Imperial independence

Abigail Smith Communications

The governing Council of Imperial agreed last month that the College will take the first steps towards withdrawal from the University of London.

The College will now meet with the Vice-Chancellor of the University, Sir Graeme Davies, and his team to discuss the terms of its withdrawal.

Imperial is an entirely self-governing institution and the University of London plays no role in its decision-making processes. It also has a direct relationship with funding councils and collaborates with other London institutions without the involvement of the central University.

Rector, Sir Richard Sykes, said: “Imperial has an international reputation that is independent of the University of London. It is absolutely right that we should promote our own identity and award our own degrees. We value our many collaborative relationships with colleagues in other London institutions, which were formed independently of the central University and will certainly continue to flourish regardless of our decision today.”

Imperial applied for and received degree-awarding powers from the Privy Council in 2003, which are as yet unused. It estimates that the first undergraduate students who would receive Imperial College degrees would be the 2008 intake. All current students would receive University of London degrees or be given the choice of converting to an Imperial degree.

The College will now seek an amendment to its Charter from the Privy Council to remove a clause requiring it to observe the Statutes of the University of London.

Science Museum Library resolution

Abigail Smith Communications

IMPERIAL and the Science Museum have announced a long-term solution for the continued future of the Science Museum Library this month, which ensures enduring public access to the library’s most important collection at Imperial’s Central Library building.

This agreement will ensure that the College and the museum, which have worked closely for nearly a century, will continue to work together to develop the library to meet the needs of the twenty-first century, with enhanced facilities and increased provision of study space.

Southside demolished

Abigail Smith Communications

IMPERIAL and the Science Museum have announced a long-term solution for the continued future of the Science Museum Library this month, which ensures enduring public access to the library’s most important collection at Imperial’s Central Library building.

This agreement will ensure that the College and the museum, which have worked closely for nearly a century, will continue to work together to develop the library to meet the needs of the twenty-first century, with enhanced facilities and increased provision of study space.

IN BRIEF

A prize RT for a King
Professor Simon Donaldson, an Imperial mathematician, has been awarded the King Faisal International Prize for science. The award, for research of global influence, will be presented to Professor Donaldson in Cairo in February 2006.

Honoured for cardiovascular action
Emirat Professor Colin Cook, a rheumatologist, has been awarded the degree of Doctor Honoris Causa of the University of Paris XI—Val de Marne. The award is in recognition of his scientific contributions in France. He was, for a number of years, a member of the Cardiovascular Action (a coordinated research programme) of the French government agency, DORST (Défense et Recherche en Santé des Traitements). He received many fellowships and research students from France to study cardiovascular biology and fluid dynamics at Imperial.

New medical Dean for South Kensington Campus
Professor Tim Williams, FMedSci, Head of the Clinical School and Director of the MRC-Asthma UK Centre in Allergic Mechanisms of Asthma, has been appointed Campus Dean for the South Kensington Campus in succession to Professor John Couchman.

"Holy Grail" of crystallography one step closer
New research published in PNAS shows how scientists from Imperial and the University of Surrey have developed a new technique for crystallising proteins. Our findings are that the process which converts materials into three-dimensional crystals, rendering their atomic structure and function to be studied. One of the main issues in crystallography is getting the protein to become crystals. To do this, scientists use a technique to encourage the molecules to form a crystal lattice.

The team developed the theory that porous materials could act as a universal nucleant, encouraging virtually any material to crystallise. They tested this with BocChl, which led to the crystallisation of the largest number of proteins ever crystallised using a single nucleant. Imperial’s Professor Naomi Chayen, Director of the School of Biological Sciences, said: "The first step in obtaining a good crystal is to get a nucleant in an ordered way. The holy grail is to find a universal nucleant which would induce crystallisation of any protein."
Engineering an end to poverty

Abigail Smith Communications

ENABLING some of the world’s poorest communities to become self-sustaining is the aim of an Imperial-based organisation designing innovative technologies to tackle poverty.

Developing Technologies (DT) uses Imperial student projects to find low-cost technical solutions that respond directly to a community’s specific situation.

DT aims to develop ideas in partnership with communities so that communities own and take forward new technologies.

This means using locally-available materials and thinking about how things work in place, so that products can be repaired, developed and replaced locally.

Keith Pullen, Senior Lecturer in Mechanical Engineering, and a co-founder of Developing Technologies, explained:

“The big issue is understanding how people work and what is available to them. There’s limited use in handing out water pumps, for example, if no one has the capability to repair or replace them when they break.”

Technologies such as a footbridge in Sri Lanka and hay mowers for Mongolian farmers are already making a real difference to people’s lives, according to Dr Pullen.

“The hay mower is a perfect example of how important it is to work within communities rather than coming in from the outside assuming you know what they need,” he says. “The Russians gave them tractors that are now rusting away unused because local farmers cannot afford to repair and run them. Our horse-drawn mowers respond specifically to the situation people are in and can also be manufactured locally.”

Student voice

The future of Imperial College from a student perspective

David Kaye is a second year undergraduate student, studying physics.

