Who's afraid of the big bad quoll?
Sussex psychologists study what causes fears and phobias

Are you scared of spiders? Were you bitten by a dog as a child? Such an experience could well have caused you as an adult to fear all dogs. Equally, many people have traumatic experiences but don't develop such fears.

Dr Andy Field (pictured below), lecturer in psychology and research fellow Robin Banerjee, both in COGS, have just won a three-year grant from the Economic and Social Research Council (ESRC) to investigate how fears and phobias are formed.

"A phobia is a clinically diagnosed level of fear about a particular thing or situation," says Andy. "You might be scared of spiders, but if you can't be in the same room as one then you have a phobia and not just a fear."

Previous studies have relied on adult subjects recalling their own learning experiences, but these memories can prove to be very inaccurate. In contrast, Andy and Robin's research will focus on children and investigate how information given to them affects their attitudes towards animals and social situations.

This is obviously difficult to do with such a sensitive subject group as children, but Andy has been involved in developing techniques to study the development of fears and phobias that do not risk traumatising the children.

Six- to eight-year-olds are particularly sensitive to developing fears of certain animals. By using pictures of three different obscure Australian marsupials (the quokka, quoll and cuscus), which British children will not have encountered or heard about before, the researchers can eliminate any preconceptions that the children might hold about certain animals.

By telling the children stories about these animals that are either positive, negative or neutral, and then later testing their perceptions of the animals, the influence of information on the development of fears can be investigated.

Negative information (e.g. 'dogs will bite you') has much more of an effect than positive information (e.g. 'dogs are lovable') on the development of fear beliefs. The source of information - whether it comes from an adult or a peer - is also crucial, with negative information being more effective when delivered by an adult than by a peer.

Ten- to twelve-year-olds begin to become concerned with social situations such as giving a talk, eating in public and talking in small groups. Again, the researchers will tell stories about certain situations and assess the results.

"The final stage is to start thinking about linking a change in belief to how an actual fear develops," says Andy. "If you expect something bad to happen, for example when you have to talk in public, and then something bad does indeed happen, it speeds up how fast you might develop a fear of public speaking."

Traffic light trial set at amber

The University has submitted staff and student feedback on a recent traffic light trial for inclusion in a forthcoming council report.

Rob French (pictured right), Special Projects Manager in Estates, received 65 comments after a one-week trial in November using traffic lights at the exit from campus during peak periods.

The report for East Sussex County Council will include comments and observations received, not just from the University but also from other drivers and interested parties (such as the police, Falmer Parish Council and the bus company), and will be important in subsequent decisions regarding the improvement of the junction.

Rob said: "Very few of the responses simply said 'traffic lights are a good idea' or 'I hated the trial'. Nonetheless I tried to decipher the message in each one and categorise them. The results were: 36 (55%), against 16 (25%) and unspecified 13 (20%)."

Of the responses:
- 19 (29%) referred to the safety issue of left-hand-lane drivers straight across the roundabout;
- 10 (15%) commented on the safer/less stressful exit because of the signal control;
- 7 (11%) recognised that it may increase the risk to vehicles queuing on or joining the A27;
- 5 (8%) (separate from the first comment above) said they wanted to see the introduction of a left-hand filter for University traffic heading towards Lewes;
- 4 (6%) thought that the trial would be better if extended to the second roundabout, or even the Village Way junction with the B2123;
- 3 (5%) felt that the trial would be more easily analysed if it ran for a longer period.

Rob added: "I noted that the majority of comments, 46 (71%), came from female respondents and only 19 (29%) from males. Make of that what you will!"
Making things crystal clear

Rebecca Colls
Human Sciences finalist, BIOLS

"How far do you want to go?" asked Dr Yves Muller (pictured right), a newly appointed biochemist in BIOLS who specialises in x-ray crystallography.

It is all a question of detail. X-ray crystallography can take us further than any microscope could ever hope to go, allowing us to look directly at the structure of life.

