

University of Glasgow

Academic Standards Committee – Friday 22 March 2019

**Periodic Subject Review: Updated Responses to Recommendations
1, 4 and 9 Arising from the Review of the School of Life Sciences
held on 2 and 3 March 2017**

Catherine H Omand, Clerk to the Review Panel

Recommendation 1

The Review Panel **recommends** that the School formulates a clear strategy for the future shape of the degree portfolio including how teaching within the portfolio will be delivered. This strategy should be developed and agreed in consultation between the School and Research Institutes and ratified by the College Management Committee ensuring the teaching commitments from all parties are embedded within College forward planning. [Paragraph 2.4.1]

**For the attention of: The Head of School and Head of College
For information: Dean (Learning & Teaching)**

College Response

This recommendation is strongly supported by the Head of College and Dean for Learning & Teaching. The School has been working on such a strategy which was presented to College Management Group (CMG) early in the new academic year (2017-18), where it was discussed and ratified by CMG and will be embedded within College forward planning.

Our view is that the structure of four-degree groups is appropriate for a School of this size. We believe that barriers to an identity for the School are not caused by the four-degree groupings per se but by previous committee and other structures used to manage the School. We will work with the Head of School in his efforts to improve consistency and coherence of approach. This has already been improved e.g. in assessment, since the appointment of the current Head of School.

School Response

The School's strategic plan states *'The aim and vision for the School is to offer and deliver a suite of internationally competitive degrees that adopt best pedagogic practice and utilise the research and teaching strengths of the College of MVLS to meet the needs of the science graduates of the 2020s and beyond. The School will aim to offer a research-led education and equip its graduates with the skills and attributes that will enhance their job prospects and success in their chosen future careers.'*

The School is working on this plan and discussions are being held regularly at the School's Management Group and Learning & Teaching Committees on how to do this. The School has already proposed to the College Management Group at its recent meetings that the way forward for meeting the aims of its strategic plan is through a College-wide action plan committed to supporting the development and delivery of the UG degree programmes. This will entail input and active participation by the research institutes into delivering research-led teaching and maximising the utilisation of the research strengths of the College. It will require the explicit acceptance by the research institutes that responsibility for the design and delivery of the UG degree programmes also rests with them. The School is dependent on

research institute staff to deliver and lead the research-led teaching necessary for its degree programmes and so the partnership between the School and the research institutes depends upon recognition that teaching is also an important aspect of research institutes contribution to College activity. This approach to the College Management Group has been successful and the partnership and cooperation between the School and the research institutes is now heading in the correct direction to permit the School to achieve this recommendation of the PSR panel. The first manifestation of this new strategy proposed by the School is that the College has created a Working Group initially looking at the provision of both undergraduate and postgraduate taught research project needs. This Working Group will comprise of representatives from all 7 research institutes and the Schools. Its remit is to examine a sustainable way to provide teaching input from the research institutes. Significantly the first recommendation of this working group, backed by the CMG, is the agreement of the research institutes that they will assume the responsibility of providing UG Honours and PGT research projects.

The School has now introduced a new Teaching Organisational structure where research institutes will have nominated representatives on the School Learning & Teaching Committee to enhance research institute input into, and understanding of, School UG degree programmes. In addition, many School degree programmes and courses will be coordinated by research institute staff who will promote the cooperative culture the School wishes to encourage. The new teaching organisation structures will also create teams to run the individual degrees and these teams will involve both School and research institute staff. The existing subject grouping meetings will continue with both School and research institute staff participation. This ties in, and involves, research institute staff at all levels of teaching administration and management. The additional benefit of this is that the nature of the degree portfolio and, where appropriate, teaching and development of the programmes will be shaped by this cross-fertilisation of school and research institutes' staff. What degrees the School should be offering and what should be in these degrees, along with where the research strengths of the College can support these degrees should be a product of the close relationship between the School and the research institutes that these initiatives should deliver.

The School is planning the rationalisation of its degree portfolio to reduce and consolidate degree programmes where there are small numbers of students undertaking specific degrees and where research institutes are unable to provide the coordination and administrative support for these degrees. It is proposed to replace some degrees with the option of a main degree with a recognition of specialisation in a related subject so still offering subject expertise and research-led teaching but being able to deliver and support the teaching in these areas. The first such example is our plan to withdraw the degrees of Virology and Parasitology and replace them with the option of Microbiology with a specialisation in virology or parasitology. The subject coverage will still exist, and the research strengths of the areas of virology and parasitology will still be utilised but the practical problems of securing coordination and administration of these subject areas that required the School to withdraw the degrees will be circumvented. There are other examples of degrees in the School's portfolio that could also be rationalised with no loss of subject coverage but increase the feasibility of their delivery.

