note the report and approve the Part 1 - Proposal for a new programme - ResM Gene Regulation; which has already been approved by School, Faculty and RDPEB. |
| Regulatory/statutory reference points | <ul style="list-style-type: none"> • Queen Mary Strategy 2030 • Queen Mary Academic Regulations • Queen Mary Code of Practice for Research Degrees Programmes • OfS regulations and policies <p>RDPEB has oversight of quality and standards issues relating to research degree programmes.</p> |
| Strategy and risk | |
| Reporting/consideration route | Draft proposals are considered by the Research Degrees Programmes and Examinations Board and the Education Quality and Standards Board (EQSB). Final recommendations will be proposed to the Senate by RDPEB for approval. |
| Author | Anderson Santos, Research Degrees Office On behalf of the Research Degrees Board |



Research Degrees Programmes and Examinations Board

Executive Summary - June to September 2025

1. Students' Businesses are not included in this paper

The Board:

- a. considers and approves nominations for internal and external examiners for research degrees;
- b. considers and approves outcomes of research degree examinations and reviews all examiners' reports;
- c. considers and makes decisions on applications to interrupt studies and extensions to the thesis submission deadline;
- d. approves awards for research degrees on behalf of Senate;
- e. considers and advises on processes and policies for research degrees.

The following items were discussed and approved at the Research Degrees Programmes and Examinations Board meeting held on Wednesday 18 June 2025

2. RDPEB membership

a. Interim Chair

As June was the last RDPEB, before the current chair's retirement (Prof Tim Warner), the deputy deans for each faculty decided to rotate the chair's duties. FDM Deputy Dean (Prof Paul Chapple) chairs the July board. S&E Deputy Dean (Prof Akram Alomainy) chairs the August board. HSS Deputy Dean (Prof Caroline Morris) chairs the September board.

The newly appointed Deputy Vice Principal for Research and Innovation Cultures, Prof Claudia Cooper, will be the new permanent Chair of the RDPEB. Claudia is scheduled to be in attendance for both August and September boards, taking on the chair's duties from October 2025.

b. End of term for further representative from each Faculty

Dr Guven Demirel, School of Business and Management (HSS)

[term of office 2023-24 and 2024-25]

The HSS Deputy Dean aims at finding a replacement from Oct 2025.

Professor Himadri Gupta, School of Engineering and Materials Science (S&E)
[term of office 2023-24 and 2024-25] - Agreed to extend for another year

Dr Eleni Hagi-Pavli, Institute of Dentistry (FMD)
[term of office 2023-24 and 2024-25] - Agreed to extend for another year

The following items were discussed and approved at the Research Degrees Programmes and Examinations Board meeting held on Wednesday 16 July 2025

3. RDPEB dates of meetings in 2025-26

From August 2025 to November 2026, meetings will be held on the third Wednesday of each month.

Please note that the December 2026 meeting will take place on the second Wednesday, due to the university's holiday closure.

The following items were discussed and approved at the Research Degrees Programmes and Examinations Board meeting held on Wednesday 20 August 2025

4. Part 1 - Proposal for a new programme - ResM Gene Regulation

The RDPEB has approved the introduction of a new Master by Research (ResM) programme in Gene Regulation, aiming to have the first cohort in October 2026.

This one-year programme will be entirely research-based and will not include modular teaching. It will be hosted by the Blizzard Institute.

Please find attached the Part 1 form and Business Case, which were also submitted to EQSB on 28 August 2025.

The programme requires final approval from Senate to enable the academic model team to configure it on the system and to notify the admissions team accordingly.

5. Clarification of Examiner Nomination Requirements for the ResM Programme

The current wording regarding the criteria for nomination of examiners for the Master by Research [ResM] has been identified as ambiguous. To address this, the RDPEB has

approved a revised and clearer version of the requirement, which will be incorporated into the PGR Code of Practice and communicated to Schools.

Current text:

“The members of the examination panel must have between them experience of the examination of at least 5 research programmes, including PhD candidates (level 8) and master’s level programmes (level 7), of which a minimum of three examinations should have been for a research degree in the UK.”

Approved revised text:

“The collective experience of the examination panel for a ResM degree must include the assessment of at least five research degrees. This total may comprise both PhD (Level 8) and ResM (Level 7) candidates, with a minimum of three of these examinations conducted in the United Kingdom and at research degree level – such as PhD, ResM, EngD, MD(Res) or MPhil. If one examiner satisfies this minimum requirement, a second examiner may be appointed even if their prior examination experience has primarily involved taught master’s programmes (Level 7) – such as MSc, MA or MRes qualifications.