Proteins supply the building blocks, machinery and force. They are the bouncers of the cell, selecting what molecules are allowed in, and chucking others out. They carry messages between cells and lubricate chemical reactions and also act as antibodies, hormones, toxins, antifreeze molecules, elastic fibres, ropes and even mini light-sources. So, proteins really have their 'fingers' in lots of pies.

If we are ever going to understand how cells work, we need to understand proteins. And the role of a protein depends on its structure. Using a beam more searching than light, crystallographers bounce x-rays off crystals of protein and study the diffraction patterns. From these patterns, they build up information that reveals the protein structure. They 'see' things that have never been seen before. This is the beauty in their science: the poetry of diffraction.

Structural biology reached the cutting edge of drug design when companies started to use 'recombinant' proteins as drugs. A recombinant has the genes of two organisms. For example, the gene for insulin was combined with a bacterial genome; as bacteria are notoriously fast at reproduction, insulin became one of the first mass-produced, recombinant proteins.

Structural biologists are now trying to understand structures well enough to manipulate them; this information can then be used in the development of new drugs.

Yves is working on a protein involved in vasorelaxation (the growth of blood vessels). A tumour recruits this protein to build its own blood supply, so blocking this action could be of great benefit in the treatment of cancer.

Conversely, more vasorelaxation may be needed when blood vessels become constrained, for example as a consequence of smoking.

Before we can control such a protein we need to know its structure. But that's just the start. Discovering something new inevitably leads to new questions that have to be answered before we can go ahead and design the drugs. The level of detail is immense and the time scale is lengthy. Many scientists don't want to go so far. But, Yves and his colleagues - well, they go all the way.
Dear Friends and Colleagues,

I would like to take this opportunity to thank you for the lovely gifts I received on my last day working at the University of Sussex (11 January) after almost 29 years. I am sure I will be seeing many of you when I next have the opportunity to visit the campus.

Chris Gaterell
Conference Secretary

Dear Editor,

According to Neil Gershon, "Anecdotal evidence suggests that our car parks are being used by some people who are neither staff nor students of the University but who see the campus as a convenient place to park free of charge" (Bulletin 14 December).

So where do these people go after they have parked? If their destination is Falmer village, wouldn't it be more convenient for them to park there - also free of charge? Or perhaps after parking on campus they walk down to Falmer station and take the train to Brighton?

All in all, wouldn't it be better for Neil Gershon to come clean and say that the reason for introducing parking charges is that the University wants to build on some of its car parks and so is trying to find a way to choke off demand for them?

Dr Andrew Chitty
Lecturer in Philosophy, EAM

Neil Gershon, Registrar & Secretary, replies:

There is no hard evidence of where people go after parking on campus other than a small but significant stream walking towards Falmer station early in the morning. Possibly people are catching a train to Brighton, possibly going to the University of Brighton.

Whatever the reason, the answer is to make sure that only those who are eligible to use the campus car parks do so.

There are a number of reasons for introducing car parking charges. Emptying the car parks to be able to build on them was not part of the original thinking, but now you mention it ...

Anne-Marie Mitchinson
Secretary to the Discipline Committee

The University Discipline Committee was pleased to note at its latest review that the number of student discipline cases had fallen and that only a very small percentage of the student population had contravened University discipline rules.

The Committee meets three times a year to consider allegations of breaches of discipline by students. At its autumn meeting, the Committee reviews the cases that have been dealt with during the previous academic year, including the types of offences committed by students and the penalties given to them.

In its latest review, the Committee also noted that most of the students who had been brought to its attention had committed breaches of the University's discipline rules such as taking books out of the Library without having had them properly issued, or misusing the University's computer systems.

Briefing notes on the discipline scheme are circulated every October to academic faculty and to Residential Advisers in University accommodation. They are available on the web at www.sussex.ac.uk/Units/secretariat/policy/stm-discipline.pdf.

