

# Norfolk and Norwich University Hospitals

The apprentice

PHOTO BY MIKE SMITH (left,

photographers Emily Phillips and Helen Rude

15-year-old Adam gets a taste of work, p4



**Shock tactics** Why a regular switch-off is good for us all, p8



Building on bone Why we are banking on our bone donors, p10



**Straight from the heart** The tests that can help to predict a heart attack, p11

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Turning the spotlight on our medical illustrators, p6

#### INFO

#### **NEWS ROUND**

#### Norfolk and Norwich University Hospital

Colney Lane, Norwich, Norfolk NR4 7UY

Tel: 01603 286286 www.nnuh.nhs.uk Restaurant

West Atrium Level 1, open 7am-2.30am Serco cafe bars

Out-patients West and Out-patients East: open Mon-Fri, 9am-5pm

Deli food2go Plaza (East), open Mon-Fri 7am-7pm, weekends 11am-5pm WRVS shop East Atrium: open Mon-Fri 8am-8pm and weekends 10am-6pm Amigo convenience store, Plaza (West): Mon-Fri 7am-8pm, weekends 9am-5pm The Stock Shop (ladies' fashions) open Mon-Fri 9am-5.30pm and Saturdays 12-5pm Serco helpdesk (for housekeeping, porters, catering and maintenance): ext. 3333 IT helpdesk Log a call using the computer

icon on the intranet home page Security ext. 5156 or 5656

Lost property 01603 287468 or ext 3468 Reception

East Atrium Level 1: ext. 5457 or 5458 West Atrium Level 1: ext. 5462 or 5463 Out-patients East Level 2: ext. 5474 or 5475 Out-patients West Level 2: ext. 5472

**Patient Advice and Liaison Service (PALS)** For confidential help and advice about our service to patients call 01603 289036 / 289035 or 289045.

**Travel Office** for car parking permits, ID badges, keys to cycle sheds, use of pool cars and Trust bicycle, information about buses and transport: ext. 3666:

Bank Cash dispensers in East Atrium Level 2 and in Amigo, the shop in the Plaza, Level 2 Chapel Open to all. For details of services or to contact the Chaplains, call ext. 3470 Sir Thomas Browne Library open Mon-Thurs: 8.30am-5.30pm, Fri: 8.30am-5pm

Cromer Hospital Mill Road, Cromer NR27 0BQ Tel: 01263 513571

#### OTHER TRUST DEPARTMENTS

 Cotman Centre, Colney Lane, Norwich Cellular Pathology, Radiology Academy
 Francis Centre (Health Records Library) Bowthorpe Industrial Estate, Norwich NR5 9JA, ext. 4652

Norwich Community Hospital, Bowthorpe Road, Norwich NR2 3TU, Tel. 01603 776776: Breast Screening, Pain Management, Microbiology, 01603 288588
Aldwych House, Bethel Street, Norwich, NR2 1NR: Occupational Health (ext. 3035): HR Recruitment (ext. 3578), Out-patient Appointments, Training, Choice team, Norfolk Research Ethics Committee, some IT services
Holland Court, The Close, Norwich NR1 4DY: HR, Clinical Effectiveness, Finance
The Norwich Central Family Planning Clinic, Grove Road, Norwich NR1 3RH. Tel: 01603 287345.

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#### **CLOT TACTICS** Chief Executive

Anna Dugdale (fourth from left) joined staff at NNUH to launch a campaign highlighting the dangers of hospital acquired thrombosis, following new guidance from NICE (the National Institute for Clinical Excellence).

The key recommendation is that all inpatients should undergo a thrombosis risk assessment on admission. Our new "Click for Clots" intranet site provides instant access to guidance about prevention and treatment, while information for patients is available on our website: nnuh.nhs.uk.

It is estimated that around 10,000 lives could be saved nationally every year if the risks are properly addressed.

## Scans on film

**A DEPARTMENT** of Health video highlights new developments in brain scanning and acute stroke services at NNUH as examples of best practice.

The film outlines how our stroke services have been improved, including faster access to CT brain scans to help determine whether a patient urgently requires clot busting drugs. Radiographers have played a central role in redesigning this service, developing the role of radiology assistants to prepare patients for their radiology scans.

The film, *Radiology and Improving Stroke Services*, can be viewed online at http://www.nnuh.nhs.uk/Media.asp?ID=14

# LETTERS

WRITE TO SUE JONES, EDITOR, COMMUNICATIONS, NNUH

#### THE CARE THAT COUNTS

Following all the recent criticism of the NNUH I feel it is important to highlight the excellent work that staff perform on a daily basis, which often goes unnoticed and doesn't attract much media attention. It certainly doesn't go unnoticed by the many patients and their families who are indebted to their professionalism and kindness.

