International disease treatment programme hits 10 million mark

A disease treatment programme started three years ago by Imperial has now treated over 10 million African children and adults for schistosomiasis and intestinal worm infections in six sub-Saharan countries, writes Tony Stephenson.

Schistosomiasis is a parasitic disease that leads to chronic ill-health affecting more than 200 million people in developing countries. Intestinal worms cause debilitating malnutrition, stunted growth and anaemia. The Schistosomiasis Control Initiative (SCI), supported by a $30 million grant from the Bill and Melinda Gates Foundation, was established in 2002 to tackle schistosomiasis in sub-Saharan Africa, where infected people are unable to afford the drugs needed for treatment. Schistosomiasis can be treated with a single dose of an inexpensive and effective medicine called praziquantel.

Professor Alan Fenwick, Director of the SCI, commented: "Simple measures such as the provision of education and low cost treatment programmes have now helped reduce the burden of illness for over 10 million people. SCI is an excellent example of a simple and highly cost effective programme which has helped alleviate a global problem. Parasitic diseases are often left untreated because priority is given to more acute diseases such as HIV/AIDS and TB. But the treatment, which costs less than 25 pence per year, gives children a much better start in life."

In addition to a treatment programme, the SCI has also set up an education programme to raise awareness of schistosomiasis and educate people in how to avoid becoming infected. Professor Stephen Smith, principal of the faculty of medicine added: "Alan and his team have managed a remarkable feat in treating so many people in such a short period of time. These figures show how initiatives such as the SCI can make a real difference in tackling serious problems in the developing world."

Bill's grand challenge for Imperial

TWO research teams from Imperial have received grants totalling $28.8 million (approximately £15 million) from the Grand Challenges in Global Health initiative, a programme of research sponsored by the Bill and Melinda Gates Foundation, the Wellcome Trust and the Canadian Institutes of Health Research.

Professor Douglas Young, department of infectious diseases, has received a grant worth $20 million (approximately £11 million) to develop drugs for the treatment of latent TB, which affects around one third of the world population. The risk of progression from latent to active TB is about 10 per cent and this is strongly increased in individuals who are co-infected with HIV. Dr Austin Burt, department of biological sciences, has received a grant worth $8.8 million (approximately £4.8 million) to develop genetic strategies to block the spread of malaria by mosquitoes.

The rector said: "TB and malaria are both major causes of ill health and mortality in the developing world. These high-profile grants from the Grand Challenges in Global Health programme recognise how research at Imperial can make a real difference to the world by helping to alleviate the suffering caused by these diseases."

The Grand Challenges in Global Health initiative, a major effort to achieve scientific breakthroughs against diseases that kill millions of people each year in the world’s poorest countries, has offered 43 grants totalling $436.6 million for a broad range of innovative research projects involving scientists in 33 countries. The ultimate goal of the initiative is to create ‘deliverable technologies’—health tools that are not only effective, but also inexpensive to produce, easy to distribute, and simple to use in developing countries.

Exhibition Road music day hits the right note

OVER 300 people gathered at Imperial for two performances that took place as part of last month’s Exhibition Road Music Day. Members of the College sat on the Queen’s Lawn alongside people from neighbouring institutions, local residents and visitors to the area to listen to a lunchtime big band performance and an evening performance from the Imperial College Symphony Orchestra. There was a huge variety of music available for listeners in the various institutions along Exhibition Road and in Hyde Park.
Professional web pages (PWP s)

What are they?
Professional web pages (PWP s) are small, branded and templated websites for academic and research staff to showcase their work. They contain personal information and details about honours and awards, research, publications, commercial activity and teaching.

Professional web pages can link to personal websites and vice versa, but it is not a College requirement to have a personal website.

Why do you need one?
PWP s for academic and research staff are interfaced into InfoEd—the new proposal development system that is being put in place for September. Once in place, InfoEd can automatically incorporate PWP data into research proposals.

By the end of this year, publication and esteem data from the PWP s will also feed into the RAE (Research Assessment Exercise) database.

What to do if you don’t have one?
PWP s are developed at department level and by 1 September all departments should have them. Each department has nominated someone to set up the PWP s. If you are unsure who this is, check with your department administrator or head of department.

Once the department contact has set up the PWP, academic and research staff are given access to update and edit their own pages. All users are able to update their own PWP s, with Mac and Linux users using terminal services.

Further details about creating and editing PWP s can be found on www.imperial.ac.uk/webguide. If you are a department site administrator and need technical support, contact Theresa Nichols or Marion Brady in ICT. Academic and research staff who require further guidance should get in touch with their nominated department contact.

