The campus in 2008
The new 4 West - have your say
plus: profile of Head of Pharmacy and behind the scenes with ICIA
Seven members of academic staff to assess research in 2008

The following Bath academics have been selected to act as expert assessors in the Research Assessment Exercise scheduled to take place in 2008:

Barry Potter - Pharmacy
Jonathan Slack - Biological Sciences
Dmitri Vassiliev - Pure Mathematics
Peter Johnson - Computer Science and Informatics
Jane Millar - Social Work
Geof Wood - International Development
Rosalind Marsh - Russian, Slavonic and East European Languages

Russell awarded UK’s highest science honour

Philip Russell, Department of Physics, has been elected a Fellow of the Royal Society. Philip was one of 44 scientists from the UK and the Commonwealth elected to the Society, whose members have included Isaac Newton and Charles Darwin. Work carried out by his Photonics & Photonic Materials Group on photonic crystal fibres is expected to lead to dramatic improvements in the power and flexibility of lasers, giving new sources of light with greatly enhanced efficiency.

Pharmacy lecturer invited to give talks overseas

Roland Jones, Reader in Neuropharmacology in the Department of Pharmacy & Pharmacology, has been invited by a panel of judges from the British Pharmacological Society to become the 2005 Rand Anglo-Australian Visitor. Roland will leave for Australia in November and will give a series of research seminars in universities in Australia and New Zealand. The award is named after leading Australian pharmacologist, the late Professor Mike Rand, and helps to maintain links between Australian and British universities by selecting scientists to take part in exchanges between the countries.

Founder of the hospice movement given doctorate

Dame Cicely Saunders, the founder of the hospice movement, has been awarded an honorary doctorate. Dame Cicely was given a Doctor of Laws degree at a ceremony at St Christopher’s Hospice in London. Dame Cicely founded the hospice in 1967 as the first research and teaching hospice linked with clinical care, and so began an enormous change in the way people with terminal illness were cared for. Now there are over 7,000 such hospices around the world.

Annual e-Tutor competition is launched

The Higher Education Academy together with the Times Higher Education Supplement have once again joined forces to celebrate innovation, good practice and achievement in the field of e-learning for the annual e-Tutor of the Year competition. Learning environments are often closed and private and the competition provides the opportunity to view and learn from effective practice. A first prize of £1000 is awarded by the Times Higher Education Supplement. The closing date for the competition is 1 July 2005. For details of how to enter, see www.heacademy.ac.uk/etutor.htm
New radar enables climate research at edge of space

Nick Mitchell and Peter Younger, Department of Electronic and Electrical Engineering, have designed a radar enabling research into climate change in the mesosphere - the very edge of space. The radar, installed in the Rothera research base in Antarctica, means scientists can use remote sensing to monitor the temperature of the atmosphere, and measure the waves and tides that flow around the planet.

Using this method, scientists will be able to explore the theory that while the lower atmosphere is warming, the upper atmosphere is cooling by as much as 1 degree centigrade each year. They will also be able to find out more about the complex mechanisms that link the mesosphere to the atmosphere.

Database enables scientists to search for natural solutions

Julian Vincent, Director of the Centre for Biomimetic and Natural Technologies, has created a new database that enables scientists to search for natural solutions to design problems.

Julian says: “Engineers depend on biologists to discover interesting mechanisms for them to exploit, but this database enables the engineers to view a directory of ‘biological patents’ and find natural solutions to technical problems.”

The most successful and famous example of biological mimicry is Velcro, designed by Swiss inventor George de Mestral after studying the hook-and-loop system used by burdock seeds to aid pollination.

Lighter materials will make air travel ‘greener’

Richard Butler, Department of Mechanical Engineering, has been working on a new generation of construction materials that will make air travel more environmentally-friendly and further improve the efficiency of renewable energy production. These composite materials are stronger but much lighter than traditional materials which can make a significant saving on fuel. Richard and his team are also working with engineers at Airbus to develop composite materials that can be made to change shape in flight to make better use of flying conditions.