My father spent four days in the NNUH until his peaceful death after a long illness. All the staff treated him with dignity and respect and they always kept us informed and sympathised with our distress. I would like to pass on my heartfelt thanks to all concerned, especially those in emergency assessment, the renal team and Mulbarton Ward. I feel that Norfolk is lucky to have such a well run and caring hospital and long may this continue.

Alan Butterworth, Attleborough

#### **20 MINUTE VISIT**

We hear so many complaints about the NNUH that it makes a pleasant change when there is some good to report.

I had an appointment for a check-up in the eye clinic (I have glaucoma).

A lady in a wheelchair was at the entrance to help me check in and the whole visit took less than 20 minutes, including a sight check and a consultation with the surgeon – so quick that there was nothing to pay in the car park. Beat that!

Bill Kite, Norwich

# Flying the flag for hospital arts

HOSPITAL ARTS volunteer Will Williams was thrilled when he won a competition to be paid to work for his favourite charity, because the charity he chose was... hospital arts. A 23-year-old marketing graduate, Will has been volunteering for one day a week at NNUH since last summer, helping arts co-ordinator Emma Jarvis with design and graphic work. Winning the Vodafone World of Difference competition meant he could afford to work full-time for the hospital arts project and put job-hunting on hold for two months.

"More than 1,000 people applied so I consider myself lucky to have this chance," said Will. "In my submission I explained that I wanted to put the hospital arts project on the map and get the message across that it's a very worthwhile charity. So far I have



designed labels, a brochure and a new doctors' roster for the Jenny Lind children's department. It's great because I am gaining valuable experience but I am also able to offer an outsider's point of view, which I think is helpful.

"The artworks are really varied but the one I like best at the moment is this painting of a jellyfish on Level 3."

## Wanted: more volunteers to feed patients

A PILOT scheme to train volunteers to feed patients at NNUH has proved so successful that the scheme is being expanded. The search is now on to find volunteers who can lend a hand during mealtimes.

The first volunteer feeders were recruited in 2008 to try to ensure that frail and malnourished patients were adequately fed throughout their stay.

Once trained, the volunteers are able to free up valuable nursing time and ensure that all of our patients are properly cared for at meal times.

"We currently have 13 trained feeders who are doing a fantastic job for our patients. We are now keen to expand the service so we can assist more wards and cover additional meal times," says volunteer services manager Sally Knights

"Our volunteers regularly comment that they feel they are really making a difference for our patients and they get far more out of providing this service than they put in.

"All our volunteers undergo criminal record and other checks before they are



Volunteer Lorna Turner helps Barbara Webber to enjoy her lunch on Holt Ward

allowed to work with patients and it's very important that feeders have adequate training as there are a lot of things to consider. For instance, some patients may have difficulty swallowing so there is a risk of choking, while others may have trouble communicating. With training, the feeders are a great asset because ensuring that patients have nourishing meals can be extremely time-consuming."

If you are interested in becoming a volunteer feeder call 01603 286060 or email charlottel.kippin@nnuh.nhs.uk, sal.knights@ nnuh.nhs.uk or linda.hurley@nnuh.nhs.uk

# MS: In search of the genetic links

**OVER THE** next ten years the neurology research team at NNUH is hoping to collect blood samples from around 2,000 multiple sclerosis (MS) patients for analysis by neuroscientists at Cambridge University. The aim is to identify genetic factors that might be important in the development of the disease. The findings could shed light on how some individuals are more susceptible to the disease than others.

Meanwhile a drug trial at NNUH involving patients with remitting-relapsing MS is being extended to include volunteers with the primary-progressive kind. Patients will be monitored for around three years and undergo regular tests at NNUH.

Only two other centres in the UK are trialling the new drug, known as fingolimod, and the results so far have been very encouraging. "We are delighted to be chosen for this study as it shows our clinical trials are conducted to a high standard," says neurology research nurse Donna Clements.

#### DIET FOR DIABETES MUMS

Visitors to the antenatal clinic at NNUH were left in no doubt about the best options for healthy eating in pregnancy after dietitians prepared a display designed to highlight the risks of gestational diabetes.

"An increasing number of women are developing diabetes in pregnancy, which can have serious consequences for both them and their babies," says specialist dietitian Amita Godse, who developed the display with dietetic assistant Dawn Moore (pictured). "We wanted to show how different food groups can affect blood glucose levels and to highlight the importance of portion control and checking food labels."



