The School of Computing Science’s vision is to continue to be recognised as one of the world’s leading computer science schools/departments, pursuing world-class research and providing world-class undergraduate and postgraduate teaching, consistent with the University’s vision, mission, and values. The long-term goal is to be ranked in the top 50 worldwide (QS).

Staffing

In order to be ranked in the top 50 worldwide, we need to grow the staff complement of the School to that typical of a top 50 School; additionally, workload issues require that we reduce the student/staff ratio, particularly in levels 4, 5, and PGT (where we have individual project supervision).

The average number of academic staff in the QS top 50 is ~50; this is a mix of R&T staff and T&S staff, using Glasgow terminology. The School currently has 35 FTE of academic staff, all R&T. The School’s short-term needs are to hire 2-3 T&S staff to reduce teaching loads on R&T staff and reduce the overall student/staff ratio. In the medium term, we need 1-2 R&T hires in Information Retrieval and Human Computer Interaction to strengthen these world-leading groups. In the longer term, we need one additional leadership R&T hire, with 2 satellite R&T hires, in information security in order to build competency in an important area; we are relatively late to the party here, so a leadership hire is indicated.

Teaching Income

It is imperative to note that we cannot reduce the student/staff ratio if the number of students grows faster than the number of staff. Yet again, despite the higher tariff, it looks like Computing Science will experience 15-20% growth over 2013-2014 in year 1.

We must be able to control UG intake at a subject level – the current Science entry approach is killing us. To increase teaching income, we need to grow the number of international students, particularly from our 2+2 agreements, and attract top RUK students, benefiting from our high rankings in UK league tables. This growth in higher fee paying students must come at the expense of fewer Home/EU students; our goal is to keep UG numbers fixed, while increasing the percentage of those students who pay RUK and international fees (see section on mobility for tactics to increase international income). We also question the current College practice of retaining the unit of resource for Home/EU students to finance collegiate redistribution.

The University focus on PGT growth has, in part, been due to an anticipated large percentage of such students paying international fees. Regardless of the origin of PGT students, each such student requires in-year project supervision OVER THE SUMMER. The School’s stance remains that the maximum number of PGT students we are willing to take is 3 x academic FTE to bound the project supervision load.

We need to increase the percentage of international students in our PGT programmes. Our most popular programmes, MScIT and MScSD, are predominantly chosen by Home/EU students; these conversion MSc’s require that we put on ~8 additional courses just for this cohort; the projects supervision for these students is not particularly of interest to R&T staff (development projects with little adventure). We have 15 funded places from the SFC through the 2017-2018 academic year for these programmes; we also have ~75 students total in the programmes in 2013-2014. Phasing out these programmes is politically impossible given the SFC places, and one has to question whether the programmes should be phased out when they are so popular. We propose hiring 3 T&S staff to teach and supervise this cohort, thus offloading these teaching and project supervision responsibilities from the R&T staff.

The new Data Science MSc starting in 2014-2015 appears to be very popular with international students, and builds upon research strengths in the School; it may provide a vehicle for replacing Home/EU fee students by international fee students; assuming 25 international students per year, this will yield £400k of fee income, which will cover the £120k required for the 3 T&S staff for the conversion programmes, leaving a tidy additional profit. And this cohort of 25 students represents <1 additional project supervision/FTE over the summer for R&T staff.

Research Income

This reached a low in 2010-2011 due to departure of Girolami; investments in Triantafillou and Trinder are starting to pay dividends in lifting overall research income; we anticipate the return of Sventek to active pursuit of funding after HoS hiatus; we also note the loss of Calder to the CSA role for Scotland.
The School continues with the policy that each academic member of staff has an annual objective to submit at least one grant application/academic year in excess of £250k; this is the minimum expectation, with many of the research stars submitting 3-4 applications/academic year of total value well in excess of £1.5M; the goal is to reach an annual income of £100k/FTE, in excess of the Russell Group average.

Staff members who no longer actively seek external research funding are being strongly encouraged to move to a Teaching and Scholarship contract at the same grade, thus decreasing the denominator in the income/FTE computation.

The School continues to diversify sources of research income; we are seeing a steady increase in the fraction of our research income from the EU; with CENSIS and the DataLab IC’s, we expect to see a slowly increasing portion of our income coming from industry.

We take issue with the accounting used for research income - several staff members obtain PhD funding from industrial collaborators; this DOES NOT show up as research income; this discounts the effort required to maintain such relationships to obtain the funding, and ignores the not-inconsiderable contribution of PhD research to the research output of the School.

**Outputs and output quality**

Each member of staff is encouraged to publish 1/2 REF-returnable outputs each year and nearly all do. We simply do not believe the output quality information that is being tracked by the Centre.

**Postgraduate research**

We want to increase this to be in the upper quartile of the Russell Group. To that end:

- The School has a policy of guaranteeing to match any company that provides a 50% studentship, either from the DTA or from operational funds;
- Staff members are encouraged to consider taking on promising students that come with their own funding (Saudi, Pakistan, Libya)
- Presumably, PGR/FTE is determined by dividing the number of students by the number of R&T staff; thus, efforts to reclassify staff from R&T to T&S will also have a positive effect on this KPI
- We have implemented a more aggressive 1st year progress viva structure so as to better detect and redirect students who do not have the appropriate skills for success

**Student mobility**

Dr H Purchase has assumed the role of the student mobility coordinator; she is exploring exchange relationships with South African, Australian, and New Zealand universities, as well as encouraging our students to consider study abroad in year 2. New changes to the Honours curriculum may enable study abroad in year 3 (to be determined).

We anticipate merging the student mobility coordinator role with the international champion role. We expect a similar set of relationships to that being nurtured for outward mobility to be important for international recruitment, 2+2 included. We will also explore School-specific exchange relationships with Universities in North America so as to provide more opportunities for outbound exchange.

**School infrastructure**

The School will continue to pursue improvements to its infrastructure in 2014-15 with a view to enhancing both the staff and student experience, and building on its reputation as a world-class centre for research and learning & teaching, through access to high quality work and study environments. This includes short to medium-term plans for refurbishing our student labs and an extensive programme of works designed to improve all areas of the School’s building fabric and accommodation.

**Physical space for projected growth**

The major predicament facing the School is access to physical space for both staff and students which threatens to curtail projected growth. The School has sought to maximise the flexibility of its existing space footprint by repurposing some spaces, but is again close to 100% occupancy which it expects to breach in the very short-term. Reacquisition of houses 8 and 9 Lilybank Gardens is critical to the School’s projected growth and efforts will continue, in consultation with College and others, to reacquire this space with urgency.