Finally, the School is seeking to obtain accreditation of its degrees by the Royal Society of Biology which will aid in strategic plans for the nature and content of its degree programmes.

Updated Response – March 2019

The School has a 5-year strategic plan which does involve the recommendations made by the Periodic Subject Review. We have progressed on our strategy to move forward in consultation and agreement with the other Schools and Research Institutes in MVLS. We have made demonstrable progress in this partnership. Over the last year we introduced a planning and

allocation system that allowed the School to progress 550 students to its 16-degree programmes whilst largely meeting student choice and respecting subject capacities. The School introduced a new system for the allocation of final year Honours research projects. This has resulted in a database of College staff who can be asked to submit Honours projects and has empowered Research Institute Directors to allocate projects to their staff as per their own priorities and plans. It has also increased the number of College staff participating in UG project supervision. We have been able to allocate students to supervisors this year as a proof of principle and this system is ready to be used to allocate next year's cohort of 550 students. **This has all been done in consultation and agreement with the other Schools and Research Institutes through the College Management Group. The next stage is to agree a college-wide set of procedures to plan and manage all UG teaching for all 3 Schools and PGT requirements for the Graduate School.**

The School has been reviewing all years of its UG programmes. We have now introduced a new year 2 for all degree programmes for session 2017-18 and its content, delivery and assessment are in line with good practice in the Life Sciences field and its benchmark statements. We have now planned and agreed a new Year 4 structure for all degrees which will meet the recommendations of the Periodic Subject Review and the accreditation criteria of the Royal Society of Biology. The new year 4 will be ready for session 2019-2020 and it will reflect a better balance and contribution of the research project and Honours Options. The year 4 Options will now run long and thin with in-course assessments both formative and summative to allow the students to both practice the final exam assessment items, gauge their achievement of the ILOs and receive timely and effective feedback. Building in appropriate student learning outcomes and their assessment by authentic assessment methods and practices is the new approach of the School to its educational provision. The School will move away from the assessment of Y4 Option courses solely by essays and a variety of appropriate assessment methods will be used.

As mentioned previously the School has now introduced a new Teaching Organisational structure where research institutes will have nominated representatives on the School Learning & Teaching Committee to enhance research institute input into, and understanding of, School UG degree programmes. In addition, many School degree programmes and courses will be coordinated by research institute staff who will promote the cooperative culture the School wishes to encourage. The new teaching organisation structures will also create teams to run the individual degrees and these teams will involve both School and research institute staff. The existing subject grouping meetings will continue with both School and research institute staff participation. This ties in, and involves, research institute staff at all levels of teaching administration and management.

An Accreditation Working Group has been constituted to take forward the applications for accreditation of our degrees by the RSB.

We have completed the withdrawal of two-degree programmes namely Parasitology and Virology and instead arranged to offer a degree in Microbiology alone or Microbiology with specialisations in Virology or Parasitology. We plan a similar arrangement for Molecular and Cell Biology with specialisations in Plant Sciences and Biotechnology. This will reduce the number of named separate degrees by 4.

Recommendation 4

The Panel highlighted the benefits of having external partners for both the School and for the student population and **recommends** that, in relation to study abroad and collaborative provision, the School should develop an internationalisation strategy that provides more effective study abroad opportunities for students and also create scope for collaborative provision and articulation pathways. This should be done in collaboration with the Vice

Principal Internationalisation, the College International Lead and with the Marketing, Recruitment and International Office (MRIO). [Paragraph 6.1]

**For the attention of: Head of School
For Information: VP Internationalisation, College International Lead, and Director
MRIO**

College Response

The College of MVLS has a well-developed internationalisation strategy and the School is part of this strategy. We suggest that the School could work more effectively with this strategy rather than create its own strategy. The School could use the strong international links created around research collaboration to promote educational and exchange opportunities for its students. There are also very good internationalization initiatives in the other two Schools in the College and we are keen to share good practice. This will be a focus for the College Learning & Teaching Committee in 2017-18. We believe that there is reluctance of some staff to encourage students to take international opportunities based on misconceptions about the impact of study abroad on their degree classification and work is ongoing to correct this. The College and the School of Life Sciences are committed to encouraging, promoting and, where appropriate, funding study abroad for undergraduate students.