#### NEWS ROUND

**WE ARE** launching a campaign at NNUH to tackle the problem of smoking in our hospital grounds.

Officially we have been a smoke free site since 2005 but unofficially the ban is frequently flouted, not just by patients and visitors but by our own hospital staff.

So how far should we go to enforce the smoking ban? Our campaign aims to raise awareness of this issue and canvas views about how we might achieve a smoke-free site.

"As a healthcare organisation we have a duty to enforce the smoking ban, both



legally and on policy grounds. Smoking is a major cause of ill health and death. It also litters our hospital gardens and it costs up to £50,000 a year to clean up

### Help us to be smoke free

650,000 a year to clean up after smokers," says HR director Bernard Scully. "While we recognise that smoking is a

difficult habit to break, we are calling on all our staff to set a good example and take advantage of the support that's on hand to help them quit."

• For help to quit smoking call Norfolk's Stop Smoking service on 0800 0854113

## Adam is our youngest apprentice

**A PUPIL OF** Sprowston High School has become the first ever "schools apprentice" to work for Serco at NNUH

Fifteen-year-old Adam Jones, from Sprowston, is working for one day a week at the hospital as part of a pilot project, learning a variety of building skills. He spends one day at City College and goes to school on the other three days of the week.

"We have an ongoing apprentice programme that has proved to be very successful," says Ian Cunningham, asset manager for Serco. "The hospital building is so technically complex that the skills required for maintenance are many and varied – we aim to show these young people sustainable skills so they can be considered for suitable jobs in the future.

"It's a two-way process because we are working with teachers and the wider community to demonstrate the range and scope of technical skills that are required to keep this hospital running smoothly."



Adam tries out his carpentry skills in the workshop at NNUH, under the watchful eye of building craftsman Steve Greaves

Meanwhile, the NNUH Trust has just recruited its first cohort of seven business and admin apprentices, in conjunction with City College Norwich.

**INCIDENTS ON THE WEB** A training programme is under way to ensure that all staff are familiar with DatixWeb, an online incident reporting tool which is now being rolled out across the Trust. "It's going to be a challenge to ensure that all key staff are properly trained on the new DatixWeb system but we are confident that it will bring worthwhile improvements for everyone involved," says project manager Gaye Franks.

"There has been a steady increase in reporting but the new system should make it even easier. Other notable benefits will include the facility for staff members to create their own reports from the system and see at a glance the action taken as a result of these incidents.

"The message we want to get across is that it's everyone's responsibility to use the system and ensure that clinical incidents are followed up without delay."

• For more information contact Gaye Franks on ext 2543 or by email: gaye.franks@nnuh.nhs.uk

# Judith welcomes international role

**CONSULTANT** microbiologist Dr Judith Richards has been elected president of the International Federation of Infection Control, to take effect from December 2010.

Judith graduated in Buenos Aires, Argentina, and moved to the UK in 1977, going on to specialise in microbiology after

a period of general training that included general medicine, nephrology and psychiatry. She has been a hospital consultant since 1989 and infection



control doctor since 1992.

She has published over 37 papers and has a long standing interest in teaching, both in this country and abroad. She has been an examiner for the Royal College of Pathologists (Microbiology).

"The prevention and control of healthcare associated infections has been a major interest throughout my career," says Judith. "I have established educational collaborations with countries such as Argentina, Uruguay and South Africa, where infection control was just developing, and I am delighted that this appointment will provide even greater opportunities to extend the scope of this work."

#### Herbal remedy trial

**PATIENTS WITH** *lung conditions such as asthma, bronchitis and emphysema are invited to take part in cutting edge research into a new herbal remedy to relieve coughs and breathlessness.* 

Known as AKL1, the tablet contains a combination of ginkgo biloba, picrorhiza kurroa and zingiber officinale, which are all plant-based products. The year-long study is funded by the UK Respiratory Research Foundation. Volunteers must be aged between 18 and 80 and attend the Clinical Trials Unit at the UEA four times over a 10-week period. Free parking and travel expenses will be paid up to £100.

Anyone interested in taking part should contact Dr Andrew Wilson on 01603 289876 or a.m.wilson@uea.ac.uk

# Free advice for employers

**OCCUPATIONAL** health advisors from the NNUH Foundation Trust are taking part in a pilot scheme to give small local businesses free access to professional advice via a helpline and website.

More than £100 billion is lost from the UK's economy each year because of working-age ill health and sickness absence and a recent Government report identified a need to provide employers, particularly those in small firms, with easy access to advice on workplace health issues. To address this, a 'Health for Work Advice Line' for small business is being piloted in seven locations in England, and across Scotland and Wales.

