College Response

We would like to thank the Periodic Subject Review team for recognising the areas of Commendation and large number of examples of Good Practice identified during the review. We recognise that staff in the School of Life Sciences have worked very hard in the last two years under the leadership of Professor Guild to make substantial improvements and the College is very grateful for their efforts.

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 and Teaching)

College Response

This recommendation is strongly supported by the Head of College and Dean for Learning and 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 to a great extent 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 and 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 explicitly 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 and 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 initiative 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.

**Recommendation 2**

The Review Panel **recommends** that the Head of School works with the Dean (Learning and Teaching) and the Head of College to continue to strengthen the working relationship with the Research Institutes in relation to teaching resources. [Paragraph 2.4.6]

For the attention of: The Head of School, Dean (Learning and Teaching) and Head of College

**School Response**

This process is now underway with 2 major initiatives being enacted as described above.

1. After discussions and proposals presented to, and discussed by, the College Management Group it has been accepted that a College-wide process which obtains research institute commitment to undergraduate and postgraduate teaching is required. This is a significant step forward as the Schools alone cannot provide all elements of the UG degree programmes. As a result of this 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 be jointly responsible with the School for providing UG Honours and PGT research projects. A College-wide planning process will help in this undertaking.

2. The School has now introduced a new Teaching and Line Management Organisational structure. The research institutes will now have nominated representatives on the School Learning and Teaching Committee to enhance research institute input into and understanding of School L&T policies and procedures. In addition many School degree programmes and courses will be coordinated by research institute staff who will epitomise 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. These new processes and strategies have been accepted by all the research institutes in the College.

The working relationship between the School and the research institutes has now moved on to a new and significantly stronger partnership.

**College Response**

We (the Head of College and the Dean for Learning and Teaching) would like to make it clear to Academic Standards Committee that a huge amount of effort and time has already been devoted by the College to ensure a strong working relationship between the School and the Research Institutes. We believe that this relationship is now very strong. All of the Institute Directors are committed to ensuring the success of the School. Members of Institute staff are appropriately
affiliated to a School and almost all have teaching objectives in their annual P+DR (some research only staff do not). It is now well understood that undergraduate teaching in the School of Life Sciences is a joint responsibility between the School and relevant Research Institutes. The work is now about maintaining this relationship and sorting out some fine detail. For example, we will ensure that individual staff respond to requests for project supervision in a timely manner and ensuring that retirement vacancies are appropriately filled with new staff who understand the teaching responsibilities of their post. This work will continue to be a priority for the College.

**Recommendation 3**

The Review Panel **recommends** that the School reconsiders both the groupings of degree programmes and the associated committee structures with a view to developing more consistency and coherence of approach across the School. [Paragraph 2.4.3]

**For the attention of: Head of School**

**School Response**

The School is addressing this recommendation by a review of its teaching organisational and management procedures. The School now has a new Teaching Management Structure with a Head of Teaching and Learning, a Head of Assessment and Feedback, a new Assessment Team, a Teaching Management Group and a tailored management of individual degrees by a Degree Team of School and Research Institute staff. The School will now plan and respond as a single unit and not as previously as 4 degree groupings diverging from each other.

The major features of this new organisational structure are

1. A new post of Deputy Head of Learning and Teaching has been created to replace current Degree Group Subject Heads. There will be 6 such posts. The Deputy Heads of L&T will be part of a new Teaching Management Group led by the Head of L&T. They will report to the Head of L&T and work as a group for operational management of teaching as well as proposing and implementing teaching policy and procedures. It is envisaged that this group will meet regularly and function very much as does the current School Operations Group chaired by the Head of School. Deputy Heads of L&T will be members of the School L&T committee and will chair Degree Group meetings as they are currently constituted. Degree Group C meetings will be either co-chaired or chaired in rotation by the 3 Deputy Heads of L&T in that area.

2. The Teaching Management Group will also include Year Leads for Years 1 and 2 and the Head of Assessment for the School. This will be a group of 10 people. The Teaching Management Group will ensure consistency and adherence to School policies on L&T and assessment. This committee will address and resolve any operational difficulties or concerns in UG teaching. The Deputy Heads of L&T will have managerial oversight for the degrees in their areas as was the case for the current Subject Heads.

