



Faculty of Life Sciences

2017-22 Planning - CONFIDENTIAL

1. Executive Summary

The Faculty of Life Sciences exists to focus passion and purpose on the search for the answers to some of the most enduring questions about life on earth; and to tackle and solve some of the most urgent problems that face humans and other animals. We use that passion and purpose to teach and train the next generation; to deliver the highest quality research; and to have impact on both society and the wider world.

Our Faculty now demonstrates a consistently high and increasing level of excellence and is performing at an elevated level both academically and financially relative to benchmarks and within SLMS. By 2021 we will be recognized not only for our core academic excellence, but for an increasing teaching & research focus on emerging 'frontier' and interdisciplinary areas of the Life Sciences, including (but not restricted to):

- Investigating the origins and evolution of life on earth
- Understanding the physics of living systems and how they constrain cell and tissue behaviour
- Cells as macromolecular machines
- A global focus on biodiversity & environmental research
- Delivering a step change in drug discovery and therapeutic innovation
- A world-leader in cell and tissue imaging technology & development
- Understanding how neurons generate the circuits that mediate cognition and behaviour

We plan to hit our budget targets throughout the planning period. After significant effort from all parts of the Faculty over many years, we are now financially sustainable within the current UCL financial model and so this year marks a major milestone for the Faculty. The strict cost controls and financial discipline we have established over the last few years will be maintained and the focus will now intensify on academic quality and vision ahead of REF and TEF. We will now invest appropriately and at a sustainable margin in developments of high quality that support our academic mission. Over the planning period we will invest in people:

- New leadership for Cell & Developmental Biology
- A new Director for the Gatsby Computational Neuroscience Unit
- Group leaders at the Sainsbury Wellcome Centre to reach full operational strength
- Academic critical mass to deliver a new Centre for Life's Origin and Evolution
- Chairs in Drug Discovery and Neuroscience to build research capacity in School of Pharmacy

We will also focus on investing in developments that connect Life Sciences to the broader UCL community:

- The Nature Smart Cities development at UCL East (Pool Street) (with Engineering, Bartlett etc.)
- The Rosalind Franklin Institute at Harwell (with MAPS)
- The Institute for the Physics of Living Systems (with MAPS)
- Development of new Biology & Computing degrees (with Computer Science)

We plan no major changes to our overall size and shape, but with the change in status of LMCB following the retirement (in two years) of the Director will re-evaluate whether reconfiguring Faculty structure will enhance the prospects for improving our academic excellence and ensure ongoing sustainability. Our overarching objective now is to deliver a high and uniform emphasis on quality associated with UCL core values leading to academic excellence and global impact in a financially sustainable fashion.

Faculty of Life Sciences

Staff, Student and Financial Summary

	15-16	16-17	17/18	18/19	19/20
	Actual	F1	Projection	Projection	Projection
Staff (FTE)					
Academic	191.7	190.4	203.7	206.7	209.3
Research	358.9	348.3	392.1	400.0	411.0
Support Services	214.0	202.1	216.9	217.6	219.5
Total	764.7	740.8	812.7	824.3	839.7

* Staff FTE for 16-17 is as at Jan '17

Students (FTE Load)

UG	2,233	2,177	2,207	2,241	2,243
PGT	267	436	444	448	451
PGR	454	457	482	482	482
Total	2,953	3,070	3,133	3,171	3,175

Financials (£m)

Income	103.79	108.14	114.42	117.43	119.68
Expenditure	72.16	75.29	82.42	84.00	86.04
Contribution (£m)	31.63	32.85	32.00	33.43	33.65
Contribution %	30.5%	30.4%	28.0%	28.5%	28.1%

Target Contribution (%)			27.0%	27.5%	28.0%
Variance to Budget (%)			1.0%	1.0%	0.1%