There is no restriction on the number of individual examinations an examiner – whether internal or external to Queen Mary – may be appointed to within a single academic year.”

6. Clarification on the Appointment of External Examiners

While the appointment of two external examiners is permitted, selecting both from the same institution is not allowed. This restriction is intended to prevent potential concerns regarding impartiality and to uphold the independence of the examination process.

To address this, the RDPEB has approved the following wording for inclusion as a new bullet point under Clause 121 of the QMUL [PGR Code of Practice](#):

- *Where two external examiners are required, they must be from different institutions (including those with honorary affiliations).*

7. Mandatory Cybersecurity training to research students

Inclusion of a new paragraph in the QMUL [PGR Code of Practice](#), outlining the requirement for research students to complete compulsory online training in Cyber-security and GDPR on an annual basis.

Section: Responsibility of Students

Clause: 59

New paragraph: [p]

Effective 1st October 2025, all research students are required to complete the online [Cybersecurity and GDPR Training](#) course.

- This training must be completed annually by all research students.

- The module is accessible via the QMUL Continuing Professional Development (CPD) system.
- Schools and institutes will have access to reporting tools to monitor and ensure student compliance.

The following items were discussed and approved at the Research Degrees Programmes and Examinations Board meeting held on Wednesday 17 September 2025

8. Amend Code of Practice references to Development Needs Analysis

The research degrees Code of Practice still refers to the Skills Assessment and Personal Development, whereas it is now called the Development Needs Analysis (DNA).

Soon after the Senate board meeting has taken place, it will need to be updated and re-published on the QMUL Policy Zone webpage.

The list below contains the proposed amended text.

Page 14, item 55g:

This assessment and review should be done by completing the Development Needs Analysis (DNA) with the student at the start of their research studies. The DNA should be reviewed before every annual progression meeting.

Page 19, item 60u:

Ensure that supervisors are completing the Development Needs Analysis (DNA) at the start of their student's research studies and reviewing this annually with each of their students. The DNA should be discussed at annual progression review. Information is provided at <https://www.qmul.ac.uk/doctoralcollege/skills-training/skills-development/>

Page 19, item 63:

The requirements for progression are set by each School/Institute. These should usually include the submission of written work by the student, a training needs analysis review using the Development Needs Analysis (DNA) (<https://www.qmul.ac.uk/doctoralcollege/skills-training/skills-development/>) jointly prepared by the student and their supervisory team, [...]

Page 25, item 96:

The individual programme of research training will be discussed at the student's initial meeting with the supervisory team. The student and supervisory team should complete Development Needs Analysis (DNA) available here <https://www.qmul.ac.uk/doctoralcollege/skills-training/skills-development/>

The DNA should be reviewed regularly during the course of the programme, particularly at formal progress reviews.

Part 1 Programme Proposal Form

All sections must be completed in full and supplementary information attached where requested. Part 1 proposals must:

- be considered by the School/Institute Education Committee and approved for further development;
- be considered by Faculty Executive and form part of the annual Planning and Accountability review;
- be discussed with External Relations regarding the market demand for the programme and endorsed by the relevant School/Institute Marketing Manager with an appended marketing report (requires endorsement of section 4);
- be discussed with Admissions regarding the entry requirements for the programme (requires endorsement of section 5);
- be discussed with the Degree Apprenticeship team regarding employer interest and End-Point Assessment arrangements (requires endorsement of section 7);
- be accompanied by detailed costing information and a business plan for the programme, endorsed by the relevant Senior Finance Partner (requires endorsement of section 8);
- be discussed with Library Services/I.T/Estates regarding the required resources for the programme (requires endorsement of section 12);

If a proposed programme is to be delivered as part of a collaborative arrangement, a Partnership Proposal form will need to be approved by the Partnerships Board before a Part 1 proposal can be considered. Please ensure section 6 is completed.

If a proposed programme is to be delivered by Distance Learning (DL), the Part 1 proposal and business case must be approved by the DL Sub-Board of SET in parallel with the Part 1 approval process above. A programme cannot move onto the Part 2 process until it has approval from both the DL Sub-Board of SET and the Part 1 Sub-Board of TPB.

Following confirmation by Faculty Executive, Part 1 proposals must be endorsed by the Part 1 Sub-Board of TPB before development of the programme can begin and further programme documentation (Part 2 proposal, Programme and Module Specifications) can be produced.

The information provided on this form will be used to market the programme.