Invention breathes new life into tennis balls

Aimée Cubitt, a final year Mechanical Engineering student, has developed a new device which pumps air into tennis balls to extend their useful life and restore the bounce to old balls. Her invention, which she has called Pump’n’Bounce, incorporates a hand-operated pump with a tennis ball canister, allowing players to pressurise the container where they store their tennis balls. Initial tests show that it is possible to double, if not treble, the lifetime of a tennis ball using this system, enabling amateur tennis players to get the most out of their tennis balls.
How will the campus improve during 2006-8?

One of the major challenges facing the University is its legacy of 1960s buildings around the Parade. A new £14 million grant from Higher Education Funding Council for England for 2006-08 will allow the University to make the parade more attractive, modern and environmentally-friendly. In this article Insider looks at how the money will be spent.
Funding criteria

The capital investment plan is a fund for the improvement of higher education facilities across England. It is the latest round of public capital funding intended to compensate for the serious lack of investment in higher education infrastructure during the 1980s. In the period 2006 to 2008, the University will receive £10.3 million to improve its infrastructure for research and £4 million for learning and teaching.

Although the funding has been allocated on a formula basis, the University has to submit proposals detailing exactly how it plans to spend the money and a final decision is expected by 31 July.

Following the HEFCE guidelines, the University selected projects which contributed to:

- the management of the major estates risk identified in the University’s Risk Register
- the University’s overall estates maintenance strategy for the removal of asbestos and refurbishment of the older Parade buildings
- research and teaching excellence.

Nicky Kemp, Vice-Chancellor’s Executive Assistant, who co-ordinated the University’s proposal says: “Unlike the first round of research infrastructure funding that was designed to increase overall capacity by investing in new resources, recent funding rounds have been designed to address past under-investment in existing facilities.

“This is helpful to the University as its own estates priorities are to invest in the buildings around the Parade.”

In order to qualify, the University has to contribute ten per cent of matched funding towards the plans, totalling £1.1 million for research and £447,000 for learning and teaching. The deadline for project completion is 31 May 2008.

Where the money will be spent

4 West
The safe demolition of 4 West was the first stage of the 2004-6 investment plan, and was completed in May. Money from the latest round will be added to the fund to pay for the rebuilding. The final cost is anticipated to be around £15 million.

The 4 West building had the largest capacity of any single structure on campus and the final plans for its replacement will be available in July. In line with the guidelines, the replacement building will not exceed the footprint of the old building but the new design will ensure that the space is much more efficient than its predecessor. The University will also seek a Building Research Establishment Environmental Assessment Method “excellent” environmental rating for the re-development.

Professor George Lunt, Deputy Vice-Chancellor, says: “The new 4 West project represents a most welcome opportunity to enhance social and catering facilities on campus, as well as our research and teaching infrastructure.”

To read some suggestions for the new building see the vox pop on page 10.

3 West
The fabric of 3 West contains some asbestos-based construction materials and it is becoming increasingly difficult to adapt space within the building to accommodate new technologies. The refurbishment project will commence with the removal and/or encapsulation of asbestos and refurbish some of the space. As part of this refurbishment the University will relocate 3 West’s remaining engineering facilities to 2 East, thus consolidating its engineering facilities at the eastern end of the Parade.

Library & Learning Centre
Over recent years the number of students accessing the library has increased from 5,000 to 10,000 per day. The planned Level 2 refurbishment will replace the existing single revolving door with two pairs of powered access doors, improving access for disabled staff and students, and will relocate access control and security points. The project will also create a new general access computer area immediately adjacent to the remodelled entrance and improve lighting and heating.

Howard Nicholson, University Librarian, says: “This investment will transform the library’s entrance areas and traffic flows, as well as providing a completely new area for drop-in student access to IT and self-service, 24-hour book issue services.”

IT Infrastructure
The funding will also be used to update the computers in the library, deliver a content management solution to underpin the development of the University’s e-learning capability and to upgrade the University’s research data storage system.