I am happy to answer any questions about the scheme on ext. 3855.

- The Disciplinary Panel, consisting of three faculty members, met on 9 January to consider a case referred to it by the Discipline Committee. A student in COGS was found guilty of behaving in a drunk and disorderly fashion, causing damage to University property and causing injury to another student.

Interpreting modern languages

Dr Annalisa Sandrelli from the University of Hull, a professional interpreter and a researcher in the field, unveiled the fascination and the complexities of the art of interpreting at a workshop on 16 January.

From an illustration of the approach used at Hull, where students are introduced to interpreting in the final year of their modern language degree, Dr Sandrelli went on to demonstrate the use of computers in this area of teaching and showed participants the relevant programs she has developed.

"The presentation was much appreciated by tutors and students of a variety of languages," said Dr Roberta Piazza, who organised the workshop.

"Tutors will be keen to explore the possibility of integrating interpreting skills into their courses and maybe develop interesting projects and materials; students will be considering this new avenue for their future careers."

The session was funded by the Teaching and Learning Development Fund (TLD).
A level playing field for disabled students

In anticipation of the new legislation, Registrar & Secretary Neil Gershon established a working group to formulate a comprehensive Disability Strategy, which is a rolling programme of organisational and physical improvements to enhance access in its widest sense.

The action required is extensive. It ranges from improving the way in which information is presented through changes to admission procedures to reviewing the way in which the curriculum is designed and delivered. To help with the latter, the Teaching and Learning Development Unit (TLDU) is currently undertaking a project on the accessibility of the curriculum, which is due to be completed this year.

We are also, of course, expected to make reasonable adjustment to the physical estate — although it has to be recognised that improving access on a campus like ours is a major undertaking and not everything that is desirable may be affordable.

Although the legislation is forcing the pace of change, Sussex is committed to ensuring that all its students are treated equally and we have a long tradition of supporting students with a wide range of disabilities.

Our provision was significantly enhanced in 2000 through the creation of the Student Support Unit, located in Pevensey I, which houses the Disability Co-ordination and Learning Support team. They will shortly be joined by a mental health co-ordinator and, thanks to the generosity of the Blatchington Court Trust, we also have a co-ordinator specifically for students with visual impairments.

The Unit works closely with the Assistive Technology Centre in Lancaster House, which provides assessments and technological support and training for Sussex students as well as students from across the region.

The staff of the Student Support Unit (pictured) offer advice and support to applicants and provide individual support to current students. They also liaise with other University staff to ensure that students' special needs are known and understood.

This does not mean giving the student with a disability such special treatment that they end up more advantaged than other students. Nor does it mean compromising academic standards; in fact the legislation is clear that universities are not expected to compromise standards in pursuit of equal access. The student with a disability has already demonstrated, through their qualifications, their ability to study their chosen subject at degree level.

All that is being asked is for some compensation for disadvantages that may arise from the disability. This might include allowing extra time in examinations or ensuring handouts are clearly legible for a student with visual impairment. Often all that is required is awareness — the recognition, for example, that a student who is hard of hearing will benefit from the lecturer facing the front of the class.

The requirements of the legislation touch us all in some way, so it is vital that all University staff try to take the time to attend one of the briefing sessions on disability issues organised throughout the year by the Staff Development Unit and also to make themselves aware of the main aims of the Disability Strategy (see www.sussex.ac.uk/Units/stuerv/den_shml) — known as Project Level Playing Field.

This is arguably an overly ambitious title because, of course, the playing field can never be entirely level for someone with a severe disability. But for many of our students and staff with disabilities, full and equal access is an entirely achievable aim. And what the strategy does provide, at the very least, is an opportunity to improve the condition of the pitch, to the benefit of all the players.
Let's get physical

Terry Cooper
Senior Duty Manager, Sport Service

It is estimated that seven work days per employee are lost in the UK through absenteeism every year, at an approximate cost of £400 per employee. Reports from some surveys suggest 98 per cent of absent days are genuine.