3. Individual degrees will be managed by teams comprising a Degree Lead, cognate course coordinators, deputies, assessment officers and staff from School and Research Institutes. Degree teams will be responsible for the content, delivery, assessment and Honours project allocations for each degree. This will devolve academic and intellectual responsibility to appropriate staff and permit greater engagement of more staff in the educational provision of the School. These teams will have both School and appropriate Research Institute members and
will allow closer links and engagement between the School and the Research Institutes. This will be several institutes for some degrees.

There will now be a well-defined, unified and logical teaching management structure for teaching with a School-wide perspective and responsibility. It will involve both School and research institute staff and as the leads for all degree subject groupings will be School staff it will allow consistency and unified oversight of teaching and implementation of School teaching policies and procedures. The previous benefits of the degree groupings will be preserved in terms of cognate staff input and appropriate research institute staff input. The change will be that the School will manage and oversee this as a single entity.

**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 and 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 out 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.

**Recommendation 5**
The Review Panel recommends degree classification should be based on performance in Years 3 and 4 and on a more diverse range of assessment methods. [Paragraph 4.2.7]

*For the attention of: Head of School*
School Response

The School welcomes this recommendation and the proposed actions have already been under active consideration. The School has embarked upon a radical rethink of its educational provision. The first major outcome of this is the design and development of a new year 2 introduced this current session. The School is currently finalising a roadmap to restructure and redesign our honours teaching, assessment, and degree classifications. The final plan should be accepted in March 2018 and includes a specific proposal to include L3 grade in degree classifications (25% weighting) starting with the cohort of students beginning L3 honours in 2018-2019. The proposal is out for final consultation, but has been broadly welcomed across the School.

The School is already committed to diversification of assessment methods in line with best practice in assessment and is moving away from a reliance on final exams of the traditional essay format to more appropriate and valid methods of assessment of the intended learning outcomes of the courses and overall degree programmes. The School is already introducing more in-course continuous assessment across its degree programmes. The assessment in the new L2 year is diversified and built using the principles of programmatic assessment. Assessment at L3 is also already well diversified. The roadmap for revision of L4 includes specific proposals relating to the diversification of assessment across the final honours, L4, year, and intended for implementation across the School starting in 2019-2020.

Recommendation 6

The Review Panel recommends that the School embeds employability throughout the curriculum, ensuring that destinations other than academic pathways are clearly highlighted to students. In this respect, the School should work closely with Careers Service and should consider the establishment of an Industrial Liaison Committee. [Paragraph 2.2.5]

For the attention of: Head of School
For information: Head of Careers Service

College Response

The College has a number of well-developed industrial partnerships based on research and it has encouraged the School to take advantage of these relationships to provide career support for students. These industry partners are enthusiastic about working with Glasgow graduates. In the first instance the School should link in with the current opportunities available in the College.

School Response

Careers delivery is via timetabled lectures and labs to ensure maximum reach and impact in terms of student number. By the end of their first year, each student will have taken part in 9 individual careers sessions, totaling 3 hours 40 minutes; second years, 6 sessions, totaling 3-4 hours and delivery in immunology, microbiology, biochemistry in years 3/4 from 1-8 hours. Delivery across other degree programmes will extend in 2018/19. Sessions have included exercises using a range of science and non-science related work contexts; presentations both face-to-face and online by employers and demonstrations of the university online alumni mentor community called The Network. The design of the content of these sessions has complemented the academic curriculum and been influenced by the latest DLHE (Destination of Leavers from Higher Education in UK) data.
and findings from other stakeholders, e.g. Skills Development Scotland, Association of Graduate Recruiters, employers and student feedback focus groups.