Key Actions Summary

Faculty of Life Sciences

Key Actions	2017/18	2018/19	2019/20
Improve student experience and develop new ways of delivering education	<ul style="list-style-type: none"> • Pilot new Life Learning courses and evaluate demand • Further develop international consultancy and education portfolio around pharmacy • Ensure adequate succession planning for major UG degrees 	<ul style="list-style-type: none"> • Grow Life Learning activity, especially in interdisciplinary areas • Ensure adequate succession planning for major UG degrees • Successfully renew major DTPs • Plan and recruit for QEOP degrees • Support New Giza project 	<ul style="list-style-type: none"> • Grow Life Learning activity • Successfully start operations on QEOP campus • Support New Giza project
Deliver research excellence through a sustained focus on quality	<ul style="list-style-type: none"> • Ensure Open Access compliance maintained • Preliminary scoping of REF • Deliver Doctoral Education strategy • Recruit new GCNU Director • Develop Metabolism & Society 	<ul style="list-style-type: none"> • Successfully execute transition plan for LMCB & begin recruitment of new Director • Ensure all research-active staff have adequate grant income • Continue Fellowships and WT Investigator awards • Deliver Doctoral Education strategy 	<ul style="list-style-type: none"> • Recruit new LMCB Director • Support LMCB post-QQ strategy • Deliver Doctoral Education strategy
Create state-of-the-art core technology platforms	<ul style="list-style-type: none"> • Secure drug discovery academic critical mass • Complete UCL/Leica Imaging Centre • Design BSU change programme • Improve technician support 	<ul style="list-style-type: none"> • Complete BSU change programme • Explore collaboration with RFI on technology platforms and drug discovery • Horizon scan for new technology platforms to support emerging areas 	<ul style="list-style-type: none"> • Improve cost-recovery and financial transparency of platform technologies • Develop new sustainable technology platforms to maintain academic environment
Invest sustainably in interdisciplinary research and teaching	<ul style="list-style-type: none"> • Complete SWC recruitment • Plan ZSL/loZ joint venture • Develop iPLS • Build Metabolism & Society domain • Launch CLOE initiative and/or Evolution domain 	<ul style="list-style-type: none"> • Secure major funding for Metabolism & Society @ UCL • Deliver joint venture with ZSL/loZ • Detailed planning and execution of QEOP • Develop plant science 	<ul style="list-style-type: none"> • Move onto QEOP site • Initiate at least one Crick satellite or secondment • Secure major funding for Plant Science

2. Vision

Our Faculty exists to **focus passion and purpose** on the search for the answers to some of the most enduring questions about life on earth; and to **tackle and solve some the most urgent problems** that face humans and other animals. Important questions to us include: how did life on earth begin and evolve? What links human and animal health and the environment? How do cells work? How does evolution shape the genome? How do organisms develop? How do neural circuits create behaviour? How can we develop novel drugs?

In pursuing our vision, **academic creativity** is very important to us. The Faculty exists only to support the academic mission. We use open approaches, sharing data and seeking to engage and empower all our staff through transparent approaches to science, teaching and leadership. We build relationships **across disciplinary**

boundaries and seek power to deliver our vision through **connection rather than hierarchy** in a large and complex institution.

Our Faculty now demonstrates a consistently **high and increasing level of academic excellence** and is performing at a high level both academically and financially relative to benchmarks. A **relentless focus on cost control** over the last five years has delivered major growth (more than doubling) our contribution, underpinning the SLMS growth overall during that period. In this planning period, our Faculty now operates sustainably, meeting or exceeding a contribution of 28% on total income (excluding the SWC, as agreed in the last planning round). Our academic excellence must now be consolidated and diversified. By 2022 we will be recognized not only for our core academic excellence, but for an increasing academic (i.e. both teaching & research) focus on emerging **'frontier' and interdisciplinary** areas of the Life Sciences, including (but not restricted to):

- Investigating the origins and evolution of life on earth
- Understanding the physics of living systems and how they constrain cell and tissue behaviour
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The Faculty has now passed the inflection point noted last year and achieved financial sustainability. The strict cost control we have established will be maintained and we now have the ability to invest sustainably at 28-30% margin. We will therefore do this in a targeted fashion, supporting academic excellence in advance of the REF/TEF. We will maintain our current size and shape with some organic growth including the planned completion of staffing of the Sainsbury Wellcome Centre and (from 2020) a modest presence at Pool Street on the UCL East site. Modest refurbishment of our existing Bloomsbury footprint will be required to maintain academic excellence and accommodate new recruits, but no major estates developments are planned otherwise.

We seek significant input into TOPS and wish to support a major transformation in our central Professional Services to deliver partnerships of high quality and effectiveness. Life Sciences continues to have a holistic and responsive approach to the provision of professional services across the Faculty, led by our Faculty Manager, and effective business partner working with Finance and HR. We are also working effectively with ISD through the SLMS "local but central" model. We will also need to maintain and develop our **local infrastructure** and **key platform technologies** including active and constructive participation in the **P block project** and **reconfiguration of Bloomsbury BSUs** as FLS has the largest number of licence holders.