The following are examples of PWP s that already exist:

www.imperial.ac.uk/people/l.s.zymanaski
www.imperial.ac.uk/people/te.stevens
www.imperial.ac.uk/people/rd.gamm

Golden anniversary for Wolfson Foundation

By Liz Gregson

IMPERIAL College is delighted to congratulate the Wolfson Foundation on its 50th anniversary this month.

The Foundation is commemorating half a century of providing support for scientific and medical research by looking back at how it has helped to address society’s needs through a commemorative publication and a series of events, including a dinner hosted by the Royal Society on behalf of British universities and the scientific community.

Anil has enjoyed a privileged association with the Wolfson Foundation for almost the entirety of this period. The Foundation’s first grant to the College in 1959 went towards a new biochemistry laboratory and equipment. In the intervening years, many projects at the College have been made possible through the Foundation’s support, demonstrating the commonality of the two organisations’ goals.

The Foundation has provided grants for recent projects at Imperial, including support towards the construction of the Wolfson Genetic Therapies Centre, and the Wolfson and Weston Research Centre for Family Health at the Hammersmith campus, as well as the refurbishment of the Department of Biochemistry.

The Wolfson Foundation also generously contributed funds to the creation of the Wolfson Surgical Technical Laboratory in 2002, enabling collaborative work in the areas of surgical simulation and robotics, imaging, patient safety and the teaching of new surgical technical courses.

Most recently, the College received support from the Wolfson Foundation for the Centre for Brain and Musculoskeletal Repair, a facility which will enable research into the mechanisms of debilitating neurological and rheumatic disorders.

BA media fellowship for Imperial ethicist

IMPERIAL’s Ainsley Newson, postdoctoral associate, medical ethics unit, has been picked by the British Association for the Advancement of Science (BA) to be one of ten media fellows from over 90 applicants.

The BA media fellowship scheme, supported by the major research councils and the Wellcome Trust, offers professional scientists, social scientists and engineers the chance to experience first hand how the media works by organising a placement with a media organisation.

Ainsley, the only fellow from Imperial and one of only four applicants from London, will be placed with The Times, working alongside science writer, Mark Henderson.

She said: “This scheme isn’t about getting into the media, it’s about helping scientists to communicate more effectively about their research. The area in which I work means I get a lot of media requests, so I want to be able to learn how to respond quickly and efficiently and talk confidently about a range of topics. I’ve always had an interest in journalism, so this is a great opportunity. I’ve also been told that it can help with grant writing!”

“Whilst on my placement, I expect to leave my personal interests at the door and learn from scratch. It’s going to be a steep learning curve, but a challenging and stimulating one.”

The fellows, who met each other at an induction meeting last month, will be reunited at the BA Festival of Science in Dublin in September, where they will be working actively as journalists in the press room.

From theoretical physicist to celebrated author

WHEN author Dr Andrew Craney graduated from the department of physics in 1986, no-one, perhaps other than Dr Craney himself, imagined the career path that he would take, writes Liz Gregson. The award of The Guardsman’s paperback of the week for his latest book Mobius Dick is an indication of this growing popularity and acclaim in a career that began over ten years ago.

He became a full-time writer in 1996 but his first book, Music, in a Foreign Language, was published in 1994 when Dr Craney was teaching in a secondary school in Newcastle. Claiming that it wasn’t particularly difficult to work and write at the same time, the only real difficulty he experienced was the amusement of some of his students when they discovered that there were some rather ‘rude’ sections within the book.

Now a published author of five novels, the common theme running through each is Dr Craney’s ability to combine several stories with a broad range of subject matter including history, philosophy, music... and theoretical physics. He explained: “I am self-taught, with a magpie tendency to pick ideas from the different areas. I first think about what I want to write about and then go out to find out about it.”

“My outlook is questioning and I view life from many different angles: I like the history of ideas and asking the question ‘what if?’ Even when studying at Imperial, I would still find the time to sneak off to the V&A to spend a few hours away from theoretical physics.”

“A lot of people who say they want to be writers, actually mean that they want to have written a book. For me, the enjoyable part is the writing itself, the creation of the product. Being an author is about sitting in a quiet room on your own. It is a private and personal experience.”

Mobius Dick is published by Picador.

Smoking ban on hospital sites

ALL NHS Trusts in London will introduce new smoking ban by the end of 2005. No-one, including staff, patients and visitors, will be allowed to smoke inside hospital buildings or outside at the hospital sites.

Supporting the initiative and will require all staff and students working on medical campuses to comply with the local hospital policy. Most of our buildings are leased, or built on, land owned by hospital trusts.