Building on existing services such as NHS Plus, the advice line provides small business

employers with easy access to advice from health professionals that is tailored to their needs. Employers are also directed to other services and advice if required.

The advice line will provide small businesses with direct support to help them retain the services of an employee at work or assist an employee back to work following a period of sickness.

Employees may also call the advice line about a health problem, although they should be encouraged to speak to their employer in the first instance, who can then contact the service on their behalf.

The advice line, delivered by NHS Plus, will run until 31 March 2011 and the number to call is 0800 0 77 88 44, or visit www.health4work.nhs.uk

## Bicentenary prizewinners take a bow

**THIS YEAR'S** Bicentenary Prize for research has been awarded to practice and education facilitator Paula Balls, with joint runner-up awards going to community midwife Kelda Hargreaves and physiotherapist Carol Payne.

Paula's research focused on the perceptions of newly qualified nurses about continuing professional development (CPD) and career progression within NNUH. "I found senior staff do not always encourage junior staff to develop or build up their confidence. Access to CPD and support from the organisation is seen as lacking, and this can affect whether they choose to remain in nursing," she said.

Physiotherapy specialist Carol Payne interviewed patients to find out what they hoped to get out of their treatment for shoulder pain. The results will now be used in patient studies to assess how successful their treatment has been.

Kelda's project showed that scans on pregnant women to determine fetal weight can be unreliable and that clinical estimation of fetal weight by palpation can be inaccurate. She intends to continue with her research to see whether clinical estimation of fetal growth can be improved. *Kelda (left) and Paula are pictured receiving their awards from Carol Edwards, deputy director of nursing.* 



## Staff Awards 2010

#### OUR STAFF awards are

taking place again this year and you have until 30 June to nominate individuals or teams who you feel deserve this recognition.

There will be nine awards in all, including categories for leadership, innovation, "unsung hero" and lifetime

achievement, as well as a "Patient Choice" award for patients who wish to express appreciation for the exceptional care they have received.

The awards ceremony will be held on 22 October at the Forum in Norwich and once again the event will be sponsored by Serco and supported by Archant.

Please take this opportunity to nominate our staff and give them a chance to shine.

#### FOUNDATION TRUST NEWS

#### A SMOKE-FREE SITE

We are taking steps reduce to smoking on the NNUH site (*see opposite*) with a three-month awareness campaign that started with a No Smoking Day on 10 March. We want to make it clear that we are a non-smoking site and discourage people from smoking in the hospital grounds.

The new measures include clearer signage and a campaign to urge staff and patients to get help to quit from Norfolk's stop smoking service (tel. 0800 0854113).

#### **MEMBERSHIP UPDATE**

The Council of Governors met in March and received an update on how the Trust was performing, plus an update on the quality of clinical services.

#### FOCUS ON ORGAN DONATION

Our Medicine for Members event on 25 March was all about about organ donation. Transplant donor coordinator Marie Garside explained what's involved and answered questions about organ donation.

#### **NEW MEMBERS**

We are recruiting new members during May, so if you have family or friends who would like to join, either go online at http://www.nnuh.nhs.uk or telephone 01603 287634 for a membership form.

#### MEET THE GOVERNORS

The Governors are holding a drop-in session where members are invited to come along and meet them over a cup of coffee and ask questions. You are welcome to drop in from 3 - 4.30pm on Thursday 27 May in the Boardroom, level 4 out-patients west , at NNUH. For more information, call the Membership Office on 01603 287634.

#### COUNCIL OF GOVERNORS

The next meeting of the Council of Governors takes place at 5pm on 27 May. Space is limited so please contact the Membership Office to book a place by telephone on 01603 287634 or e-mail membership@nnuh.nhs.uk



#### SPOTLIGHT ON MEDICAL ILLUSTRATION



Our medical illustrators photographed 16,000 patients and produced more than 70,000 images last year. Here is a chance to meet the team and learn more about their work



# patient FOCUS

**UNLESS YOU** have been asked to attend their studios at NNUH, the chances are you have little idea of what our medical illustrators actually do.

As head of department Simon Dove explains: "Our work is not just about taking photographs and producing colourful posters and leaflets. We also have an important clinical role to play."

Photography has come a long way in recent years and specialised techniques are increasingly being used to help detect and track conditions such as skin cancer and eve disease.

Balancing this clinical role with creative photography, graphics and multi-media is one of the challenges faced by our medical illustrators in a world where digital techniques are advancing at a rapid rate.