Supplementary guidance to support completion of this form can be found on the [DGLS website](#).

| 1. Proposal details | | | |
|--|--|--------------------------------|---------------------------------|
| Proposed Programme title (and name of award if different) | [ResM] Master by Research in Gene Regulation | | |
| Award type | Single <input checked="" type="checkbox"/> | Joint <input type="checkbox"/> | Double <input type="checkbox"/> |
| Proposed start date | September | 2026 | |

| | | | |
|---|--|---|---------------------------------------|
| Proposed term dates (if non-standard). Include at least five years ahead | Standard QM term dates with 3 entry points to mirror PhD intakes (September/January/April) | | |
| Points of intake/entry | September <input checked="" type="checkbox"/> | January <input checked="" type="checkbox"/> | Non-standard <input type="checkbox"/> |
| Direct Application? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Closed / Restricted Programme? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| Academic Lead | Radu Zabet/Vardhman Rakyan | | |
| Administrative Lead | Nawaz Ahmed | | |
| Apprenticeship Standard and version number (if applicable): | | | |
| Intended Awards | | | |
| Award | Mode of Study / Location of Study | Duration | |
| Master by Research [ResM] | Full-time | 1 academic year | |
| | | | |
| Anticipated Student Numbers (provide 3 academic years from the proposed start) | | | |
| Year of Registration | Anticipated Numbers | Maximum Numbers | Minimum Numbers |
| 2026/2027 | 15 | 20 | 5 |
| 2027/2028 | 16 | 20 | 5 |
| 2028/2029 | 17 | 20 | 5 |
| Proposed HECoS Codes and weighting (HECoS Code information can be found on the HESA Collections Coding Tool) | | | |
| HECoS Code 1 | 100901 genomics | 33% | |
| HECoS Code 2 | 100962 research skills | 33% | |
| HECoS Code 3 | 100869 bioinformatics | 33% | |
| Responsible Cost Centre | | | |
| Blizard Institute | | | |
| Teaching Apportionment (please indicate the split of teaching between Schools / Institutes for the programme and according to the particular Discipline) | | | |
| School/Institute | Discipline | % Split | |
| Blizard Institute | | 100 | |
| Choose an item. | | | |
| Choose an item. | | | |
| Does the programme include a formal collaborative arrangement with an overseas provider? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| If yes, will the students spend more than half of their studies in the UK or overseas? (Please provide an approximate percentage for study at each provider rounded to the nearest 10%, e.g. 40% in the UK and 60% overseas) | | | |
| | | | |

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|--|---|
| Details of collaborative institution(s) involved in delivering any part of the programme | |
| n/a | |
| Funding Details | |
| Will the programme be funded by another European Commission public source that is not HEFCE? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| If so, provide details. | |
| Will the programme be funded by another source that is <u>not</u> a European Commission public source? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| If so, provide details. | |
| Will the programme be offered under the Science and Engineering Foundation (SEFP) umbrella? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| What level of disclosure (DBS) or overseas police check is required for this programme, if any? For further information about the different types of DBS checks, please visit the DBS Guidance website | |
| None | |
| What level of Occupational Health clearance is required for this programme, if any? For further information please visit the QM Occupational Health website | |
| None | |

2. Programme rationale

Please provide details of the rationale for the proposed programme. In addition to being academically sound, these should include clear links to the QM Strategy 2030, the Principles of Academic Degree Programme Design and any other strategic reasons, financial reasons and / or recruitment reasons. If more than one point of entry is proposed, this should be clearly explained. If the proposed programme involves a collaborative partner, please clearly outline the responsibilities of the partner in developing (if applicable) and delivering the programme. If the programme is an apprenticeship, this should explain the intent of the programme.

Last year, with a generous support from Barts Charity, we formalised the scientists working on epigenetics at Queen Mary University of London into an official Centre for Epigenetics (<https://www.qmul.ac.uk/epigenetics/>). Please note that the ResM is not formally linked with the Centre and that The Barts Charity has no financial contribution to this degree.

Nevertheless, we are using this strong epigenetics and genomics research expertise at Queen Mary University of London within the Centre of Epigenetics and Centre for Genomics and Child Health and Blizard

Institute more broadly (e.g., Genes & Health study) and take advantage of the national and international recognition of the genomics and epigenetic research, to propose a new ResM in Gene Regulation as a one-year supervised research programme. This programme will provide the opportunity to recruit both national and international students onto a one-year programme of research at master's level using the international recognition of our research.

The proposal is for a one-year programme of supervised research, for which examination is by submission of a dissertation. The proposed programme comes under the purview of the Academic Regulations for Postgraduate Research Degree Programmes and the Research Degrees Programmes and Examinations Board.

Master by Research (ResM) award was approved by Senate and Council in June 2022 and our new programme will follow the respective published guidance.