The Health & Safety Executive claims that of a total 190 million days lost through absence, 6.5 million sick days are taken as a result of stress, costing British industry £370 million a year.

Too much work, boring or repetitive work, bullying or lack of control can cause stress in the workplace. The UK employee now works more hours than those in any other EU country, and among developed countries second only to the USA.

The health and well-being of an employee is essential for the efficient running of a company or organisation. Many employers including this university have realised the need for a healthy workforce and have invested in health promotion – this week’s Health Week being one example of that investment.

In terms of health promotion, exercise is considered the ‘best buy’: studies over the last 20 years have suggested that employees who participate in exercise save their employers £6s.

This is because employees who exercise regularly see improvements in individual performance and productivity. Exercise increases muscular endurance, stamina, mental alertness and concentration and improves decision-making.

Employee morale is another benefit of exercise, which can be used in the management of stress.

The psychological benefits of exercise have been well documented, and include improved confidence, self-image and morale. A physically active employee improves their relations with other employees and reports a greater level of job satisfaction.

An employee is likely to stay with and may work harder for an organisation that cares for their health and well-being.

So in a win-win situation for both the employer and the employee, the major benefits of exercise are improved productivity and morale, reduced stress, reduced employee turnover and a decline in absenteeism.

Financial issues are often the barriers to implementing an exercise programme, but many decision-makers will tell you that “to make money, one has to spend money” and most fitness programmes are self-funding.

Organisations investing in their employees often see a positive return on that investment.

If we as a university wish to achieve a ‘healthy campus’, encouraging staff to exercise is a massive step in the right direction – physically, psychologically and financially.

Staff tackle blazing inferno on campus

Above: Julie Carr fearlessly attacks a blazing metal bucket while John Welling looks on.

The University is in safer hands following a series of training sessions for staff on fire hazards and the use of fire extinguishers.

After a presentation by John Welling from the Health and Safety Office and a video on the use of fire extinguishers, each group had the opportunity to practise putting out real fire in controlled conditions, using fire blankets and two different types of extinguisher.

Julie Carr, Executive Officer in Arts, is pictured using a carbon dioxide fire extinguisher to put out a blaze under John’s watchful eye.

About 250 members of staff have attended the sessions and further courses will be offered later this year.

What to do if you discover a fire

• Potential sources of ignition include cigarettes; electrical equipment (including computers); heaters; contractors’ tools and equipment; and arson. A fire can be fuelled by paper and boxes; polythene, plastics and solvents; carpets and furniture; or waste materials. To ensure that all potential fuels are properly controlled, empty bins regularly; store chemicals, solvents and paper correctly; and check that furniture is in good condition.

If you discover a fire, immediately sound the fire alarm. When an alarm goes off, East Sussex Fire Brigade and campus Security are automatically alerted. Security staff also contact the Fire Brigade direct (in case the system fails) as well as the University Rescue Team. All fire alarms are tested weekly by Chubb, the University’s fire systems maintenance provider.

• Only attack the fire if you are competent to do so and you have a safe escape route. If the fire is caused by a flammable liquid such as petrol, you can use either a foam or carbon dioxide fire extinguisher. Wood, paper or textiles on fire can be extinguished using water from a hose reel or a foam fire extinguisher.

Electrical equipment such as computers should be dealt with only by a carbon dioxide fire extinguisher.

• Close windows and doors and check your area to make sure all other occupants have left. Dial 3333 (not 999) to report the fire and leave the building by the nearest available exit.
First class

The following have all been promoted to professorships: Dr James Barlow (SPRU), Dr Trevor Beebee (BIOLS), Dr Tony Carr (Centre for Genome Damage and Stability), Dr Phil Husbands (CGS) and Dr Ian Scoones (IDS).