All our photographers are registered medical illustration practitioners and members of the Institute of Medical Illustrators, a professional body that exists to uphold technical and ethical standards within the profession. Patients are required to sign a form to consent to being photographed and the images are never used for education or illustrative purposes without their express permission.

"We are often asked by clinicians to take very graphic close-ups – for instance before and after breast reconstruction surgery – which can be difficult and embarrassing for some patients," explains Simon. "An



important part of our role is to put people at their ease and be sensitive to their feelings and to <u>any cultural differences</u>.

"We point out that the photographs will provide visual evidence that may be used for early diagnosis, or to confirm that the patient's treatment has been effective.

"Clearly it would not do for a medical photographer to be squeamish or to faint at the sight of blood. We approach our work with the same professionalism and respect whether we are photographing graphic surgical procedures in theatre or bodies in the mortuary."

In 2005, Simon won a national innovation award for innovation in developing a web-based clinical image

> library that can be used by clinicians to view their patients' clinical images from a safe and secure location. More recently the team won an innovation award for their work with dermatology (*pictured right*) as well as individual awards for their graphics, ophthalmic photography and multi-media work (details available on our website: www.nnuh.nhs.uk).

> "We moved away from conventional film to embrace the digital era back in 2001, when we moved to the new Colney site, and since then we have not looked back," says Simon. "The challenge now is to keep up with the latest developments and provide an up-to-date, effective service for staff and patients."





Inis awara-winning image of an eye injury (above) was taken by medical photographer Lin Wymer. Specialised equipment (below) is used to produce detailed images of the interior of the eye



#### **MEDICAL ILLUSTRATION: THE FACTS**

**OUR MEDICAL** illustration team (*left*), led by Simon Dove, consists of eight photographers, a video producer and a graphic designer, plus two office staff and a part-time admin assistant. Visual material and videos produced by the team are widely used for research and education, as well as for treatment planning and evaluation.



#### CLINICAL PHOTOGRAPHY

Photographers working in ophthalmology use a range of specialised cameras and techniques to help doctors record and diagnose conditions of the eye. They photograph more than 1500 patients per month, producing images that are used to

monitor conditions such as diabetes, macular degeneration and glaucoma. A new photography service has recently been introduced to help dermatologists to examine moles more closely, using a non-evasive light source to reveal structures beneath the skin surface that



are invisible to the naked eye. Dermatologists routinely rely on photographic images to monitor any changes in the appearance of suspicious moles.

#### **GRAPHIC DESIGN**

Designed by Ann Lush, the award-winning visual material produced by the medical illustration team is widely used for patient information, staff presentations, education and research – ranging from colourful menus to brochures, exhibition design and posters. Ann is hoping to investigate techniques for producing digital 3D images which have the potential to bring drawings and diagrams to life in new, dynamic ways.



#### **MULTI-MEDIA**

Richard Nuttall (*pictured far left*) is responsible for filming and editing DVDs produced in-house for information, education and research, working closely with staff throughout the Trust. New technology is increasingly being used to create animated sequences and interactive web-based programmes that are especially useful for teaching purposes.

#### FOCUS ON EMERGENCY GENERATOR TESTING AT NNUH

There is more to looking after the power supply at NNUH than routine maintenance. **Sam Dibble**, Serco's engineering services manager, explains why a regular switch-off is essential for our peace of mind

# **SHOCK** TACTICS

**QUESTION:** How many people does it take to switch off all the lights at NNUH? Answer: one to turn off the electricity supply and around 30 more standing by to ensure that the emergency generators kick into action with the minimum of disruption to hospital business.

"It's a heart-stopping moment when you flick that

switch for the first time," says Sam Dibble, Serco's engineering services manager. "We are all acutely aware that this is a busy hospital with 1,000 patients relying on us so we want everything to go smoothly."

The black start generator test, as the great switch-off is known, takes place every three months and the first sign that the power is off – apart from the lights suddenly going out – is the big bang that reverberates around the building when the fire dampers shut down. While this can be unnerving, it's a good sign because in the event of a fire the dampers would prevent flames from being fuelled by the ventilation system.

The lights come back on in three to eight seconds but for some plant and equipment the delay can last up to a minute and a half. While only one person flicks the switch, the rest of the team is on stand-by with walkie



talkies to communicate and troubleshoot any problems that may arise.

Of the four emergency generators available at NNUH, only three would be needed in a peak-time emergency. Between them, these oil-fired generators could keep the hospital powered at full load for as long as it takes

the Electricity Board to reinstate supplies. "Touch wood we have never had a

problem with the generators failing to start during a test," says Sam. "However, a lot of work goes on behind the scenes to ensure that the power supply and switching system is properly maintained and that the building is completely safe."