The ResM in Gene Regulation will have entry points in September, January and April. Students will be admitted as individual researchers for already proposed projects by the supervisors on the Centre of Epigenetics website. However, we will also consider students proposing their own independent research project by liaising with supervisors from the Centre of Epigenetics. Projects will need to fit within the broad theme of gene regulation and suitability of projects will be assessed by the two course directors (Dr Radu Zabet and Prof Vardhman Rakyar). Individual guidance will be provided for projects that are not found to meet the suitability requirements. We will particularly encourage projects with two supervisors where one preferably will be a core or affiliate member within the Centre of Epigenetics, but supervisors that are not members of the Centre of Epigenetics will also be allowed to submit projects. We expect that most projects will consist of both wetlab and computational and/or AI parts. The Centre for Epigenetics boasts deep expertise in a large range of both experimental techniques/models and computational approaches (including Machine Learning and Artificial Intelligence). We will also leverage the links and interactions we have with DERI for additional expertise. Admission will be based on an interview by a panel of three academics using a standard PhD interview (presentation and specific questions) and ensure we follow all current EDI provisions (including but not limited to attending online interviews and narrative CVs).

3. Programme description

Please provide a description of the proposed programme for prospective applicants ([this will inform the marketing material](#)). This should provide an overview of the key features of the programme, and should include additional information that may be helpful for marketing the programme, e.g. distinctive strengths in your School/Institute.

ResM in Gene Regulation programme offers the opportunity to engage with independent research at master's level at Blizard Institute, and within the broader research environment, offered by the Faculty of Medicine and Dentistry, at Queen Mary University of London. One of the supervisors would be affiliated with Blizard Institute, while the other supervisor(s) can be from anywhere within the University. While MRes consists of 3 months taught component and 9 months research and

MSc of 6 months taught component and 6 months research, the ResM is 12 months research only degree, with no taught component.

Queen Mary University of London has one of the largest communities of epigenomics researchers in the world. This hub consists of a core group of 17 group leaders (all internationally recognised), focusing primarily on epigenetics and genomics research, and over 20 associate research groups with clinical and non-clinical interests. The core group covers research themes such as: Mechanistic Basis of Human Disease, Comparative, Evolutionary, and Developmental Epigenetics, Computational and Population Epigenomics and Repetitive and Non-Coding Elements. More broadly, Queen Mary University of London is one of the UK's top research universities, with the vast majority - 92% - of our research submissions assessed as internationally excellent or world-leading (REF 2021). The Faculty of Medicine and Dentistry at Queen Mary University of London provides a supportive, stimulating, diverse and inclusive research environment with high-quality facilities attracting national and international talent and delivering the highest quality research and impact.

This is a master's level programme of supervised research of one calendar year to be examined by submission of a dissertation with no taught content or modules. Students will also need to present a poster (at 6 months) and deliver a presentation (at 9 months) of their work to the Centre of Epigenetics cohort, which will be on a pass/fail system. They will have a resit option anytime within 3 months following the same process for the PhD boards and we will follow the standard policies, including for EC, extensions and interruptions. The programme focus is on a specific subject from within the diverse and rich research environment offered by Centre of Epigenetics at Queen Mary University of London. Students will carry out a research project, with expert guidance from the research supervisors; students will use their findings to produce a dissertation of up to 30,000 words. The ResM programme, therefore, allows students to engage with extended independent research at master's level, providing the opportunity to develop advanced knowledge and skills, which will provide preparation for specialist career paths (in industry, academia or public sector) or further study (at PhD level).

Within the Centre of Epigenetics, we organise a monthly research seminar with international leaders in the field of epigenetics and bimonthly internal seminar with core and associated groups of the Centre of Epigenetics. Students will have the opportunity to attend all these seminars, present their work (short talks) and write a report based on one of the seminars they attended. This will further develop their research and presentation skills, but would also allow them to engage with other genomic and epigenomic researchers at all career stages. There will be a scheduled welcome event within the first week of the start for each cohort, but also there will be options to interact at social and networking events following the bi-monthly seminars and internal talks.

Each student's supervisory team must normally include two members of academic staff from Queen Mary with the experience to supervise the research project. In all cases, both the primary and secondary supervisor must be research active.