By 2021 we will be recognized for:

- Universal academic excellence and a top 3 REF 2020 performance
- Consistently excellent student experience delivered through innovative research-embedded teaching
- Support for innovative, cross-cutting and sometimes high risk research
- Empowered and engaged staff at all levels who love working in FLS
- A vibrant research culture with a UK-leading focus on impact and inter-disciplinarity
- Pervasive engagement across UCL, particularly with MAPS and Medical Sciences
- A leader in scientific collaboration with the Francis Crick Institute

Our current **size and shape** (two large Divisions with balanced teaching/research portfolio complemented by three research-focused externally funded centres) delivers academic excellence, improved financial sustainability, low professional services (PS) costs and good integration across the Faculty PS team. We will consider restructuring cell biology across the Faculty, to improve academic excellence & contribution taking advantage of changes in the funding of LMCB and arrival of new leadership in 17/18 for Cell and Developmental Biology. This will also require appropriate laboratory refurbishment for planned new recruits. By 2022 our size and shape will be comparable to 2016 but with a significantly younger and more diverse age profile of staff. Student numbers will be little changed overall and in the face of increasing competition we will preserve high entry standards but with a shift towards PGT and away from some UG courses (e.g. MPharm).

3. External environment

The consequences of Brexit are the overriding external issue to contend with in the planning period. We analyse the principal threats and opportunities to FLS as follows:

- 1. Research.** The primary threat is a diminution in research income after exit from the European Union if access to Horizon 2020 is not maintained. This is primarily a threat to research volume and subsequent impact (including the REF) rather than a financial threat. Our plans respond to this by focusing on the window of opportunity that remains in the two years prior to Brexit to maximise our volume of ERC and Horizon 2020 opportunities; by ensuring FLS participates vigorously in developing alternative funding streams such as the current focus of RCUK on ODA-compliant research; and by ensuring FLS is able to respond rapidly to the new Industrial Strategy and funding opportunities aligned with this.
- 2. Teaching.** The primary threat is a diminution in teaching income threatening financial sustainability of the Faculty. We are responding to this by (a) increasing our efforts in outreach to UK populations; we would be particularly interested in working (perhaps in collaboration with IoE) on developing Foundation courses or exploring alternative qualification routes to entry (b) pivoting to PGT where there is European demand driven by depreciation of sterling, keeping overall student numbers constant (c) reinforcing our engagement with critical overseas markets e.g. Asia for MPharm.
- 3. People.** The environment around Brexit has caused anxiety to significant numbers of staff and students. Within Faculty we are taking the opportunity to maximise communication and aligning our strategy with that of UCL towards Brexit. We recognise that interactions of Faculty and central PS have been limited to date on these issues and will work towards greater engagement over the next 12 months. We have already begun investigating specific cases and constructing bespoke solutions for key members of staff.

We identify a minor opportunity with Brexit to mobilise consultancy expertise in drug discovery and life sciences, but this is significantly outweighed by the threats identified above and so therefore efforts are concentrated on mitigation. Other aspects of the external environment that are of concern:

- 4. Over-capacity in the UK MPharm market** is in our judgement significant driven by entry of lower tariff providers offering poor quality training. Our strategy is to maintain our current quality and improve our student experience, if necessary reducing overall cohort size (and compensating for teaching income by increasing PGT quality and volume, maintaining overall numbers). Evidence thus far suggests 'flight to quality' when courses are under pressure and we believe our approach will minimise impact on our sustainability; we anticipate lower tariff providers may exit the market after Brexit.

4. Objectives and actions

Our overarching objective is to deliver a high and uniform emphasis on **quality** associated with **UCL core values** leading to **academic excellence** and **global impact** in a **financially sustainable** fashion that typically targets contribution rates at or above our current sustainable Faculty-wide contribution rate of 28%. FLS activities already have broad engagement across UCL2034 Principal Themes.

A high existing level of Faculty research performance is confirmed by external review in REF2014 (UoA5 4*/3* percentage 46/36% & UoA3b 47/40% rising from 15/40 and 25/40% in 2008), successful 2017 QQR of the UCL/MRC Laboratory for Molecular Cell Biology (LMCB), successful 2015 Gatsby Computational Neuroscience Unit QQR. Teaching excellence is now at a high level with overall 2016 NSS score of 89% (up 3%, with Teaching scores now at 92% second only to the Bartlett) and two degree programmes maintaining greater than 90% (Biological Sciences now at 97% OS, Biomedical Sciences) with two just under (89%).