The black start generator test follows a rigorous process developed by Sam when the new hospital opened in 2001. The first black start took place on 18 May 2002.

"We are governed by NHS guidance contained in the *Health Technical Memorandum*, which requires that certain

### ELECTRIFYING FACTS

Did you know that NNUH has:

- 40,000 light switches
- 13,320 light fittings
- 750 miles of electricity cable
- 67 CCTV cameras

• 7.2 megawatts of standby generation, enough to supply around 50,000 homes in the short term

requires that certain tests are undertaken regularly to ensure the safety of the building," he explains. "We give staff plenty of warning and most people are familiar with the routine by now."

When a black start is imminent a



Packing a powerful 11 kilovolts – equivalent to a small electricity sub station – the main switch room at NNUH is off-limits to all but a few authorised keyholders, including Serco estates officer Phil Willgress



member of the Trust facilities team (usually facilities officer Bob Dyson) goes to the Switchboard department armed with a walkie talkie so he can stay in radio contact with the Serco team in the main switch room. At this point he is the only person with the authority to call off the black start if there is a serious emergency and he feels





generators are controlled through a series of complex circuit boards (far left), while the generator engines (left) are housed in separate metal containers in the hospital grounds

The four NNUH

there is a good enough reason to call off the test.

"I am pleased to say that so far there has not been a good enough reason and staff are generally very supportive," says Sam.

• The next Black Start generator test will take place at 8am on 21 May

#### VIEWPOINT

# HOW LEAN CAN TURN TO MEAN

Trust chairman **David Prior** warns that the lessons of Toyota and Mid Staffordshire must be learned

WHEN I worked for British Steel in the 1980s the car industry was one of our biggest customers. In 1980 it was dominated by British Leyland, Ford and General Motors. By 1990 the Japanese had become the biggest producers – in particular Toyota.

For the next 30 years Japanese methods of production spread through much of the manufacturing sector in the West. At its heart lay one word – quality – and from this flowed a range of related concepts including just-in-time, zero

#### "Targets can be used to help improve patient care but they should never be an end in themselves"

defects, total quality management, continuous improvement, quality circles and the elimination of waste. These concepts have been incorporated into one overriding philosophy called "Lean" which has now been adopted by many successful businesses and organisations, including hospitals such as ours.

Quality and efficiency are two sides of the same coin. Toyota became the most successful car company in the world by ensuring that quality (and safety) was at the heart of all their processes. Everything they did was based on providing their customers with the perfect car. And in so doing they became the most efficient producer in the world, with the highest productivity.

A few months ago, this all changed and Toyota has had to recall a huge number of cars because of safety problems. The cost of the recall is estimated at around \$3bn but the reputational impact on Toyota is incalculable. Already their stock market valuation has fallen by some \$30bn. The reason for this disaster is quite simple. For a short period of time, about two years ago, Toyota took their eye away from quality and the customer and focused instead on volume and market share. Their over-riding aim became to sell more cars than General Motors and become the largest car company in the world. In so doing, they lost the plot.

There is a very important lesson in this for the NHS and for hospitals like ours. We must never take our eye off patient safety, clinical outcomes and the quality of care. In other words, the patient. If activity and targets are allowed to determine the culture of hospitals then



we will go the same way as Toyota have done over the last few months. Targets can be used to help

improve patient care but they should never be an end in themselves. If they do become an end in themselves patient care will suffer and clinicians and other staff will become demotivated and less engaged.

Over the last 12 months there have been a number of acute hospitals, most notably Basildon and Mid Staffordshire, where the interests of the patient have been overlooked. This could happen in any hospital if the culture allows targets and volume to swamp quality and safety.

It is the duty of everyone who works in our Trust to make absolutely sure that that can never happen here. The interests of the patient are paramount and priorities should be founded on clinical need.

In his inquiry into the tragedy that happened at Mid Staffs Hospital, Robert Francis QC concluded: "If there is one lesson to be learned, I suggest that people must always come before numbers. It is the individual experiences that lie behind statistics and benchmarks that really matter and which must never be forgotten."

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#### FOCUS ON ORTHOPAEDIC NEWS



# Banking on bone donors

Patients are benefiting from more complex hip surgery than ever before, thanks to the skills of our orthopaedic surgeons. But this would not be possible without the donation of bone by patients undergoing routine hip replacements

**NNUH HAS** won a licence to operate a human bone bank, following a rigorous inspection by the Human Tissue Authority.

It means that bone otherwise discarded during primary hip replacement surgery can continue to be recycled to help patients needing more complex hip reconstructions.