University Hall
The University Hall is currently being used as general teaching accommodation seating 335 students using tiered, retractable seating. This project will fund the refurbishment of the space to make it more suitable for general teaching usage and to equip it with state-of-the-art audio-visual teaching facilities. When completed the Hall will be able to accommodate 385 students and a number of wheelchair bays. The project will facilitate improvements in heating, lighting and ventilation, as well as access for the disabled.

Funding the future

The University anticipates that there will be future rounds of funding council capital investment. The new Estates Strategy, due to be approved by Council early next session, will help to establish future priorities for capital investment and identify which projects deliver the greatest benefit to the greatest number.
“Pharmacy and pharmacology work together to achieve the basic ambition of the right drug, in the right place at the right time”

“Counting pills?” said Anthony Smith, Head of Pharmacy & Pharmacology, “that’s not part of pharmacy today. In fact, the work being done in this department is a really good example of just how much roles in pharmacy and pharmacology have changed.”

One of only two pharmacy departments in the country to have a 5* rating, Pharmacy & Pharmacology at Bath is known for excellence in both teaching and research. It is also one of the University’s oldest departments and in 2007 will celebrate 100 years of pharmacy and pharmacology in Bath.
Anthony has been head of department since 2002. He said, “This is a very exciting time for the department; in addition to some groundbreaking research, we have the Research Assessment Exercise, professional re-accreditation and the centenary celebrations all happening in 2007. “At the moment I seem to divide my time between searching for ways to improve the future of pharmacy whilst researching its past.”

Working together
The role of the pharmacist has evolved enormously from compounding medicines to dispensing and now prescribing medicines and advising on their use. Pharmacists are involved all the way from the laboratory to the bedside. Pharmacology is the study of how drugs work and the development of new treatments.

“Pharmacy and pharmacology work together to achieve the basic ambition of the right drug, in the right place at the right time,” said Anthony. “Pharmacists work in the community and hospitals advising doctors and patients about their medications. Behind the scenes pharmacists and pharmacologists work in universities and the pharmaceutical industry developing new treatments.

“As a department we put equal emphasis on both our research and our teaching. The analogy I like to use is ‘How has Chelsea become top of the league? It is not because it has got 11 goalkeepers or 11 strikers but because it comprises a team of people who all do different things.’”

Researching the future
“My personal research focuses on the survival of bacteria in infection. Over the last twelve months I have been working with Mark Enright, Department of Biology & Biochemistry, to understand the survival of MRSA. This has had a high media profile and the development of new treatments.

“We have discovered that the bacterium can survive without food or water for up to six months, which makes it incredibly difficult to contain.

“This is just one strand of the research being conducted in the department, which carries right across the pharmaceutical sciences. Other exciting current projects include Barry Potter’s medicinal chemistry research: clinical trials show really exciting potential for helping women with advanced breast cancer.

“Richard Guy has been researching non-invasive ways of measuring blood glucose levels for diabetics. He has designed a watch that gives diabetics an instant glucose reading.

“He has designed a watch that gives diabetics an instant glucose reading”

“Both these projects have arisen out of real innovation and fundamental research.”

Looking at the past
In the midst of his department’s groundbreaking research, Anthony is keeping one eye on the past.

“I have been going through our archive and contacting alumni to see what material we have that traces the progression of pharmacy and pharmacology in Bath.

“I’ve discovered class photographs right back to the 1920s – all students looked and dressed the same until the mid-60s!”

The origins of the department can be traced back to the founding of the Bath & West of England College of Chemistry & Pharmacy in 1907. The original premises was in Bath on Cleveland Place.

“The origins of the department can be traced back to the founding of the Bath & West of England College of Chemistry & Pharmacy in 1907”

“People assume the college was in the building that has ‘Dispensary’ written on the exterior but it was actually the building next door and, strangely, we are yet to find any link with the Dispensary, commercial or academic.