We now seek to further **increase quality** within the cost control envelope established over the last three years, and to deliver some **investment** largely associated with academic retirements or funded by external sources, to deliver income at a high marginal contribution rate (>30%). Our vision is challenging to deliver and will require continuous competitive innovation within a changing external landscape. Our key objectives are:

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Objective	Strategy reference	Actions
Increase quality and global impact of our research		
Develop effective and productive scientific relationships with the Francis Crick and Rosalind Franklin Institutes	PT-1,2, KE-C,D	<ul style="list-style-type: none"> • Secure funding for at least three Crick satellites • Identify and support new satellites and secondments for FCI building on existing engagement. • Identify and support opportunities for joint working (e.g. cellular imaging, drug discovery) with new RFI • Ensure external grant funding underwriting all joint appointments
Ensure SWC/GCNU and allied activities make FLS the best centre in the world for neural circuits & behaviour research	PT-1,2 KE-D,E	<ul style="list-style-type: none"> • Complete recruitment of SWC Group Leaders • Recruit new Director for GCNU and facilitate integration with SWC • Support GCNU & SWC to increase external funding • Support partnership with Hebrew University & Columbia • Build strong partnerships and activities between the SWC/GCNU and other FLS (or SLMS) neuroscientists
Establish FLS as the UCL hub for therapeutic discovery	PT-1, PT-2, PT-3, PT-6, KE-A	<ul style="list-style-type: none"> • Ensure effective development of TRO Drug Development in School of Pharmacy and recruit a new Chair for SoP • Develop and launch new Life Learning courses in Drug Discovery • Begin to scope impact case studies for REF
Support cell biology in the Faculty and beyond	PT- 1,2,3 KE-C,E	<ul style="list-style-type: none"> • Recruit new LMCB Director after retirement of current Director • Support transition of LMCB to external response-mode funding • Work with MRC to ensure effective post-QQ transition • Complete Imaging Centre • Complete recruitment of new Cell & Developmental Biology Research Department leadership, with appropriate laboratory refurbishment • Explore opportunities for greater integration/collaboration between LMCB & Cell & Developmental Biology Research Department. • Continue to develop Institute for Physics of Living Systems initiative [with MAPS] and its links with FCI
Establish FLS as a leader in cross-disciplinary research & teaching within UCL	PT-1, 3, 4, 5, 6 KE-A, C, D, E, F	<ul style="list-style-type: none"> • Develop new cross-UCL Metabolism & Society @UCL activity • Complete recruitment of translational neuroscience leader to SoP and integrate with ARUK Drug Discovery Unit/UCL Imaging Centre • Develop new Biology & Computing courses (with CS) and plan for Nature Smart Cities on QEOP site • Explore potential collaboration and interaction with Rosalind Franklin Institute
Become a global leader in environmental and biodiversity research	PT-1,2,3,KE-1	<ul style="list-style-type: none"> • Ensure succession planning for leadership of Centre for Biodiversity and Environmental Research • Initiate at least one major joint project with Zoological Society of London/Institute of Zoology in the 'One Health' area