Although our bone bank has been running since the 1980s, stricter guidelines have recently been introduced to ensure that the donated bone is properly stored and completely safe for patients. There are also stringent regulations covering consent and the documentation of bone donation.

Janet Holtaway, who started as a theatre nurse in 1980 and has run the bone bank for the past 11 years, is delighted that the HTA has approved the bid to continue.

"The compliance document runs to hundreds of pages so it was quite a challenge to ensure that we are following all the guidelines laid down by the HTA," she said.

#### HOW IS BONE HARVESTED?

- A total hip replacement involves replacing the head of the femur (thigh bone) with a metal ball and pin so there is always a round knob of bone, plus shavings of bone, that would be discarded if they were not kept for the bone bank. Bone donors are not compromised in any way – if the femoral head is not harvested, it is discarded.
- The harvested bone is stored under strict conditions, at a temperature of minus 80 degrees and "quarantined" for at least six months to enable a series of tests to be carried out, both on the bone itself and the donors' blood. The bone can be

stored for up to three years.

• When needed for a hip revision, the bone is

taken from the freezer to the operating theatre, where it is crushed in a bone mill so it can be packed into a mesh casing around the new hip joint. This acts as a "trellis" to enable new, healthy bone to grow.

• The bone bank is supervised by orthopaedic surgeon Mr John Nolan (*pictured*), who is officially the "designated individual" for the bone bank.



"We are lucky to have orthopaedic staff that already set extremely high standards for the safety of patients."

Janet's role is to review the notes of all patients undergoing total hip replacement surgery at the NNUH and Spire, the private hospital at Colney, and ask those patients who might be suitable if they would be willing to donate bone.

She then co-ordinates the consent for donation, retrieval, testing and storage of the donated bone, right through to the allocation of bone, requested by orthopaedic surgeons for their patients' surgery.

"There are a large number of contraindications to donation, so the number of patients who can donate is very small in relation to those who have total hip replacements. We are very grateful for the gift of bone because it can make a big difference for patients undergoing hip revision surgery."

## Stitches beat staples for wound healing, say researchers

**RESEARCH** undertaken at NNUH suggests traditional nylon sutures may be preferable to metal staples when it comes to closing wounds after hip and knee surgery. The risk of developing a superficial wound infection was found to be up to four times greater when staples were used.

"Staples are regarded as quicker and easier to use than sutures but they may also be more expensive in the longer term," says physiotherapist Toby Smith, who led the research with orthopaedic surgeons Professor Simon Donell, Mr Charles Mann, and physiotherapist Debbie Bowyer.

"We analysed research studies evaluating

683 patients, of whom 351 had wounds closed up with staples and 322 with traditional nylon sutures. While the risk of superficial infection was greater, there was no significant difference between sutures and staples in the development of inflammation, discharge, re-opening of a previously closed wound, necrosis or allergic reaction.

"We are suggesting that further highquality research is needed to confirm our findings, but in the mean time we would urge patients and doctors to think more carefully about the use of staples for wound closure after hip and knee surgery."



Toby Smith (left) pictured with Charles Mann, Professor Donell and Debbie Bowyer

# THE **REAL** HEART OF OUR HOSPITALS

Every day important decisions are made by doctors to diagnose and treat life-threatening heart conditions. Here, cardiologist **Dr**[**Ian**]**Williams**] pays tribute to the laboratory teams at NNUH whose tests can help to assess the risk of heart attack from a single blood sample



**CENTURIES OF** increasingly sophisticated analysis of the structure and properties of the failing heart have helped heart specialists to understand more about why things go wrong and what to do about them.

Some of the biggest advances have taken place in the laboratory. Today's tests provide crucial information about the chemical make-up of the body: they can help us determine whether a patient's chest pain is related to angina and even assess the risk of having a heart attack in the near or distant future. Such tests are so sensitive that, in some cases, they are the equivalent of detecting a single aspirin tablet dissolved in an Olympic-sized swimming pool.

Clinicians from all specialties increasingly rely on sophisticated imaging tests such as angiograms, ultrasound, CT and MRI scans to help them make an informed diagnosis. Occasionally, however, the definitive answer comes from old fashioned clinical assessment coupled with some sort of pathology testing.

Every day, basic assessments of biochemistry and haematology in cardiac and other patients are central to the way in which we deliver care. Specifically, the levels of sodium, potassium, calcium and magnesium in the blood have a direct influence on the electrical properties of the heart, while an overall assessment of kidney function affects the choice of drugs and the dose appropriate to treat a range of cardiac



"Some tests are as sensitive as detecting a single aspirin tablet in an Olympic-sized swimming pool "

conditions. These tests provide invaluable guidance for clinicians when deciding on an appropriate course of action in terms of treatment and further investigations.