“We moved up the hill to Claverton, via the Merchant Venturers College in Bristol and the College of Advanced Technology at Ashley Down, when the University was offered the location for a new campus in 1966.

“Pharmacy has evolved over the years to become an academic subject. In the early days there was no real academic component and qualification was mainly based on apprenticeships and practical exams.

“Now we have a department of 520 undergraduates on pharmacy and pharmacology courses, and the Masters in pharmacology is the only course of its type in the country. We also have around 100 postgraduate and postdoctorate students.”

In addition, the department has just completed its first, very successful, ‘distance learning’ course for pharmacist practitioners. The first cohort of students were mainly local hospital-based practitioners, as the course sits well within the development of the NHS. There are plans to roll this out nationally and internationally.

Where to from here?
“The big events during the rest of my tenure are the Research Assessment Exercise and the centenary. I am confident that both will reflect the past and future successes of the department.

“Whilst we work together to cement our reputation in the UK, I intend to continue my work in raising the international profile of the department. Since becoming head of department I have made a number of trips overseas, primarily in South East Asia.

“I made a very interesting trip to China where there is huge potential for growth in higher education. I have been working with local universities to identify opportunities for collaboration – there is massive scope for knowledge-transfer within this country.

“China is a particularly exciting market because of the pharmaceutical work being done on the traditional herbal medicines. I really think there is great learning potential for both them and us and I would like this department to be the one that leads the way.”
Over recent years the University has received international recognition for its arts programme. With plans being drawn up for a top-of-the-range Media Arts Centre at Claverton, the institute is set to take its place on the world stage. In this issue Insider follows its progression.

Creative Arts has been part of the University in an extra-curricular capacity for over 30 years. However, it was the launch of the Institute of Contemporary Interdisciplinary Arts (ICIA) in 2003 that really put the University’s name in lights.

When John Struthers, Director of the ICIA, arrived at the University as a consultant in 1999, visual arts, drama and music worked independently of each other. In anticipation of the launch of the institute, John worked to pull together all the strands, modernise the performances and increase the portfolio.

John said: “When I arrived the arts scene had a very low profile even on its own campus – in fact the Arts Barn was being used to store furniture and the studios were housed in cow sheds left over from the original farm!”

By bringing all the arts together, the ICIA has not only hugely increased the University’s arts provision in Bath, but developed its work in Swindon and gained an international reputation through commissioning a professional performance portfolio.

Act I – ICIA at Claverton

Today the ICIA organises regular performances, exhibitions, symposia, classes, workshops and community events. It also commissions world-class acts, such as the internationally renowned dance company Henry Oguike, which tours all over the world under the University’s name.

There is now such high demand for the classes and workshops that most have a waiting list. Space restrictions on campus mean that the institute uses venues in town to absorb the overflow. For details on the numbers of students involved in arts events see the boxed text overleaf.
“To an extent we have become victims of our own success,” explains John. “We are now working at full capacity and need new facilities in order to keep pace with rising demand.”

Two of the most popular additions to the portfolio are contemporary dance and jazz. The University is the only place in the area where these can be studied. John is a firm believer in working alongside other local providers, rather than entering into competition with them, especially as plans for the new centre take shape.

“To an extent we have become victims of our own success,” explains John. “We are now working at full capacity and need new facilities in order to keep pace with rising demand.”

“I believe that the only way to actually get a critical mass of quality work in the area is by working together. By being precious about pooling ideas you stay small.”

In addition to its arts events, the ICIA works alongside the University’s academic departments as much as resources allow. Recently it has worked with the Department of Mechanical Engineering on uses for its new tracking device. It is currently used on athletes but there is the potential to use it to track dancers’ legs on stage. There are also plans for an arts therapy strand within the Social Work degree.

Act II – ICIA in Swindon

Who holds one of the best 20th century art collections outside the Tate? Swindon Borough Council and currently it is in a damp basement because the town has no gallery.