**Recommendation 7**

The Review Panel **recommends** that the School explores the provision of other placement experiences that do not have a research focus. [Paragraph 2.2.4]

For the attention of: Head of School

**School Response.**

Work experience opportunities are promoted via the life sciences Moodle. These include the Saltire Internship Programme and the Scottish Life Sciences Internship Programme (Scot Grad). The Careers Service delivers the ‘Internship Hub’, exclusive to University of Glasgow students. Last year there were 379 roles advertised, the majority of which were open to Life Science students. Increasing the number of science-related internships is currently a key strategic focus for the hub. A Science Fair with 16 visiting employers offering placements is to be held on 27 Feb 2018. Students can also book 1:1 coaching and group sessions to prepare them for the recruitment processes for placements/jobs. The School also provides Schools outreach projects as part of the Honours project options which allows students to have non-research placement experiences.

**Recommendation 8**

The Review Panel **recommends** that the School reviews its processes to ensure all GTAs receive statutory training as required by the University and that they are appropriately supported by the School in the delivery of their roles. [Paragraph 4.4.7]

For the attention of: Head of School

For information: Director of LEADS

**School Response**

GTAs play a critical role in the School of Life Sciences assisting in the delivery of teaching whilst GTA opportunities also provide a means for MVLS postgraduate research students and other early career researches to develop their skills and experience of teaching. GTAs in Life Sciences primarily act as laboratory demonstrators for undergraduate and PGT courses but they also support the associated marking of student assessments.

The School recruits GTAs on an annual basis in line with the University’s extended workforce policy but hopes to introduce longer contracts for session 2018/19 pending approval by Human Resources.

The School is committed to training and developing GTAs during their time supporting our teaching. All GTAs are required to undergo the statutory University of Glasgow GTA training which is delivered by the University’s Learning Enhancement and Academic Development Service (LEADS). This training (GTA Introduction to Learning & Teaching in Higher Education), is non credit-bearing and should be completed prior to a GTA commencing their teaching duties. If a GTA has already completed this
internal training course they do not need to repeat the course if they are subsequently engaged as a GTA by the School in future academic years.

One GTA interviewed by the PSR panel claimed not to have done this training, or to have heard of it. The School has therefore reviewed its procedures for engaging GTAs and devised a checklist for use by admin staff involved in the recruitment process. All new GTAs will be formally reminded of this training requirement and School admin staff will check for non-completion and will contact those GTAs who have not satisfied this requirement and remind them of the enrolment arrangements. GTAs will be reminded that it is their responsibility to have completed training before undertaking any work on behalf of the School. Completion of training will be verified by the University and recorded locally.

Additional lab-specific training is expected to be provided by course coordinators/lab leaders on a course-by-course basis. The School is satisfied that regular structured training is provided in the two areas in which the School employs GTAs on minimum hours contracts (in Level 1 Biology and in Anatomy). Training provided to GTAs who are employed as demonstrators on an ad hoc basis will be reviewed and monitored going forward. In all cases GTAs will be expected to receive the following training:

- A general Health & Safety briefing for GTAs
- A safety briefing about each lab/location they find themselves working in
- Access to relevant practical manuals and COSHH forms in advance of classes
- A meaningful run-through of each lab’s content with academic staff in attendance
- Training on assessment and feedback

The School will engage in a dialogue with course coordinators and lab leaders before the start of each session to assess the requirement for GTAs across all courses (GTA hours per course per semester/GTA numbers), and the likelihood of being able to fulfil these requirements from the existing GTA pool.

Academic staff are reminded regularly that GTAs must NOT carry out any work until they are fully registered and trained and this will continue in future.

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/polices, useful School information and details of staff benefits.

**Recommendation 10**

The Review Panel recommends transparency of workload modelling for all staff, ensuring time was allocated for early career staff development and participation on the PGCAP. [Paragraph 4.4.2]

**For the attention of: Head of School**

**College Response**

The MVLS Workload Model is transparent to all staff. It is currently being implemented across the College. Time is allocated within the model for early career staff development and participation in PGCAP. The challenge is to ensure that the WLM is correctly implemented across the College. The College is committed to meeting this challenge.

**School Response**

Time is allocated to early career staff for development, including for participation on PGCAP. Time is also allocated annually for continuing Scholarly activity and career development for all staff.