Martha Burkle, PhD student in the Institute of Education, has just left for Vancouver in Canada after winning a fellowship at the University of British Columbia. Martha will be working on her doctoral thesis in the University's Department of Distance Education and Technology.

Head of Sport Karen Dunster has completed her MBA at the University of Brighton. Perhaps it was the competitive sporting instinct showing through: her deputy, Simon Tunley, finished his Brighton MBA exactly a year ago.

There may be trouble ahead ...

Researchers in SPRU have been commissioned to help a government department anticipate and prepare for future threats to food, agriculture and the environment.

The "horizon scanning" programme will provide a means to challenge the current policy approaches and assumptions of DEFRA, the Department for Environment, Food & Rural Affairs. It will also offer a route for commissioning work on subjects that are currently not seen as policy priorities.

Announcing the initiative earlier this month, Science Minister Lord Whitty said: "This programme offers an opportunity for all - including those who have in the past been critical of the Department's research priorities - to contribute ideas about the direction our scientific research should take."

Small ads

**Hous...
Café culture

The Bulletin guide to eating and meeting on campus

AFRAS common room

Owned by the School of African and Asian Studies, the common room is managed by the ever-smiling Pauline Brown with the assistance of a tribe of AFRAS students.

Location

Eighteen months ago the common room expanded by moving down to the ground floor of Arts C into what was the Geography Resources Room, where it gets lots more passing trade. There’s more room outside in the summer, with picnic tables on the grass.

Ambience

The L-shaped room combines the feel of Africa and Asia with the contemporary chic of coffee bars in Brighton — and there’s a bit of Italian thrown in for good measure. The warm, earthy wall colours are the same as Pauline’s front room at home and you’ll find the same café chairs and tables at Pinocchio’s restaurant in town. The Italian influence continues with the colour-coordinated floor tiles, but many of the colourful batik pictures and photos are mementos from trips to Africa and Asia by students and staff. Floor-to-ceiling pot plants complete the homely feel.

Clientele

Students study alone or in groups, setting up informal seminars on the squishy terracotta-coloured sofas. But customers come from all over campus, not just from AFRAS.

Menu

Bhajis, spring rolls and samosas add an eastern flavour to the usual filled rolls and sandwiches (a bargain from £1.00). The fashionable wraps (tortilla dough with cold fillings, £1.50) were an idea from Pauline’s son’s Italian girlfriend. Wholesale quiches in four varieties (£2.00) are also popular. “I tend to offer food that I think sometimes the kids don’t get at home,” says Pauline. “The baked potatoes (£2.50) fill them up. Cheap, good food, that’s what I like.” The menu changes regularly and Pauline makes a different soup every day (£1.80 with bread).

Most popular dishes

Home-made vegetarian tikka, chicken tikka sandwich filling, baked potatoes with tuna and mayonnaise (£2.50).

Facilities

Daily broadsheet newspapers (but not the Times or Telegraph), one Computing Service PC, AFRAS student pigeonholes and an electronic information service for AFRAS students.

Opening hours

Open Mon–Fri, 9am–4pm. Packed at lunchtimes, between 12 and 2. Closed for Christmas, Easter and a fortnight in the summer vacation.

A walk on the wild side

David Harper and David Streeter BIOLS

Winter Gnats fly throughout the year, but they are much less obvious in summer when the swarms form in deep shade. The adults do not bite humans. Their larva feed on decaying matter such as corpses, meaning that Winter Gnats often feature in forensics courses!

At this time of year much of campus appears to be more moss than grass. Mosses generally need moist conditions in which to thrive so that most grow best during autumn and spring at a time when grass growth has slowed down.

Moss comes in two basic models; those that grow erect forming small cushions and the rest that grow prostrate in mats. It is the latter kind that appears to take over our lawns at this time of year. Close examination will reveal that not all the moss in our grass is the same.