You might not immediately make the association but Swindon boasts a long and illustrious history of involvement in the arts - in fact 25 years ago, it was the nation’s leader in community arts. The reorganisation of local government and a shift in funding priorities led to a slip in its reputation but there is still a vibrant arts scene and a ready audience.

A new campus in Swindon would provide the University with an opportunity for growth not possible in Bath because of space restrictions and competition. If it goes ahead the institute would provide Swindon and Wiltshire with a unique range of academic arts courses where there is currently a gap in provision, and is considered to be absolutely central to the town’s planned regeneration.

Aware of the potential, the University intends to invest heavily in the arts. This includes developing a major academic department in the town centre with 750 full-time arts students and opening a major art gallery.

John said: “By working with partners such as Swindon Borough Council, the University can expect huge returns for their investment.”

To be continued...

The new arts centre at Claverton and the new campus in Swindon will cement the ICIA’s unique role in the arts on campus, in the region and across the UK.

“I am incredibly proud of all that we have achieved over recent years on limited resources,” said John. “Although the institute has only existed for 18 months, and we came from very humble beginnings, we have already been approached by other universities who want to learn from our success.

“As a world-class University we attract very ambitious and very capable students. I hope that in the next year we will have taken positive steps towards being able to provide the sort of arts provision they deserve.”

ICIA at a glance

The ICIA team, led by John Struthers, has five full-time and eight part-time staff.

More than 8000 people attended ICIA activities last year, 700 of whom were students who enrolled for courses and music ensembles.

There are 15 student arts societies supported by the ICIA.

The institute commissions four pieces a year. It also gives six professional dance performances, six musical performances and several exhibitions. Students give two operatic and two dramatic performances a year.

A number of activities are offered to students free of charge and both students and staff are subsidised. Last year, income generated through performances was in excess of £50,000. Over £80,000 was raised through grants and funds.

For information on activities open to staff see the back cover of this issue.
Insider asked a random selection of staff and students what facilities they would like to see in the building that will replace 4 West:

"More computers! It’s a real fight in the library, especially around exam time. We also need group study areas so that people can work together without disturbing others in the ‘quiet zones’. More laundry facilities would be really good."

Annabel Gregg
2nd year Social Work student
Melissa Rogers
2nd year Sociology student

"A nightclub for staff! No, OK, the ICIA needs more space – especially a proper gallery rather than a foyer. We definitely need more lecture theatres so we don’t have to repeat lectures."

Nick Mitchell
Department of Electronic & Electrical Engineering

"We really need a postgraduate centre. At the moment we just go to the Claverton Rooms but we need somewhere separate for staff and students. Also, the library gets really crowded so some more study space would be good."

Harry Walton
Economics postgraduate student

"The priority should be general teaching space. The students talk about needing more computer labs too. I would like more outside eating space, although that’s only because it’s actually sunny today!"

Mandy Wanstall, Sally Pringle
and Hannah Filer
School of Management

"I’d like Maths to move into the new building. We really need large lecture theatres – there’s a real lack of general teaching space, and meeting rooms."

Anthony Robinson
Department of Mathematical Sciences

"At the moment there is a three-week waiting list for counselling because we only have two rooms. We really need some more space to be able to offer a proper service.

"We need a chemists - at the moment the students have to collect their prescription in town.

"The postgraduates really need their own home. We talk about wanting to increase the number of students but we need the facilities in place to support them.

"Also, how about a general University reception?"

Sandra Newell
Student Support
Ian Jamieson takes the challenge

In July, Ian Jamieson will step down as Dean of Humanities and Social Sciences and become the full-time Pro-Vice-Chancellor for Learning and Teaching. We know that the quality of learning and teaching at the University is already very good, so what can be done to improve it further? Ian explains how we measure our success and where we go from here.

How does the University know that its standard of teaching and learning is high? We know that from a wide variety of sources: from the Quality Assurance Agency’s teaching review exercise where Bath had one of the best performances of any university in the last two years; from our external examiners’ reports; from our own student satisfaction survey and from the very low student drop-out rate – currently 3.3 per cent, which is the fifth lowest in England.