To help smokers prepare for the change, hospitals are running quit smoking groups. Members of the College are able to attend these groups but will need to agree the time off with their line manager.

Quit smoking support group contacts

<table>
<thead>
<tr>
<th>Site</th>
<th>Stop smoking clinic</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammersmith</td>
<td>Stop smoking clinic</td>
<td>020 8846 6840</td>
</tr>
<tr>
<td>Charing Cross</td>
<td>Stop smoking clinic</td>
<td>020 8846 6840</td>
</tr>
<tr>
<td>St Mary’s</td>
<td>Martina Opara-Evemo, Outpatients, extension 2155</td>
<td></td>
</tr>
<tr>
<td>Royal Brompton</td>
<td>Occupational health service</td>
<td>020 7808 2139</td>
</tr>
<tr>
<td>Chelsea &amp; Westminster</td>
<td>NHS Outline</td>
<td>0800 169 0169</td>
</tr>
<tr>
<td>Northwick Park</td>
<td>Occupational health service</td>
<td>020 8869 9169</td>
</tr>
</tbody>
</table>
Bioengineered for success

IN October, 13 students become the first to leave Imperial with a degree in biomedical engineering. The course asks students to understand a vast array of engineering and medical subjects, from anatomy, physiology and pathology to electrical engineering, making it the only degree of its kind in the country. Laura Gallagher met three of the students.

Giovanni Biglino
Giovanni, 21, from Torino in Italy, managed to juggle the demands of his degree with writing a book. What was the best thing about the course? I like the fact that it’s very multidisciplinary—we did medicine, we did maths, we did biomedics—so it’s not boring, which is very important to me.

…and the most challenging? I had to struggle in the first year. I went to a liceo classicis, which is a type of high school where you study humanities and historic subjects like Latin and ancient Greek. We did basic maths and physics but not other sciences.

Was the course what you expected? It was even better than I expected. It kept improving from the first year because from then on the course gets more and more specific.

What’s next for you? After three years, I realised I really like cardiovascular mechanics, analysing the way in which the heart pumps the blood and what devices can be used for the heart valves, for example, and to stimulate circulation. Next year I’m going to Brunel University to do a PhD in that field.

Tell us about the book you’ve written, Armonie del Ritorino. It’s inspired by the life of an Italian painter, Umberto Magnani (1885–1957), and it was published on 23 June. It’s inspired by his work and his life, and the artistic environment in Italy in the first half of the century. I have been writing at home and during the holidays. I didn’t cast away the subjects I learned in school—I’ve also been working at Sothby’s and I am a correspondent for art reviews on an Italian magazine.

Kenneth Goh
Twenty-four-year-old Kenneth, from Bukit Timah in Singapore, came to Imperial after two years of military service. He says getting back into study afterwards was difficult, especially because when he first moved into his hall of residence he had difficulty understanding what some English people were saying!

What was the best thing about the course? Getting to know the lecturers and the other students. We are quite a small group, so I came out of it knowing them all very well. Also, London has been great—there’s so much to see and do.

…and the most challenging? The amount of work we had to do, because we were covering so much ground and so many disciplines, from maths to physics.

Mingjie Ong
Like Kenneth, Mingjie, 23, joined Imperial from the Serangoon area of Singapore after doing his military service. He says that after his time in the diving corps, doing underwater searches and reconnaissance, coming to Imperial was a bit of a culture shock.

What was the best thing about the course? Some of the projects we’ve done, such as designing a prosthesis for the pelvis. Our prosthetic could be used, for example, in an old person whose bones had fractured due to osteoporosis. We designed it using a computer and made a small prototype.

…and the most challenging? The first year was really difficult because after military service it took me a while to get back into things, but the staff were very friendly. To anyone thinking of doing the course, I’d say persevere; it’s worth the effort in the end!

Was the course what you expected? More or less but with it being a new course, I didn’t know what to expect.

What’s next for you? I’m going to Australia to visit my sister, before going back to Singapore. I’m considering my options—I might decide to do a PhD in the UK but I’m also applying for jobs in engineering and bioengineering.

MEDIA MENTIONS with Abigail Smith

Oil industry is cooking on gas
Oil companies are on the lookout for young talent, according to The Guardian (18.06.05) and a qualification from Imperial is just the thing to get you started. The College’s MSc in petroleum geoscience is the oldest in the UK and “a unique programme”, according to Michael Ala, earth science and engineering. Dr Ala adds: “We take people with a good earth science degree and bring them up to the level where they can work in the modern oil industry.”