Examination of the one-year research project is by submission of a dissertation (not exceeding 30,000 words). Supervisors will provide one round of feedback for each thesis before submission. The dissertation will be assessed by a minimum of two examiners: an internal examiner and an external examiner, appointed by the Research Degrees Programmes and Examinations Board. We aim that each external examiner will evaluate multiple theses and, thus, we will not need one external examiner per student. Students will also need to present a poster, deliver a presentation of their work to the Centre of Epigenetics cohort and would be on a pass/fail system. In addition, each student would need to submit an essay on a seminar they attended within Centre of Epigenetics and this would be evaluated by their supervisor as a pass/fail. The 2nd supervisor will be the second marker and the course directors will handle the moderation ensuring the standards are consistent throughout the programme. An oral examination is required for certain examination outcomes, as detailed in the academic regulations. The examiners' decision will be sent to the Research Degrees Programmes and Examinations Board (RDPEB). There are no alternative or other exit awards. Students will only be able to pass their degree by submitting a dissertation and achieving a pass evaluation by the internal and external examiners. There will be options for resits for the presentation and essay submissions.

The outcomes are:

- (i) pass;
- (ii) minor amendments to be made within six weeks;
- (iii) re-presentation of the dissertation in a revised form for a second and final time, within six months. The first examination must include an oral examination to select this outcome;
- (iv) fail. The first examination must include an oral examination to select this outcome. The external examiner pool will be managed centrally to avoid any risks around shared examiners.

Supervisors will need to have up to date PGR training. Director of Postgraduate Research within Blizard Institute will provide support for the wellbeing of the students and provide mediation and support in cases where there are issues arising between the students and their supervisors. If the numbers of students increase significantly, the course directors would be able to support as well.

4. Marketing information

Please provide evidence of demand for the proposed programme (further guidance and information must be sought from External Relations and appended to this form). This could include:

- A level trends and UCAS or HESA data;
- UK, EU and international economic data and regional, national or sector-specific data;
- consideration whether the market is UK-only, EU or international (consult International Office);
- qualitative feedback on the proposal - via questionnaire or focus groups;
- employer feedback / feedback from Professional or Statutory Regulatory Bodies (consult the Careers Service);
- explanation of overlap with existing programmes at QM and if so which ones, how will the proposed programme be differentiated;
- employer appetite for apprenticeship delivery (consult the central Apprenticeship team)

The proposed ResM in Gene Regulation will allow us to recruit international students onto one-year programmes of research at

master's level at the Blizard Institute, within the Faculty of Faculty of Medicine and Dentistry, at Queen Mary University of London. The ResM will be an independent degree.

In addition, we want to explore taking advantage of international partnerships at QMUL. Queen Mary has signed a number of agreements with Mexican partner institutions (IPN, UABC and CIMAV), but also with Nanchang University. It is envisaged that the proposed programme will bring in additional students from these international partners.

The proposed ResM programme will allow these students to engage with extended independent research at master's level, providing the opportunity to develop advanced knowledge and skills, which will provide preparation for specialist career paths or further study.

In particular, the ResM in Gene Regulation will target anyone looking to gain acquire research skills (either wet lab, computational or both) to equip them for research-based positions in either Academia (e.g. a PhD) or Industry. In addition, it could also be attractive for students who do not want to stay in research, but would like to be exposed to a full year of research, as it may help with future jobs in the Life Sciences sector. Finally, clinicians (in UK or overseas) wanting to gain specific research experience in one of the areas within the Centre for Epigenetics would also constitute a target audience. For example, NHS clinicians want to expand their research time (e.g., <https://www.rcp.ac.uk/news-and-media/news-and-opinion/rcp-calls-for-doctors-to-have-more-ringfenced-time-for-clinical-research/>) and our ResM could both provide the research, wetlab, computational and/or epigenetics skills for the clinicians but also the possibility to run a research project under the supervision of an experience academic within the Centre for Epigenetics.

We have run preliminary market research with 2nd and 3rd year students in Nanchang, and the results shows that 70% of students (N=197) would be very keen in a research-only master's degree (see attached market report).

The marketing report is below:

Recommendation:

Caution

Our recommendation is to proceed with caution with respect to the proposed programme *Masters by Research in Functional Genomics and Epigenomics* based on several compelling reasons outlined below.

Cautions:

- **Strong Case for Cannibalisation:** The existing [MSc Bioinformatics](#) and [AI In Biosciences MSc](#) at Queen Mary (QM) already incorporates a compulsory core module in "AI and Data Science in Biology" and the [MSc Genomic Medicine](#) allows students to work directly with patient data from the pioneering 100,000 Genome Project. This would appeal to students seeking to expand their analytical and data skills. Moreover, the *Bioinformatics MSc* at QM requires students to have an undergraduate degree in Biology or other relevant natural sciences, which we believe poses a direct competitive challenge to this proposed programme.