<p>Ensure sustainable access to state-of-the-art Life Sciences technology platforms</p>	<p>PT-1,2,3,KE-1</p>	<ul style="list-style-type: none"> • Complete UCL Imaging Centre for advanced microscopy (with FBS) • Embed imaging technology in our research-embedded teaching at MSci and MSc/MRes/PhD levels • Following LMCB renewal, secure increased level of science platform development funding from external sources. • Contribute to BSU transition plan and support P-Block developments
<p>Increase volume and quality of research activity associated with the School of Pharmacy</p>	<p>PT-1, 2, 3, KE-1</p>	<ul style="list-style-type: none"> • Invest in Drug Discovery and Translational Neuroscience to connect with UCL Imaging Centre, the Translational Research Office and other Faculties • Support career progression of high quality Excellence Fellows • Engage fully with SLMS Research Facilitators • Improve overhead recovery from industrial grants and tackle conflict of interests • Improve volume of 4* research outputs • Planned relocation of activity within BMA House to maximise research interactions
<p>Increase quality of our education & training</p>		
<p>Develop research-embedded teaching and make pervasive throughout FLS</p>	<p>PT-1,2, KE-A,B,C</p>	<ul style="list-style-type: none"> • Develop newly implemented Cell Biology MSci stream • Grow Biochemistry, Molecular Biology & Biotechnology MSci • Optimise research-embedded teaching provision at CTFU • Develop group research projects for MSci streams
<p>Deliver a UK-leading MPharm degree</p>	<p>PT-2, 3, KE-A</p>	<ul style="list-style-type: none"> • Finalise and implement Years 3 and 4 of MPharm programme • Develop 5-year degree incorporating pre-registration training. • Refine implementation of values-based recruitment in year 2 • Improve overseas marketing
<p>Promote culture of universal pedagogy</p>	<p>PT-2, 3, KE-A</p>	<ul style="list-style-type: none"> • Increase engagement with UCL Arena • Increase proportion of staff with Higher Education Academy qualifications • Develop joint project with UCL Institute of Education for undergraduate pharmacy students • Roll out postdoctoral accreditation scheme for teaching
<p>Enhance and ensure sustainability of FLS Doctoral Training Programmes</p>	<p>PT- 2, KE-A</p>	<ul style="list-style-type: none"> • Further develop MRC Doctoral Training Programme across SLMS and develop specific skills training programme • Enhance integration between BBSRC, NERC and MRC DTPs hosted in FLS and with EPSRC DTPs hosted in BEAMS
<p>Establish new and sustainable high quality international collaborations in Life Sciences</p>	<p>PT-1,2,3,6, KE-A</p>	<ul style="list-style-type: none"> • Develop New Giza project (with Medical School) • Develop new China strategy around China Pharmaceutical University • Develop partnership with Chulabhorn Research & Graduate Institutes
<p>Consolidate and improve Masters programme provision</p>	<p>PT- 2, KE-A</p>	<ul style="list-style-type: none"> • Address recruitment or terminate courses with fewer than 20 students unless strong academic justification. • Increase attendance at international recruitment fairs (targeting specific sectors e.g. Singapore) • Increase promotional activity through continued use of video,

		subject-specific brochures and engagement with International Office's Hobson's Connect system.
Deliver impact through developing Life Learning	PT-2, 3, KE-A	<ul style="list-style-type: none"> Partner with UCL Life Learning to develop drug discovery portfolio of Life Learning activity Invest in at least three or four new areas of Life Learning including Drug Discovery Support SysMIC to develop their PGR training into a Life Learning offering.
Increase quality of academic and professional services leadership		
Make sustained progress in equalities and diversity	PT-2, 5; KE-A, B	<ul style="list-style-type: none"> Promote Athena SWAN in GCNU/SWC. Support all Divisions/Institute achieving at least Silver in planning period Improve BME mentoring in all teams at all levels Promote inclusivity in all Faculty events and projects
Develop all staff	KE-B	<ul style="list-style-type: none"> Ensure a consistent high quality approach to staff appraisals Active participation in leadership training Focus on respectful workplace and mental health support/training
Develop excellent group leaders	PT 1-6, KE B	<ul style="list-style-type: none"> Develop new training for early career group leaders focusing on research integrity & personal leadership qualities
Promote excellent leadership with transparency and authenticity	KE B	<ul style="list-style-type: none"> Recruit new GCNU Director Complete recruitment of new senior positions for Cell & Developmental Biology Prepare for new LMCB Director in 2018/19
Improve coherence and effectiveness of professional services	KE A,B,D	<ul style="list-style-type: none"> Engage fully with TOPS process at all levels

5. Staffing

Our overarching goal is to improve the **quality** of all our staff (academic, research, teaching and professional services) consistent with **UCL core values** in order to deliver **excellence** at a similar shape and size. Continued planned growth in headcount is expected in new facilities such as the Sainsbury-Wellcome Centre and this is fully cost recovered through external research income or endowments. Elsewhere we look to replace staff as we have an ageing Faculty with significant succession planning required to maintain teaching excellence.

Staff morale, mental health/stress & work/life balance

- Staff survey.** The 2015 Staff Survey continues to inform our approach. Key themes that emerged were a need to focus on fairness and respect in the workplace; and on the goals and objectives for academic and professional services staff associated with their Divisions. We are responding to this by increasing emphasis on communication, dialogue and explanation between the leadership team(s) and staff; and continuing to emphasis and encourage greater dialogue between professional services and academic, research and teaching staff.
- Mental health/stress.** Our staff report high levels of stress or pressure in the workplace, and neutral scores in the Staff Survey indicate a lack of awareness of support. There is also significant concern about high levels of stress and mental health problems in our student cohorts that affect staff. Our plans address this by explicitly rolling out 'mental health toolkit' training throughout the Faculty and

emphasising the benefits of mutual support in a diverse workplace. Our second Faculty mental health workshop is scheduled for May 2017.