Summer storms usher in asthma misery
The typical British summer of hot humid conditions followed by violent thunder storms could cause widespread respiratory problems even in those with no previous history of illness, warns The Times (24.06.05). Asthma and hayfever sufferers are particularly at risk according to Martyn Partidge, national heart and lung institute, who advises: “The key thing is that they should be taking their preventative therapy. They shouldn’t not exercise. It has been well-documented episodes of asthma epidemics after storms.”

Trainee doctors left out in the cold
Doctors’ training is being undermined by “middle class men” who refuse to allow students to be involved in their care, according to Jenny Higham, paediatrics, obstetrics and gynaecology. Criticising patients who unreasonably insist on only being seen by a consultant, she tells BBC News Online (25.06.05): “Society as a whole appears to be becoming less philantropic. It is disheartening to go to a clinic and to have patients repeatedly say they do not want any student involvement.” She adds: “We can’t underestimate the negative effect.”

Rethinking the thinking machine
The possibility of creating thinking machines is a delicate subject and one that is often misunderstood, says Igor Aleksander, electrical and electronic engineering, who has dedicated his career to understanding and replicating consciousness. Speaking to The Guardian (23.06.05) about his work, he dismisses apocalyptic sci-fi visions of machines taking over the world.

“A properly functioning, conscious machine is going to drive your car and it’s going to drive it safely,” he says. “It will be very pleased when it does that, it’s going to be very worried if it has an accident. If suddenly it decides, I’m going to kill my passenger and drive into a wall, that’s a malfunction. Human beings can malfunction in that way. For human beings, you have the law to legislate, for machines you have engineering procedures.”

Literary stars unveil Imperial’s unique periodic table

By Laura Gallagher

WRITERS Dr Oliver Sacks, Dr John Emsley and Sir Jonathan Miller visited Imperial last month to celebrate the relaunch of a chemical periodic table that contains every non-hazardous element in physical form. Following restoration by technician Stephen Farrington, the table has returned to the foyer of the department of chemistry after being consigned to the basement during refurbishment.

Imperial’s periodic table became the second of its kind in the world when it was created 30 years ago. It was set up by Professor Bill Griffith, now a senior research investigator in chemistry, together with carpenter Jim Beard, glassblower Arthur Madell and lab technician Roy Deavins. Introducing Dr Sacks, Dr John Emsley, formerly science writer in residence at Imperial and the University of Cambridge and author of several books including The Shocking History of Phosphorous, said: “It’s rather nice that perhaps the world’s most famous neurologist takes this interest in chemistry.

“We know from his book Uncle Tungsten that that interest goes right back to his childhood in the 1940s, when apparently he was able to go to local chemists and buy things like concentrated sulphuric acid!” Dr Sacks, author of The Man Who Mistook His Wife for a Hat and Awakenings, said: “It is lovely to be here. I was in Alaska with Jonathan Miller over the weekend, unveiling a flying periodic table flown by a small plane to little villages all over Alaska to educate the people there.”

Wearing a periodic table T-shirt, Dr Sacks demonstrated his lifelong fascination with the table by reading a passage from Uncle Tungsten. He described seeing the prototype for Imperial’s table in the Science Museum as a child: “I could scarcely sleep for excitement the night after seeing the periodic table. I kept dreaming of it in the excited half-sleep of night.”

“The next day I could hardly wait for it to re-open and went to the top floor where the table was and I visited it as often as I could. I copied it into my exercise book, I carried it everywhere and now, 60 years later, I still have a copy on my person.”

Dr Sacks was accompanied to the opening as youngsters, and he and Sir Jonathan caused an explosion in Highgate ponds by throwing a pound of sodium metal into them.
Silwood Business Centre — relaunched

THE new look Silwood Business Centre was unveiled last month, made up of 12 business suites to start-up companies. Some may know the building as the Technology Transfer Centre (TTC), originally built and opened in 1987. Impact, the property leasing arm of Imperial, felt that the time was right to update the look and feel of the centre in line with today’s occupier requirements.

The centre is now ideally placed to offer smart business suites at the Silwood campus that can be fitted out to individual specifications for the business sector. The renovated space meets with Imperial’s ethos of attracting and encouraging start-up businesses and spin-out companies.

David Brooks-Wilson, director of estates, said on the day: “The renovation and relaunch has been a complete success with guests attending from the College and local business community.”

Imperial success at Henley

STAFF and students at Wye campus have a brand new sports pavilion. The brick built pavilion at Withamden includes changing rooms with showers, a fully-equipped kitchen and toilets. It replaces the former wooden building destroyed by fire in May 2002.