- **Difficulty in Meeting Desired Enrolment Targets:** The current cohorts for *MSc Genomics* and *Bioinformatics* at QM attracted 32 and 45 students respectively for the 2024/25 academic cycle. While the proposed programme's upper scale target of 30 students appears ambitious and potentially unrealistic, we anticipate the programme will more likely attract between 5-10 enrolments in its first year. This conservative estimate reflects the typically smaller cohort of students preferring research-pathway (MRes) programmes, as evidenced by HESA data. It would be prudent to conduct a survey of current student cohorts to gauge interest from those preferring a research-oriented pathway.

Competing/existing programmes' enrolment at QM:

MSc FT Genomic Medicine (QM)

| | | | | |
|-------|-------|-------|-------|-------|
| 27 | 26 | 44 | 30 | 32 |
| 20/21 | 21/22 | 22/23 | 23/24 | 24/25 |

MSc FT Bioinformatics (QM)

| | | | | |
|-------|-------|-------|-------|-------|
| 30 | 31 | 34 | 48 | 45 |
| 20/21 | 21/22 | 22/23 | 23/24 | 24/25 |

- **QM's Lower Ranking in Life Science and Medicine:** QM was ranked 69th in the latest QS global rankings for subjects in Life Sciences and Medicine, which is comparatively lower than its main London competitors: Imperial (8th), UCL (9th), and KCL (11th). The REF (Research Excellence Framework) scores underpin the university's reputation in research and its standing in league tables, often playing a significant role in attracting students. In the most recent survey conducted in 2021, QM was ranked 19th, again lower than key competitors Imperial (1st), UCL (6th), and KCL (9th).

Reasons for:

- **AI is Revolutionising Protein and DNA Sequencing:** Rapid advances in biotechnology and bioinformatics, particularly the application of Large Language Models (LLMs) trained on extensive biological datasets, have fundamentally transformed the field. The recent [Nobel Prize](#) in Chemistry, which significantly highlighted AI's role in protein structure prediction, underscores this transformation. AI algorithms can now:
 1. Analyse vast genomic datasets to identify nuanced patterns and variations
 2. Enable more accurate diagnostic approaches
 3. Facilitate personalised treatment strategies
 4. Predict protein-DNA binding mechanisms, crucial for understanding gene regulation and developing novel therapies

Google DeepMind's AlphaFold exemplifies this revolution, accurately predicting protein structures from amino acid sequences.

- **Market Gap:** The proposed MRes is strategically designed to prepare students for PhD programmes or research-intensive roles in genomics—a notably underserved market in London. While competitor institutions offer research-intensive MRes programmes with varying computational research components, none comprehensively incorporate AI or recent technological advances in their module teaching.

- **Proposed Programme's Unique Features:**

1. Focus on interdisciplinary projects (wet lab + computational/AI integration).
2. Leverages QM's expertise in epigenetics/genomics and DERI's computational resources.
3. Projects proposed by supervisors or students, often co-supervised.

- **Downstream Growth in Relevant PhD Programme Enrolment:** Our analysis of UK PhD programme enrolments in genomics and genetics reveals a significant upward trajectory. Enrolment increased by 20% in 2021/22 compared to pre-pandemic levels in 2019/2020. Given the recent technological advances and emerging synergies between AI and genomics, the field is poised for accelerated growth.
- **Key Focus Area for Government Policy:** The UK government's substantial investment in life sciences—including £520m allocated to the Life Sciences Innovative Manufacturing Fund—signals strong institutional support. This is complemented by growing demand for computational and AI skills in biosciences and an expanding life sciences sector both domestically and internationally.
- **Positive Digital Signals:** Our keyword mapping indicates a remarkable surge of interest in AI's biological applications. "AI in Biology" searches peaked at 31,000 monthly searches, representing a significant 69% year-on-year increase.

Competitor provision (from other Higher Education Institutions where applicable)

Please provide brief summary including: programme titles, length of time programmes have been offered, numbers of applicants and registered students.

It is worthwhile noting that there is no consistency amongst UK Universities on naming this degree as MSD, MSc, MRes or MPhil means.