School Response

The School of Life Sciences will focus on two groups for international recruitment purposes; students seeking entry to our postgraduate Masters programmes and pupils considering Glasgow as a destination for a full programme of study (3-4 years in our undergraduate degrees.)

To this end, the School adopts the following tactics to achieve its strategic goal of expanding international student numbers:-

- Working closely with colleagues in External Relations (ER) to ensure educational agents in all countries are aware of the degree programmes we offer and the routes to entry;
- Developing good links with the relevant International Deans (e.g., for North America, East Asia, South Asia etc) to identify genuine opportunities for institutional partnerships that will lead to articulation agreements;
- Supporting ER colleagues with material and, where appropriate personnel support, at recruitment events in target markets;
- Advancing direct links with independent schools overseas to facilitate direct recruitment and develop other tools to enhance positioning and recruitment in those markets;
- Exploiting individual academic's research contacts to widen opportunities for recruitment in major and minor markets;
- Expand the offering, design and content of summer schools, as a 'taster' device to attract students to our degree programmes;
- Broaden our partnership base for student exchange and study abroad activities, improving the inward flow of students and increasing opportunities for our own students to study overseas for a semester or a full year.

Specific examples for the coming year include:- conclusion of an articulation agreement with South Puget Sound Community College in the Seattle area, USA, and imminent exploration of a similar opportunity with the PSG College of Technology, Coimbatore, India; supporting coverage of multiple STEM-subject-focused recruitment events in major US centres, noting a strong level of interest in Life Science programmes; development of a new summer school in Global Health; advancing discussions with a top US independent school to develop a bespoke

summer school for 11th grade pupils (a shorter offering, derived from existing material); and in-depth discussions with study abroad partners to ensure understanding of the new level-2 courses now operating in the curriculum.

Life Sciences enjoys a first-class relationship with colleagues in ER, including staff based in Glasgow and those who work overseas. We obtain significant help in designing paper-based and web-based materials for international students and receive sound and robust advice on markets that are sensible to pursue and those that are best kept to one side for the time being. ER staff take our input on the best way to present our course in the marketplace (e.g., at recruitment fairs) and have responded positively to our input on our new level-2 design and constituent courses; insightful feedback is provided. ER staff also provide excellent support for design, marketing and operation of our summer school programme, and are assiduous in presenting the School with new opportunities and potential new partners.

We look forward to working with ER staff to approximately the same level and in the same ways as in previous years. Extra support and discussion may be needed in taking forward articulation agreements (devising operating parameters and managing relationships at a one-to-one level on a continuous rather than periodic basis) and in designing a school pupil-focused summer school.

Updated Response – March 2019

The School has made sound progress on all elements of activity noted in its response to the PSR.

We have worked closely with the MVLS College International Deans (CIDs) on a range of opportunities. This has been especially useful in exploiting an initiative with Duke-NUS in Singapore where discussions are at an advanced stage to conclude an agreement via which students who wish to enter the medical degree at Duke-NUS will pursue a four-year undergraduate degree in Life Sciences – in any subject - prior to joining the Singapore institution.

The School has concluded a 2+2 undergraduate articulation agreement with the South Puget Sound Community College and the first tranche of students is expected to come to Glasgow in 2019. The agreement forms a template that, with the active encouragement and support of colleagues in ER and the Dean for Global Engagement (DGE) for the Americas, will be offered to institutions in California and other parts of the USA. The School, supported by the DGE for South & South East Asia, will shortly begin discussions with two universities in Malaysia, one each in the public and private sectors, with a view to developing 2+2 articulations, most probably in the areas of microbiology and environmental biology in the first instance. A similar articulation opportunity in Sri Lanka is under review but is considered at best embryonic at this stage. For postgraduate articulation, discussions are progressing well with a view to a 60 (overseas) +120 (Glasgow) credit offering with the PSG College in Coimbatore, India, based on the Schools Masters programmes in Biomedical Sciences. The School is being supported by the CIDs, College Dean for PGT studies and the DGE South & South East in this venture, and a visit to the PSG site is anticipated in May. It may be possible to recruit students in 2019, but 2020 might be more realistic.