3. **Work/life balance.** As is common in the sector our staff are reporting dissatisfaction with the balance between work and home life and an inability to meet the requirements of our job without regularly working excessive hours. We will address this through modelling behaviours; high profile Athena SWAN (and other) events that celebrate a balanced approach; and an emphasis on quality of approach to academic work thus improving efficiency and freeing up time.
4. **Flexible retirement.** We have had discussions with 44 staff potentially suitable for flexible retirement in the last year and will continue discussions with each of them. Teaching succession planning has been undertaken and key posts that will require replacement identified.

Continue to improve quality of professional services and support staff in these roles

1. **Engagement with TOPS.** We have a small number of large operating units with a highly effective embedded PS team across the Faculty; managed locally by our Divisional Managers and overall by the Faculty Manager. Recent local restructuring of the UCL Genetics Institute PS team and the Biosciences PS team has further emphasised this ongoing integration, increasing specialisation and recognising the need to periodically review our team structure in order to support the goals of the Faculty and UCL and locally respond to changes in academic, teaching and research priorities. We are using this effective and integrated approach to engage proactively with TOPS. Following merger, the School of Pharmacy PS teams were reorganised comprehensively with subsequent smaller iterations to respond to changing local, Faculty and UCL priorities.
2. **Technical staff** are frequently a neglected group in terms of career development and we wish to increase our focus on developing these individuals and integrating them into Faculty structures.

Develop all staff

1. **Performance management.** Appraisal rates are consistently ~95% and our emphasis has moved to improving quality through training appraisers and the use of an additional checklist. All academic, teaching and research staff are now assessed for promotion every year and Faculty-wide transparent and standard procedures are implemented. At a central level we monitor performance of any new hires against business plan for a minimum of two years. We also have a Faculty led process for consideration of reward arrangements for all levels and categories of our staff.
2. **Address key issues for postdoctoral research staff.** The PRES survey indicates some concerns over career progression, career advice and transferable skills training in this cohort. We will increasingly focus on quality of training and experience for this group, including provision of a clear and transparent pathway of support through schemes such as Career Development Fellowships towards personal independence. This will include pathways to support both retention and departure from the Faculty.
3. **Leadership training.** We have invested in the Future Leaders programme for the last three years, with successive Life Sciences leaders coming through. We will continue to invest in this programme in a gender-balanced way, seeking to extend leadership training opportunities to a diverse range of staff including professional services teams.
5. **BME staff development and student attainment gap.** We have incorporated additional BME objectives into our Faculty E&D plan; partnered with UCL Law to identify black male students suitable for the Freshfields Stephen Lawrence Scholarship scheme; and nominated several students for the London School Black Child of Achievement Awards. We will continue to actively engage with the Liberating My Curriculum initiative, acknowledging the challenges in fundamental biology of this approach, and will work with the Provost's Race Envoy to champion change.

Investment in new or replacement mission-critical academic staff

Our overall approach remains one of restraint with a static or slightly increasing (SWC) academic headcount. Within Biosciences there will be significant numbers of staff retirements in the planning period, most of which are critical for our teaching excellence (and income). We will meet replacements for retirement through a

combination of proleptic appointments and external recruits. Similarly, we also need to recruit replacement staff in other grades and positions where they play mission-critical roles in research or education delivery.

In addition to these planned replacements, we will deliver modest investment (or re-investment where possible) in key interdisciplinary or emerging areas in line with our academic and financial sustainability strategies:

1. We will now develop new **teaching and research capacity** preparing for the **Nature-Smart Cities** programme at QEOP (which will start to appear in our three year planning horizon from next year) and the previously signalled focus on a **Centre for Life's Origins and Evolution (CLOE)** within Biosciences.
2. We will complete **Developmental & Stem Cell Biology leadership recruitment** through a senior appointment to replace retiring Faculty, together with recruitment of their equally talented partner, aiming to provide new energy and direction in this very important area.
3. The **Sainsbury Wellcome Centre** will continue to recruit academic staff reflecting increased resource allocated following the recent excellent GCNU QQR, and the continuing resourcing of the SWC now that it is open. These will all be accommodated within existing Estates footprint and are fully cost-recovered through external grant funding.
4. The **Gatsby Computational Neuroscience Unit** will recruit a new Director following the decision of the highly successful longstanding Director, Peter Dayan, to step down later in 2017. This recruitment is fully cost-recovered through external grant funding.
5. We will complete building interdisciplinary capacity in **Drug Discovery** (replacing Professor Paul Fish) & **translational neuroscience** associated with the School of Pharmacy, partnering with the ARUK Drug Discovery unit and the SLMS Translational Research Office. This will include funding for a Drug Formulation initiative.
6. We will continue to participate in the **SLMS Excellence Fellowship scheme** which has delivered a cohort of outstanding early career researchers delivering both excellent research and leveraging significant (sustainable) research and personal fellowship income following on from their core funding.

6. Internal enablers, barriers and operational impact

Our Faculty remains critically dependent on staff and business processes associated with central Professional services to deliver its plan. This dependency has increased since 16/17 due to the maturing of our cost savings efforts that have delivered financial sustainability in the current planning period. Future quality improvement will require improvement in **business processes** within central services and a significant barrier to future financial sustainability is the lack of **management information** needed to carry out the next wave of quality improvement. We are investing considerable effort in working with central services at all levels to enable progress and look forward to the operational stages of the **TOPS process**, acknowledging that progress in the current year has mainly focused on planning and design of TOPS.

1. **Research Services.** We currently lack business intelligence on the areas we have identified where sustained effort will enable us to improve our financial sustainability. We lack effective reporting tools for reporting overhead recovery in real time; identifying PIs who may require assistance in securing research funding; listing direct cost recovery of salaries by PI; providing detail on the extent to which our PIs collaborate on grant applications. We have established manual workarounds for many of these in cooperation with Research Services but this is currently a limiting factor for improving quality and financial sustainability.
2. **Admissions.** We depend on effective partnership working with central services to meet our admissions targets and improved flexibility of the centralised processes in 16/17 has paid dividends in meeting our targets this financial year. We now look to continued cooperation and a move to electronic dissemination of management information on admission in 17/18.
3. **Estates - footprint.** Following the 15/16 planning round we put in place in collaboration with Estates an annual business process to conduct a Faculty-wide space audit and update of FAMIS. Estates have faced significant challenges completing this process in successive years but we reached a satisfactory conclusion with a reduction in our FAMIS estates footprint by 15% in 15/16. Future progress now demands we create

management information systems that allow us to dynamically manage our estates footprint and we seek to work with the Management Information groups to achieve this in 17/18.

4. **Estates – teaching space.** We have been working closely with Room Booking to try and ameliorate some of the adverse consequences of late room changes on our student experience but this continues to be challenging. We remain keen to introduce ‘hard caps’ on modules but our suggestions to improve student experience by allowing for module selection in the year before a student takes the module requires SITS development for which Estates and SRS continue to lack capacity.
5. **Finances.** Our financial reporting and prediction has improved dramatically over the last three years and is well integrated across the School and with central Finance. To make further progress, we require capacity to undertake detailed modelling and options appraisals of large-scale financial changes, and the capacity to carry out ‘deep dives’ to identify specific areas of activity requiring increased focus to establish financial sustainability.
6. **Human Resources.** We have completed execution of a major ERVS plan over the last three years with HR support. We depend upon effective interaction with HR to deliver the next phase of staff development with flexible retirement. We also are limited in developing quality of leadership through continuing challenges developing PAR to allow a focus on quality and goal setting;

The main barriers to delivering our vision and plan

The four barriers that are both pervasive and important are:

1. **Lack of business intelligence** on a real-time basis to enable focus on the academic mission and where additional work is required to support and develop this mission in a financially sustainable fashion.
2. **Central IT** support systems that are not always designed with the academic mission in mind and consequently often cannot deliver the information required to assess, monitor and promote financial sustainability. We are reverting to manual workarounds in many cases which require staff time and are less reliable and accessible.
3. **Complicated business processes** which can add extra layers of accountability without improving effectiveness or efficiency. We wish to help redesign business processes around the academic mission which usually depends on a time-poor academic seeking to deliver effective teaching, research or impact.
4. Insistence on **uniformity of approach** across Faculties regardless of changes already implemented and the nature of the respective Faculty business activity. The multiplicity of UCL Faculties is often raised in our interaction with central Professional Services as a reason why improvements in business processes cannot be delivered rapidly, due to the need to secure wide consensus across a large number of Faculties. We would encourage an approach that tolerates a degree of heterogeneity and wish to work with central services to deliver consensus, as many of the changes we require to make further progress will require such an approach.