Examples of Master by Research only programmes include:

University of Essex: MSD in Life Sciences

<https://www.essex.ac.uk/departments/life-sciences/research-degrees>

University of Cambridge: MPhil in Biochemistry

www.postgraduate.study.cam.ac.uk/courses/directory/blbcmphsc

University of East Anglia

<https://www.uea.ac.uk/research/research-with-us/postgraduate-research/postgraduate-qualifications-explained/masters-by-research>

Bristol (Offers MSc by Research)

<https://www.bristol.ac.uk/study/postgraduate/research/biological-sciences/>

KCL (this one is interesting. It is a 16-month MRes with some teaching but a longer research project)

<https://www.kcl.ac.uk/study/postgraduate-taught/courses/biomedical-and-molecular-sciences-research-msc-mres>

Marketing endorsement

Reviewed by: Sasha Bishop

Date: 28/03/2025

5. Admissions information

All applications should be processed via the QM Admissions Office. Where provision is completely new, or non-standard entry requirements are proposed, this must be discussed with the QM Admissions Office. If a limited number of places are available on the programme, please provide the rationale for this.

Please outline any proposed deviation from the standard application process (e.g. selection process and deadlines). This is mandatory for all collaborative and apprenticeship programme proposals and must be discussed with the QM Admissions Office and the central Apprenticeship team (if applicable) before any agreement is signed with an external body, partner or employer.

Students will apply to the programme (under single course code), and in the application form they can specify a list of project preferences, that have been chosen based on prior discussions with potential supervisors. The list of projects will be advertised by Centre of Epigenetics core or associate members (currently more than 50 research active academics). We will ensure that at least 30 projects will be advertised each year, and the list will be updated to ensure enough projects are available throughout the year for each uptake period (January, April and October), as per entry points for postgraduate research courses at QM. We will also consider students proposing their own independent research project, by liaising with supervisors from the Centre of Epigenetics. Applications will be submitted through the postgraduate research system. Admissions will be based on an interview by a panel of three academics using a standard PhD interview (presentation and specific questions).

The programme will also be considered by the Intercalated degrees committee for intercalating MBBS students. QMUL Intercalated students will be eligible to apply for this degree and will be provided with appropriate level of training (2 weeks at the start of the ResM) by their supervisors and the training will be relevant for their projects. Adjustments to the interview schedule for Intercalated students will be made to ensure students will have their places in a timely manner.

Entry requirements

Please provide the proposed entry requirements for the programme, including the level of English language proficiency required for international applicants (please list the IELTS requirements separately in the section below). Standard entry requirements should align with those already agreed and published for existing cognate provision.

Degree Requirements

A 2:1 or above at undergraduate level in a relevant subject such as Biological Sciences, Computer Sciences, Medicine or Dentistry (non-UK medical degrees marked on a grading scale must be equivalent to a UK 2:1 degree) or equivalent degree.

Other Routes

Applicants without a 2:1 or background in the above subject with previous engagement in research skills training at undergraduate or Master's level (including but not limited to research projects, summer internships, etc) will be considered on an individual basis.

Individuals with relevant professional qualifications or other relevant experience and qualifications will also be considered.

All applicants must meet the standard Postgraduate Research English Language requirements for the Faculty of Medicine or Dentistry Band 4. The requirements by discipline are listed here:

<https://www.qmul.ac.uk/international-students/englishlanguage/requirements/postgraduateresearch/>

English language entry requirements (for International students)

Please specify the IELTS requirements for each component (the minimum component score for degree level study is 5.5).

Overall: 6.5

Reading: 6.0

Writing: 6.0

Listening: 6.0

Speaking: 6.0

Admissions endorsement

Reviewed by: Rosanna Visvanathan

Date: 25/03/2025

6. Additional information required for collaborative programme proposals

Please clarify how and when application data will be shared between institutions, and how students will be informed of this. Please state which institution(s) will be responsible for issuing offer letter(s) and communicating any visa requirements to students.

Please also clarify whether students will be registered at the partner institution, as well as QM for the duration of the programme. For proposals where students progress to QM from a partner institution, please outline the arrangements for confirmation of this progression to be provided to QM.

NA

7. Additional information required for apprenticeship programme proposals

Please clarify if the apprenticeship has an integrated or non-integrated End-Point Assessment (EPA), who the End Point Assessor Organisation (EPAO) will be, and the duration of the EPA. Please outline the proposed Intent (planning), Implementation (action), and Impact (on apprentices and employers) of the apprenticeship.

NA

Central Apprenticeships endorsement

Reviewed by: Click or tap here to enter text.

Date: Click or tap to enter a date.

8. Fee arrangements

Home tuition fee: Non-standard (please specify) Band D- £15,250

Overseas tuition fee: Non-standard (please specify) Band D- £28,500

If the proposed non-standard fee will match fees charged for any existing programmes, please list all programmes with this same non-standard fee.

MRes/MSc in Regenerative Medicine

If any non-standard fee arrangements are proposed, please outline any details and the rationale below. This is required for all collaborative programmes.

Follow the standard practise of Blizzard using the QM Banding system. This is pending confirmation on whether a ResM award can charge PGT fees or is required to charge PGR banding.