Although none of this provides much of an incentive for staff to make significant change, the environment in which we work means that nothing ever stands still and we always need to improve what we do for our students.

What sorts of factors are likely to induce us to change? Most commentators believe that the change in the fee regime in 2006 will encourage students to adopt a more ‘consumerist’ approach to their study. At best this could mean a demand for more interesting and innovative teaching using the latest technology, but at worst it could mean pressure for spoon-feeding and a demand for higher grades in return for their investment!

Other pressures will come from attempts to implement some of the conclusions of the University’s Teaching Efficiencies Working Group, which broadly concluded that whilst teaching at Bath was generally of a high quality, we tended to teach and assess in a less efficient manner than many of our competitors.

Finally, there will be pressure from the developing electronic technologies. Young people have increasingly been exposed to a variety of forms of e-learning at school and have an expectation that this will be continued in a more sophisticated way at university. In accepting the report of the Teaching Efficiencies Working Group, Senate agreed to an improvement of the University’s current virtual learning environments.

In order to manage these developments, and to put support for learning and teaching in the University on a more substantial and professional footing, the University has created a new Learning and Teaching Enhancement Office [including Rachel Cowie, Derek Morrison and Rachel Hudson photographed here with Ian], thus mirroring developments in most other UK universities.

The office draws together existing staff from the Quality Support Office, relevant members from Staff Development, and the e-learning team from the Centre for the Development of New Technologies in Learning. This group will respond to the learning and teaching needs of academic departments across the University, and will work to ensure that the learning experience at Bath is one of the best in the UK.
The ICIA offers many different ways for staff to get involved in the arts alongside students and members of the local community. Activities and classes are run by the University’s arts specialists alongside visiting professional tutors.

See the following for a flavour of what will be on offer this autumn, and remember, staff get a discount. Further details and activities will be confirmed in the autumn brochure due out in September. Booking is available from 19 September 2005.

Music
Most groups perform locally and on campus. Activities are free, apart from Big Band Assembly, DJ Skills and Songwriters Surgery:

- Big Band Assembly (BUBBA)
  Rehearse: Wednesday evenings
- University Chamber Choir
  Rehearse: Tuesday evenings
- University Concert Band
  Rehearse: early evening
- University Orchestra
  Rehearse: early evening
- University Choral Society
  Rehearse: early evening
- The Alley Barbers
  Close harmony barbershop
  Rehearse: Thursday and Friday lunchtimes
- University Gasp
  Gospel, Acappella, Soul & Pop Choir
  Rehearse: Monday lunchtimes
- DJ Skills
  Course: Wednesday evenings
- Songwriters Surgery
  Course: Thursday evenings

Dance
All classes are taught by visiting professional tutors and are open to staff, students and members of the community. Course fees start at £34.

- Samba dance
  Monday evenings: beginners and intermediate
- Street dance
  Monday evenings, Wednesday afternoons and evenings: beginners and intermediate
- Contemporary dance
  Monday evenings: intermediate
  Tuesday evenings: beginners
- Tap
  Tuesday evenings: beginners, intermediate and advanced
- Jazz dance
  Wednesday afternoons: intermediate and advanced
- Ballet
  Thursday evenings: beginners, intermediate and advanced
- Belly dance
  Friday evenings: beginners

Visual arts
All classes are taught by practising professional artists and are open to staff, students and members of the community. Beginners and those with experience welcome. Staff fees range upwards from £40 per semester.

- Ceramics
  Monday & Tuesday evenings
- Painting
  Monday afternoons
- Drawing
  Tuesday afternoons
- Digital art
  Wednesday afternoons

More information and to join the mailing list, contact:
ICIA Box Office on 01225 386777 or www.bath.ac.uk/arts
To receive a free brochure through internal post or to subscribe to the new ICIA arts news email bulletin with occasional stop press information and offers, send your email address to ICIAinfo@bath.ac.uk stating your preference.