In addition, there are two other important barriers/enablers

- **Staff morale and communication.** Without the full and enthusiastic engagement of academic, research, teaching and professional services staff we will not realise our vision. These issues were apparent in the 2015 Staff Survey, although not uniform across our Faculty, and are explored further in the ‘Staffing’ section below. We have an active programme of engagement at a Faculty level to improve the situation and further actions will be taken as we plan for the 2017 Staff Survey.
- While **estates provision** is generally good across our Faculty and – unusually within SLMS – we have no major estates projects in the Capital Plan, we do have an ongoing need for small works, refurbishment and occasional medium size project. Estates capacity and capability to deliver these has been significantly impacted in 16/17 with small works projects only just starting now in March. We are concerned that the capital plan lacks adequate, transparent mechanisms for incorporating and prioritising small scale projects (£1.5-3M) to improve student experience and/or refurbish current space, with very large projects and a limited number of priorities ‘crowding out’ medium scale projects that remain important.
- **Interdisciplinary activity** is a particular focus of this strategic operating plan where any new investment is to be made. This will be a significant enabler of our financial sustainability because it will target new areas

of academic excellence that link our Faculty to others across UCL, delivering novel and financially sustainable activities with global impact. The Metabolism & Society domain funded in the 16/17 PSDF round is an excellent example of one such area we wish to encourage as a major enabler.

7. Assessing performance

We aim to achieve a universally high level of excellence throughout our Faculty, regardless of staff category or operating unit. We will maintain or exceed an overall contribution rate of 28% on overall income, excluding the (fully funded) Sainsbury Wellcome Centre as agreed in the 16/17 planning round and subsequently.

Education

- We anticipate a static NSS (noting the likelihood of UCL not meeting its overall response target) as improved teaching quality, feedback and research-embedded teaching is balanced by continuing challenge with satisfactory rooming and quality of AV provision
- We are targeting an improved PRES through focus on PG supervision, quality of careers advice and general transferable skills training reflecting the particulars of our PRES feedback
- Employability and SSR are both high and we have no plans to target higher (or lower) levels
- We plan to broadly maintain the balance of our student population with a slight drift towards higher PGR and higher overseas (but significant variability between courses)

Research

- Our overall goal is to improve quality while maintaining quantity of our research activity. We aim to provide access to an outstanding research environment, resources and facilities to maximize research productivity and impact.
- We target trend growth in research grant income and a sustained level of new research applications at double the targeted research grant income
- PGR student load is highest in SLMS (and 2nd highest in UCL) at 1.7 per eligible FTE (note different definitions of this figure in the KPIs); we have no plans to increase
- Research overheads are the highest in SLMS; we will continue to target further increase where feasible
- In addition to the UCL KPIs we will monitor direct cost recovery of grants

International

- Partnership working [international consultancy income, type 2 partnerships] is expected to increase particularly through consultancy in the School of Pharmacy, the start of the 'New Giza' project and China Pharmaceutical University project

Staff

- Target a higher net diversity through engagement with Athena SWAN and the Race Chartermark action plan
- Staff engagement reflects the current change process towards financial sustainability. We will target higher engagement through promoting bidirectional communication and dialogue
- In addition to the UCL KPIs we will monitor performance of new recruits against business plan

Financial performance & efficiency

- Financial Efficiency [teaching income per academic, research grant income per academic, total staff costs as percentage of total income] are high by external benchmarking (except where noted above) and relative to SLMS peer Faculties. We will seek to maintain these figures while improving research grant income per academic in School of Pharmacy
- Space volume is relatively high, reflecting our major platform technologies and 'wet lab' scientific needs. We will target a reduction of 5% in overall space requirement. Specific areas such as our occupancy of BMA House (School of Pharmacy) require review and resolution
- Space efficiency has improved significantly since 14/15 and we will target contribution per sq M > 1.0

In addition to these measures, our overall assessment of performance will use a combination of quantitative and qualitative sources. We will encourage informal feedback; reflect upon the staff survey, monitor appraisal outcomes and where appropriate pursue exit interviews. This reflects our core belief that academic excellence is hard to capture and therefore relies on multi-source feedback, including a qualitative assessment of performance.