“I HAVE now been around long enough to realise the high caliber of staff and students that make Imperial such a world class establishment. In order to remain cutting edge, the future must always be of concern and it is in everyone’s interest for the College to continue to build on its undeniable success. As such there are certain matters that need to be addressed in order to guarantee Imperial moves forward in the right direction.

The first of these is top-up fees. Whether one is for or against them (and there are compelling arguments for both sides) they are here to stay. Therefore it must be made sure that they will not have an adverse effect on the influx of undergraduate talent to our courses. Imperial must be very proactive in appealing to some of the under-represented demographic and social groups, not because of a sense of political correctness due to Government-enforced social engineering, but because it is often individuals from these groups that have the most undiscovered potential and sheer determination to succeed at the highest level. Those from less privileged backgrounds need to be shown they can indeed gain a place at Imperial and there must be an adequate grant infrastructure in place to ensure this.

As an institution at the forefront of development, Imperial needs to reflect social change and one sector I feel it is failing to address is the number of women on its courses. There are encouraging steps being taken with various summer initiatives, but these efforts need to be redoubled as Imperial still represents the scientific community of a bygone era. There should be a higher profile female figure at the College, maybe appointed due to it being in a position with the sole purpose of being a figurehead for women’s interests.

The emphasis of any expansion of departments should not just be on research, however, but on full undergraduate body also. There are fears that the College could be turned into a research institute with a minimal number of undergraduates. It is essential for the wellbeing of the College that this does not happen, as teaching undergraduates is an important way of discovering new talent and in research and, more importantly, is the main reason Imperial exists in the first place!

Another source of worry is the possibility of UK students becoming outnumbered by overseas students. It is unquestionable that admitting students from all over the world is a pivotal factor in the College’s success and one of the reasons it is a fascinating place to study. There is also the full-fare issue with the College needing to increase funds by recruiting more from overseas. However, it is arguable that there is a significant level of ‘brain drain’ occurring there as a large amount of these students are funded with scholarships from companies that will require them to live outside Europe and thus not contribute to the economy. If Imperial is to admit a larger proportion of these students, the positive impact of its role in teaching undergraduates will be severely weakened in the UK.”
New Head of Commercial Services

Paddy Jackman took up the position of Head of Commercial Services in November 2005. "In the first interview of the new year, Reporter's Alex Platt went to meet him.

Is this a new position and what does the role entail?" "No, this isn’t a new position as such. But it was formerly known as Head of Business Services. I’m responsible for residences, sports and leisure, catering and conferences, the latter two having become separate entities since I came into post. I see this as much more than an overseeing role though; it’s also happen-as-you-go. This is reflected in the fact that I’m heavily involved in some of the biggest things happening on campus.

What is your background and what do you bring from this to your new role?" “My most recent position was Commercial Director for the University of the Arts London, the federal body of the five leading art colleges in Europe, including Central St Martin’s. The role was similar and included developing new student halls. It’s quite a leap coming from art to science! But one of the best things about coming here is the availability of budget funding. It’s really exciting to have the chance to develop something new. Looking forward, I see pricing potentially international in retail and I hope to bring some of this commercial experience to the role.”

What do you see as the biggest challenges of your job and where will you be making the biggest changes?" “I am really keen to develop the staff and student experience. Imperial is certainly one of the top academic institutions in the UK and I want our postgraduate services to also reach this high standard. We need to offer potential students what they expect from an institution like this. I also want to gain everyone’s confidence and trust. I’m not just here to look at bottom line performance. I truly believe that we don’t have to make a choice between great services that run so well or running things as a business just to make a profit. These things are not mutually exclusive, a natural balance can be obtained.”

What do you see as the biggest challenges for higher education as a whole in this area? “I think one of the biggest challenges is the unknown effect of top up fees. We will either end up with students with more disposable income to spend whilst studying or students who are more aware of their spending as they are conscious of future debt. Either way, students now have expectations as consumers, the attitude of offering sub-standard services because they’re ‘just students’ can no longer exist. Institutions everywhere will need to raise their standards.”

What major plans do you have for the future? "I want to gather our team together. We are currently four independent areas and we need to recognise that these services do cross over. By grouping them together, we could offer staff and students a one-stop shop in a designated area.”

Southside update

Allison Andrews Estates

THU Southside project achieved an important milestone at the beginning of this month when the main building contractor, Laing O’Rourke, took possession of the site on time as planned. The demolition contractor, Castillon, successfully completed their works just after Christmas following an increase in resources on the site. At the point of the demolition up to 60 lorries were leaving the site each day filled with rubble.

Design of the new Southside and new building is progressing well with only the ground floor areas to be finalised. The buildings are being designed to restore the form and coherence of the original Prince’s Gardens by complementary the scale and form of the 1850’s buildings.

The project is scheduled to be completed by the end of August 2006, in time for the beginning of the autumn term.

A view not seen since 1962

A matter of time

BACK in October 2005, Imperial staff were challenged to suggest the contents of a time capsule to be buried beneath the new halls of residence at Southside. With competition so steep, the judging panel decided to split the prize between two members of staff. Colin Grimshaw, ICT Media Services, was for his suggestion of a commemorative DVD of the Southside redevelopment process and Dr Nicolas Cinoi, Mechanical Engineering, for his suggestion of including of his old computer, with all its data, to reflect working life at the College in 2006.