If the proposal is for an apprenticeship programme, please outline the maximum funding available and detail the funding that will be drawn.

NA

Finance endorsement

Reviewed by: Richard Stenning

Date: 19/06/2025

9. Indicative Curriculum

Please provide an overview of the indicative curriculum for the proposed programme in terms of proposed modules to be studied in each academic year of study (which will appear in marketing material 'subject to approval'). Please clearly indicate which modules are new, and which already exist and have been approved.

If the programme requires students to undertake any proportion of their scheduled activities outside of a QMUL campus, in a workplace environment, please clearly indicate this below, and specify the percentage of the notional study hours to be undertaken in the workplace. Work-based learning includes activities such as placements, internships, professional / industrial experience, and volunteering.

Please provide this information for all modules, including those which are elective, and / or non-credit bearing.

This is a 12-month full-time programme with no taught modules. The curriculum will require students to undertake a research project and write a dissertation based on the research activities results. Students will also gain transferable skills in presentation and preparing a poster.

As per QMUL's Academic Regulations for research degree programmes, each student's supervisory team must normally include two members of academic staff from Queen Mary with the experience to supervise the research project.

10. Professional accreditation

Please specify the accrediting body (if applicable) and the nature of the accreditation: e.g. qualification to practice, exemption from professional exams, membership of a professional body). This should include the likelihood of the proposed programme receiving accreditation, and how important the accreditation is to the success of the programme.

NA

11. Resourcing requirements

Please summarise the proposed resourcing arrangements. This should include Library, I.T, space requirements and staffing, as well as the impact on any existing provision. Detailed costings should be provided with the form.

Each student will need a laptop (costed through the programme with laptops lasting a number of years), a desk that they can book through the current New Ways Of Working System and access to library. In addition, computational only students will need access to QMUL HPC,

while wet-lab students will need access to the lab space assigned to one of the supervisors. The fee also includes a UKRI level bench fees.

Joint Working Statement - resources

For programmes that are to be delivered with an external collaborative partner or jointly between more than one internal School/Institute, please summarise the proposed resourcing arrangements for the partnership.

For apprenticeship programmes please summarise the specific plans with employers.

Detailed costings should be provided with the form.

NA

Library/I.T/Estates endorsement (as appropriate)

Reviewed by: N/A

Date: Click or tap to enter a date.

12. Work-Based learning



For programmes that involve work-based learning, please provide details of any external partners to be involved in workplace provision, the duration of any work-based activity, and the % of time spent in compulsory work-based learning per programme year.

NA

Approval of Part 1 Programme Proposal

New programme proposals are to be confirmed by Faculty Executive before being submitted to the RDPEB: Part 1 Sub-Board.

Confirmation of faculty approval will be denoted by the signatures below. The signature of the Head(s) of School/Institute will confirm that the School/Institute can fund and resource the programme as outlined in the proposal, and support the student experience overall.

| School/Institute and Faculty approval | |
|---|---|
| Head(s) of School/Institute  | Head(s) of supporting School/Institute |
| Head(s) of supporting School/Institute | Head(s) of supporting School/Institute |
| Vice-Principal and Executive Dean  | |
| Date of Faculty approval: 22/08/2025 | |
| Document checklist for faculty approval | |
| <input checked="" type="checkbox"/> Fully completed and signed Part 1 Proposal form <input checked="" type="checkbox"/> Business case <input checked="" type="checkbox"/> Marketing report <input checked="" type="checkbox"/> Financial costing | |

| Part 1 Sub-Board endorsement | |
|------------------------------|-------------------------|
| Chair of P1 RDPEB: | Date: 20/08/2025 |

Once a programme has Part 1 approval (both faculty and P1 Sub-Board) it can be marketed as 'subject to approval'. To initiate this process, the fully approved Part 1 Proposal form must be sent to DGLS.

In order to publicise a new programme the School/Institute administering the programme (through the programme proposer) should liaise directly with their Faculty Marketing Manager to ensure that all the necessary information required to market the programme is provided.

Please note that for programmes to be delivered with a collaborative partner, **no partnership agreement can be signed** until the proposed programme receives Part 2 Programme approval.

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This page is for the use of the Research Degrees Office

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|-----------------------------------|--|
| Process checklist: | <input type="checkbox"/> Fully completed and signed Part 1 Proposal form received <input type="checkbox"/> Logged with Academic Model team for programme creation <input type="checkbox"/> Programme codes circulated to programme team and stakeholders |
| Part 1 process completion: | Click or tap to enter a date. |
| Notes: | |