Furthermore, mosses are pretty choosy about the kinds of places in which they will grow.

For instance, the terraced lawn between Sussex House and the North-South Road sports a common species of fens and damp chalk grassland, easily distinguished by the pointed tips to its branches and its often red stem (Calliergon crispulum). On the other hand the area immediately surrounding litter bins is often covered by a robust golden-green moss characteristic of nutrient-enriched spots like decaying logs (Brachythecium rutabulum), while a large undyed dark-green specimen thriving beneath the trees between the Meeting House and Falmer House is otherwise a plant of damp woodlands on calcareous soils (Eurhynchium striatum).

For many, moss is a less than welcome addition to their manicured lawns, but our Estates Policy accepts them as an intrinsic component of the campus biodiversity.
Lectures, seminars, colloquia

Mon 28 Jan
5.30pm–7.00pm USIE Open Seminar: Fiona Leach (Sussex), Investigating gender violence in African schools. EDB 341.

Tue 29 Jan
12.30pm–1.30pm Inorganic Discussion Group: Mike Hill (Sussex), Bimetals and Bisiminophosphorano metalloids. Chichester 3R143.

12.30pm–2.00pm Centre for Life History Seminar: Malcolm Cowburn (Sheffield), Ethical issues in undertaking life history research on male sex offenders. Library Meeting Room.

2.15pm–3.50pm SEI Research-in-Progress Seminar: Matt Browne, Change de Mission, Notre Europe. A71.

4.00pm–5.00pm Experimental Psychology Colloquium: Leigh Gibson (UCL), Is hunger always 'the best sauce'? Relations between appetite states and outcomes. EP Seminar Room 4D13/4D14.


5.00pm–7.00pm Media Studies Graduate Research Seminar: Lyn Thomas (North London), Fans, feminisms and 'quality' media: The case of The Archers. Venue TBA.

5.15pm Centre for German-Jewish Studies Research Colloquium: Liti Geminder (Sussex), Relative experiences: Memoirs of a German-Jewish father, daughter and son, 1938–1945. Arts A155.

6.30pm–7.30pm Professorial Lecture: Richard Stobart, What will shape tomorrow's car: Research, regulations or the customer? Arts A2.

Wed 30 Jan
12.00pm English Graduate Colloquium: Rod Edmond (Kent), tite TBA. Arts D640.

1.00pm–2.30pm IDS Seminar: Alan Gilbert (UCL), Globalisation, inequality and privatisation: What future for the health of poor households? IDS Room 221.

4.00pm Centre for Southern African Studies Seminar: Joanne MacGregor (Reading), The politics of disruption: War veterans and the local state in Zimbabwe. C162.

5.00pm–6.30pm Migration Research Seminar: Philip Cole (Middlesex), Philosophies of exclusion: Liberal political theory and immigration. D630.

5.00pm–7.00pm History Work-in-Progress Seminar: John Lawerson (Sussex), Zionism and Judaism from the personal perspective of a survivor. Arts A155.

Fri 1 Feb
1.00pm–2.30pm IDS Seminar Series on Crisis, Islam and Development: Julian Saurin (Sussex), Multilateralism, unilateralism and intervention: The politics and law of self-determination. IDS Room 221.

4.30pm Philosophy Society: Michael Morris (Sussex), Realism beyond correspondence. Arts A155.

Mon 4 Feb
12.30pm–1.50pm Continuing Education Research Forum: Michael Reynier (Leicester), Approaches to teaching archaeology in HE and CE: The role of the subject centre. Arts D310.

Bulletin

The Bulletin is written and produced by Alison Field and Peter Simmons, with regular contributions from Jacqui Bealing. We welcome any news, story ideas, letters or small ads from staff and students of the University. The next issue will be out on 8 February, with a copy deadline of 1pm on 1 February. Please contact the Press and Communications Office in Sussex House on ext. 8888 or email bulletin@sussex.ac.uk.