The School has offered highly regarded Summer Schools for several years now, both to 'bespoke' partners and the free-market, and these are successful for their own intrinsic merit and in attracting students to our Masters programme. We have again enjoyed first class support from the DGE Americas and ER for these initiatives, particularly for identification and development of partnerships for the Schools. In a new departure this year, the School has developed a pre-University Summer School (pre-ISS) aimed at 16-17-year-old pupils (i.e., 11th grade) initially in the USA. Two partner high schools on the US eastern seaboard participated in the development of the biology-based pre-ISS and the School also profited

greatly from the transformative input from an ER-based colleague who broadened the thinking and scope of the offering. The first tranches of students will arrive in July of this year and the cohort may include students from India as well as from the USA. There is considerable interest in this offering in the USA and Asia. Finally, on this theme, the initial pre-ISS framework is going to be expanded to encompass a slightly broader remit and will now involve all three schools in MVLS and will seek to target the International Baccalaureate Schools overseas with a view to attracting such students to the various undergraduate programmes offered by the Schools.

For direct recruitment, the School took a strategic decision to support ER in the US market by attending NACAC STEM fairs and other recruitment events (e.g., specific High School-based events) across the country and also to visit and work with existing study abroad partners to maintain student flows. The School hopes to see increased four-year enrolments from these activities. The School also participates as needed and available in recruitment events elsewhere (e.g., India) and remains interested in exploring with the new DGE for East Asia options for recruitment into the four-year degree programmes in China. International recruitment into the School's PGT programmes remains strong, particularly in the Biomedical Science portfolio, and a healthy increase in enrolments from the Indian market is evident.

The School recognises the threat posed by EU Exit in terms of our Study Abroad opportunities. We will work closely with the DGE for Europe to exploit opportunities offered via the new partnerships with the Lufthansa and Radboud universities to maintain and expand European exchange placements. The School has appointed two new younger staff to take this forward and their strategies are beginning to take shape; this is an ongoing process. The School seeks to offer regular international placements via the standard Student Exchange /Study Abroad route, and also via short summer placements (e.g., via IAESTE) or ten-month long internships via our flagship MSci programme. In the context of the latter group, in association with the DGE for South & South-east Asia, the School secured funding for two undergraduate students to spend 10 months at the Indian Institute of Science and Education Research (IISER) in Pune, India. The award also permits IISER undergraduates to come to Glasgow. IISER is a superbly-equipped and highly-rated teaching and research centre in India and it is no surprise that the two students who are currently in Pune report that they are having a positive, productive and life-changing experience. A funding bid to continue the link with Pune has been submitted as has a second bid to offer similar opportunities with the University of Sydney, one of Glasgow's Strategic Partner institutions. If successful, this award will permit Sydney students to come to Glasgow and will allow Glasgow Life Science students the opportunity to work not only on the main Sydney campus, but also at the new Taronga Institute for Science & Learning.

Finally, the School has made its expertise available on a wider platform to support institutional capability in developing nations. In association with the DGE Africa and the Middle East and other colleagues across the institution, the School has been working with senior members of the University of Malawi to support curriculum development, administrative staff capability and support for Malawi staff taking up senior management roles in their host institution. This initiative offers clear scope for strategic level funding to work with a forward-looking and high calibre university in Africa.

Recommendation 9

The Review Panel **recommends** that the School provides an induction programme for new staff ensuring expectations, roles and responsibilities, both within the School and in the wider context, were clearly transparent. [Paragraph 4.4.1]

For the attention of: Head of School

School Response

The School has created an Induction area as part of their online staff handbook (SharePoint). This will provide staff with information they require during their extended induction programme within the School.

Line Managers and new staff to the school, within each job family, will have a designated area where specific information for that job family will be available including details of their induction template which can be personalised by their Line Manager.

There will also be a generic area for all staff which includes links to common training requirements such as Equality & Diversity, University guides/policies, useful School information and details of staff benefits.

Updated Response: March 2019

New staff receive a welcome letter containing some basic information and links to help with orientation prior to taking up their post. Once started in post, new staff will be led through the induction process by their line manager. The School has created a 'Staff Induction Resources and Information' area as part of the online staff handbook on SharePoint. There are 3 sections tailored for MPA, Academic, Technical/Operational staff, and a separate section for line managers. The areas for each job family contain information to assist staff during their extended induction programme within the School. These contain links to mandatory and recommended training and links to generic information that should be of assistance to all staff groups, such as University guides/policies, School-specific information, virtual campus tours and details of staff benefits. There is an induction checklist that can be customised by the line manager. Navigation within Sharepoint has been improved and we will continue to work on improvements over the coming months.