The current MVLS Workload Model is available to individual staff to see their own record. Within what can be seen by individual members of staff is some measure of where they stand by comparison to the distribution of workload across all School staff. This provides some considerable level of transparency while retaining anonymity for staff.

There are various teaching and development-related tasks that are not currently captured automatically by existing university systems into the MVLS Workload Model. Our School recognises this and each year asks all staff to provide details of work done not captured by the system. All staff have the annual opportunity to provide School management with this additional information, and are encouraged to do so.

The MVLS Workload Model is new and under revision. The College has established a Workload Modelling Working Group that is actively considering a variety of issues, for example how we might include the considerable task of assessment effectively within our WLM. This is a valuable tool that will become more accurate and comprehensive over time.

Currently our School is using the WLM to support management in reviewing staff workload across our School in a sensible and intelligent way. We do include the work that staff tell us they do that is not captured automatically. We engage with our staff actively in this.

An important recent change to our School management has been improved line management and the creation of Deputy Heads of Learning and Teaching with responsibilities for management of issues such as workload within their degree areas. This team now meets with the School Head of Learning and Teaching every two weeks as a Teaching Management Committee. The first focus of this management team is School workload. This will facilitate greater accuracy and greater transparency. Its focus will include a horizontal view across the 17 different degree programmes and vertical view down the curriculum to ensure refinement of workload as and where appropriate. The
Deputy HoL&T will use this to have informed conversations with the staff that they manage. This will improve School-wide transparency in workload.

Engagement with and refinement of the new workload model. Responsibility of the Head of School, Deputy Head of School and Head of Administration. Working group co-opting the input from the Chief Technician and School line managers. Policy and plan of action to be presented to the School Management committee.

**Recommendation 11**

The Review Panel **recommends** that the School reviews processes for providing feedback to external examiners to ensure that the feedback loop is closed. In so doing, the School should consider reducing the number of External Examiners to provide greater consistency across programmes. [Paragraph 5.2.2]

*For the attention of: Head of School*

**School Response**

We have already reviewed our processes.

At the programme level, each external examiner (EE) interacts extensively with the relevant programme coordinator, teaching team, and body of students at various points/opportunities throughout the year. Extensive feedback is exchanged verbally and in writing (the EE report) and feedback and dialogue at that level is very healthy.

At the School level, the School notes any comments make by EEs in meetings of Boards of Examiners, and monitors all EE reports submitted to the Senate office. The School also responds to any points highlighted by the Senate Office as requiring response or action. The School is very focused on reflecting on and acting on the EEs’ comments, with extensive communication happening within the School and with the Senate Office/Academic Standards Committee. We could however be much better at reporting all this activity directly to the EEs themselves. We thus accept the PSR recommendation and have begun to change our practice, e.g.:

1. The School will acknowledge receipt of all EE reports and indicate timeframes for any expected responses/ actions (*i.e.*, manage EE expectation)
2. The School will circulate copies of the AMR and any responses to individual EE comments to all the EEs.
3. The School now invites all EEs to visit the School/University during the academic session to observe practice and to meet students
4. The School has decided to centrally organize the final EE visits (for reviews of work and Boards of Examiners) such that the School can have open dialogue and Q&A sessions with groups of EEs
5. The School will organize joint meetings of Boards of Examiners where practicable, such that the EEs can observe and share practice with each other and allow for better representation of the School senior management at each meeting
6. The School will organize informal group dinners for the EEs, to allow sharing of experience between the EEs and with School senior management.

The total number of EEs is being reduced by two because two degree programmes are being discontinued. We are looking into further opportunities for rationalising the number of EEs, e.g. having one EE cover a set of cognate degrees. However, we feel that EEs play a very important role in the quality assurance of our degrees, in the application of discretion process, and in the quality enhancement of our provision. It is also important to maintain a reasonable EE-to-student ratio. The number of EEs is likely to be reduced to 12-15 in total: not too much to compromise the EE workload and the rigour and breadth of scrutiny that our provision receives.