David Traske, Wye campus manager, performed the ribbon cutting at the event. He said: “The old pavilion burnt down quickly... it has taken a lot longer and considerably more effort to create something better in its place. A particular tribute must go to Chris Anderson, Wye campus estate officer, Neil Mosley, head of sport and leisure, and their teams for making this new pavilion possible. We are confident that it will be used extensively by our students for sports including cricket, football and rugby, as well as being of great benefit to local community teams.”

Neil Mosley said: “Decent sports facilities encourage participation. This new pavilion is a first rate facility that will provide an appropriate base for a range of sports matches and events. Students and staff will now have access to a premier sports ground on their doorstep. Following the formal opening, the pavilion was put to its first use — as a venue for an Imperial College staff vs students cricket match. The result was a closely fought victory for the staff (70-6 against 169 all-out).”

Wye’s up to sport

Silwood Business Centre

HEFCE board members announced

BILL Rammell, Minister for Lifelong Learning, Further and Higher Education, has announced the appointment of three new members to the board of the Higher Education Funding Council for England (HEFCE). These positions are David Professor Eastwood, vice chancellor of the University of East Anglia, Professor Tim Wilson, vice chancellor and chief executive of the University of Hertfordshire and Dame Patricia Hodgson, chair of Higher Education Regulation Review Group.

The appointments replace outgoing members Professor Sir Gareth Roberts, Stephen Bundell and Ann Lloyd.

Mr Rammell also announced the reapoint- ment of Peter Saraga, Nigel Savage, Sir Richard Sykes, rector, and Jackie Fisher for a further term on the HEFCE Board.

Spotlight on Spin-outs: InforSense

INFORSENSE provides advanced informat- ics infrastructure for effective information- based decision making in both scientific and business domains. Its technology enables the streamlining of informatics activities, includ- ing data and application integration, capturing the analytics, as well as the decision making process itself.

The company was founded in 1999 and has since become a leading supplier. It commercialised pioneering technology from e-Science research at Imperial, led by Professor Yike Guo, department of computing and chief scientist of the London o-Science Centre. The aim is to free scientists’ creativ- ity by enabling dynamic datamining, using the data/analytics/reporting required for a particular task, without having to worry about IT integration. In addition, InforSense technology enables organisations to capture and mine their analytical processes, repre- sented as workflows, to discover and share expertise and best practice. Today, InforSense is leading the way in applying advanced grid computing and semantic web technology for the next generation platform for enterprise- wide decision support.

Many top pharmaceutical companies and research centres use the software but as the technology is generic, the company is also seeing growth outside the life science indus- try, for instance, in the financial sector.

In May this year, InforSense won top hon- ours at the Bio-IT World conference in Boston for knowledge management and collabora- tion, in recognition of the importance of the software solutions being provided. For further information, visit www.inforsense.com.

What’s on... What’s on... What’s on...

Friday 8 July 19.00
Royal Academy of Arts
Picture this...
Professor Brian Derby, University of Manchester; Professor Richard Fruck- owick, University College London.

Tuesday 12 July 14.00-17.30
Lecture Theatre 1 47 Royal School of Mines
Open meeting: Carbon Capture and Storage
Second in a new seminar series under the Energy Futures initiative at Impe- rial. Examines the new carbon capture and storage (CCS) technologies figuring prominently in recent UK domestic energy policy and G8 climate change initiative announcements. Experts from key government departments and major energy companies join speakers from Imperial to discuss the unique opportunities of CCS and how it may be applied. Open to all, email p.michael@imperial.ac.uk to attend.

Wednesday 13 July 18.30
The Royal Institution
THE architecture of crystals: from nets and tiles to building stones
Dr Rob Bell, University College Lon- don, Dr Martin Zwijnenburg, Marie Cure, and Mishab Sarwar, Royal Institution.

15-16 September 09.00-16.00
Tanaka business school

Medlock Investing Event
Tickets should be purchased in advance. Contact Jonathanzc@campden.com to attend. Working in official partnership with Imperial, Eucomed and ABN Amro, MedTech Investing Europe 2005 will once again provide an exclusive educational and networking platform for investors, strategic partners and innovative medtech companies.

Wednesday 28 September 18.00
Tanaka business school
Science Business Design
Tickets must be purchased in advance. Contact: design-event@imperial.ac.uk
Visit www.imperialinnovations.co.uk for further details.

Noticeboard

Nicole Dash is looking for someone willing to re- home her two cats. Oscar, long-haired ginger tabby, 7, and Barney, 2, who is a short haired black and white. They are both very affectionate and used to going inside, although they don’t currently have access to a cat flap. They really need to be homed together by someone without young children. Please email nicole.dash@imperial.ac. uk, if you are interested.

Noticeboard

Imperial College staff and student teams before their match