Other relevant items will also be included. Look out for the full report when the capsule is ready to be buried.

Higgins joins gene group

IMPERIAL’S Professor Christopher Higgins will form part of a leading advisory group on human genetics research. Professor Higgins, who is a leading figure in stem cell research and genetic causes of disease, joins six other new members of the Human Genetics Commission. Health Minister, Jane Kennedy, said: “I am delighted to announce these new appointments. The Commission remains a valued source of expertise and well-considered advice for the Government. These appointments will help it to continue to address the important issues, challenges and benefits raised by the developments in human genetics.” Science Minister, Lord Sainsbury, added: “The HHGC brings broader social, ethiccal, legal and economic considerations to one of the most exciting and fastest evolving areas of science and technological development.”

Science Museum Library resolution...continued from page one

Following engagement with stakeholder, including existing library users and professional bodies, on the proposed way forward, the project teams at both Imperial and the Science Museum recommend that implementation of the proposal begins this month. It is likely to take around two years to complete. This process will include extensive refurbishment of the existing library at Imperial, increasing study space for students and capitalising on the latest digital and wireless technology to provide a dynamic research and learning environment. Parts of the Science Museum’s Wroughton site will also be refurbished to meet its new role, as will areas of the Science Museum building to provide consultation facilities.

For full details of the agreement visit www.imperial.ac.uk/Pl162.htm

Guardian (02.12.05): “Looking at the media, you do get the impression that it’s much more common for men on a stag weekend to get a collective blowjob or whatever.”

Survival of the single

Sticking with the peace of singletons may be the recipe for good health, according to American scientists. Arguing with your spouse for just half an hour, the team found, is stressful enough to slow down wound healing by a day. “These findings are interesting, and illustrate yet again the control that the mind has over the body,” says Steve Bloom, Investigative Science, BBC News Online (05.12.05).
A day in the life of...

Dr Bill Hanage has been at Imperial for five years and is a Research Associate in Epidemiology based at St Mary’s Campus. Bill joined the College from the University of Oxford. It was a return for Bill as he completed his PhD at the Royal Postgraduate Medical School, which merged with Imperial in 1997. Reporter’s Alex Plat went to meet him, to find out about a typical day in his working life.

7.30 Bill starts his day at home by spending an hour replying to his emails and completing many of the small administrative tasks that come with his position. He explained: “Getting an early start is really good, especially as I have a fair number of collaborations with people in different time zones, including Boston and Vietnam, at the moment. Starting early means I can sometimes actually get to talk to these people directly.”

10.00 Bill aims to get to work by 10.00. “I travel by tube and usually read something on the way. This has nothing whatsoever to do with science, to clear my mind for the day ahead.” The first thing that Bill does upon arriving at his desk is to deal with any paperwork that he couldn’t send via his PC. Today involves letting key people know that a paper has been accepted by a journal. There are frequent interruptions from technicians and postdocs with various questions. Bill said: “I have an open door policy, but sometimes if I really need to work uninterrupted I pick a note on my back saying do not disturb! Only a couple of people think that doesn’t apply to them, including one colleague who gets my attention by pinging my headphones!”

10.30 Bill jumps in a taxi to get to the South Kensington Campus.

11.00–12.00 Bill presents a lecture for biological science undergraduates. He also teaches on several courses in Natural Sciences and Medicine, at undergraduate and postgraduate level.

12.30 Before eating lunch, Bill tries to go for a run either along the canal in Paddington or around part of Hyde Park. “It can be hard to find time to do this, but I try to make it a priority. I will always allow time for a sandwich from one of the many shops in Paddington though, as I am diabetic and can’t skip lunch,” he said.

13.30 This afternoon, Bill spends time analysing data sets and running evolutionary simulations to see how bacteria populations behave under different circumstances. He said: “I tend to try and use the afternoons for bigger chunks of work. Again, the sheer diversity of things going on can be a distraction. We might find ourselves having conversations about a variety of exciting topics including HIV, bird flu, all manner of diseases and evolutionary questions. It is hard to go a day without finding something really interesting going on, which is great but not when you’ve got a lot to do.”

15.00 “Although Bill’s role has become steadily more theoretical over time, he does still occasionally don a white coat. Today he spends time in the lab setting up a sequencing reaction. He is comparing different species of bacteria. He explained: “What constitutes a species in bacteria, even after years of study, has no definitive answer. We use both actual bugs and computer-based approaches to try and come to a satisfactory conclusion.”

16.00 Bill heads back to his desk. He spends time on some correspondence with various science journals. He said: “It’s challenging to push things through to publication, trying to convince people you are right and why your work should be recognised. Also, if it is a day Arsenal are playing I start getting butterflies around now, so this helps to quell these!”

17.00 Bill continues his current research, studying the effect of vaccination on bacteria carried by children in Massachusetts and populations of the same species of the bacteria pneumococcus, in the Gambia. He said: “This is obviously a very interesting comparison as they are such very different places.”

18.00 Bill heads home for the day, of course, to watch Arsenal play, if there’s a match...