Decisions of this sort are being made by cardiologists several times a day, every day, and thankfully those decisions are all the more accurate for the timely input of pathology services. In cardiology we only rarely undertake biopsies of the heart or blood vessels in order to make a diagnosis or assess risk. Instead, blood tests are increasingly used to assess biochemical disorders, from common conditions such as high

Consultant cardiologist Ian Williams addresses an audience during National Pathology Week (above) and (left) biomedical scientist Vicky Jepson in the laboratory at NNUH, where up to 15,000 patient samples are analysed each day

cholesterol levels and diabetes, to rare conditions such as Fabry's disease, and also for the genetic analysis

of structural and electrical cardiac problems.

Sadly, some inherited disorders of the heart only come to light after a sudden, unexplained death and certain conditions may be diagnosed at post mortem from an inspection of the heart, microscopic analysis and occasionally genetic assessment. In these cases it is vital that pathologists and clinicians work together to plan appropriate screening for relatives, assess the risks to their health and try to prevent further tragedy.

A hospital is so much more than the sum of all its parts. I would not understand my specialty so well, nor would I be able to practise it as reliably or fully, without the input of my colleagues in the pathology department.

• If you have a Viewpoint you would like to share, please send your contribution to sue.jones@nnuh.nhs.uk or call 01603 289944

# Planning consent sought

**PLANS FOR** a new £15 million hospital at Cromer have now been submitted to North Norfolk District Council and are due to be considered by the council's planning committee on 6 May.

The new building will replace most of the original Mill Road hospital, which first opened in 1932, and is designed to provide day treatment, out-patient care, minor injuries, renal dialysis and extended diagnostic services. If approved, construction work will begin in early September and continue in three phases: Phase 1 will include resurfacing of the football club car park to provide parking for staff and patients during construction. The existing vacant Barclay Ward will be refurbished to accommodate dialysis patients and the existing dialysis unit will be removed to make way for the new hospital building.

**Phase** Construction of the two-storey hospital will begin and departments will be moved into the new building.

#### Eyes on new camera

**THE PURCHASE** of a new digital camera for the Allies Unit means patients undergoing surgery for a range of eye conditions at Cromer Hospital no longer need to travel to NNUH to have clinical photographs taken by our medical illustrators.

The new Canon G11 camera will be used to take "before" and "after" images. Professional photographers from Medical Illustration are already on hand in the Allies Unit to record images using specialised ophthalmic equipment (see page 6).

#### THE PULSE

Editor Sue Jones (ext. 5944) Pictures Medical Illustration and Sue Jones Head of Communications Andrew Stronach (ext. 3200) Communications and Membership Manager Janice Bradfield (ext. 3634) Communications Officer Hayley Gerrard (ext. 5821) Please send your contributions for the June issue to Sue Jones (Communications) by 9 May 2010. • The Pulse *is funded entirely from donations and not from NHS funds*  **Phase[3**] The old building will be demolished – except for Barclay and Davison wards – and work will start on the car park and forecourt, plus landscaping.

Following a public consultation about the new hospital, a total of 51 written comments were received, of which 24 per cent praised the new designs. There were understandable concerns about car parking, construction traffic, cleaning the glass frontage and the retention of trees on the boundary – these issues have all been addressed as part of the planning application.

Detailed designs are now being prepared ready for tendering to subcontractors.

• For more information and detailed plans go to www.nnuh.nhs.uk/page/newcromer

**STAFF IN** the renal dialysis unit at Cromer Hospital turned purple to celebrate World Kidney Day on 11 March, serving purple cakes and holding a purple-themed raffle to raise over £300 for kidney research. Pictured with patient Josie Best are junior sister Angie Webster, senior sister Janet Dickenson, staff nurses Gillian Martins, Ruth Brock and Lydia Chatwin, and volunteer Sue Woods.

#### WELCOME

...to the following consultants who have recently joined the Trust: **Mr Heinrich Hollis**, consultant in emergency medicine, and **Mr Edward Cheong**, general surgeon.

#### FAREWELL

...to the following long-serving staff who have recently left the Trust: Jane Lebbell, senior radiographer, after 48 years, Margaret Crawford, staff nurse on Kimberley Ward, after 40 years' service, Andrew Mace, chief biomedical scientist in haematology, after 37 years, Ann Barron, senior healthcare assistant on Dilham ward, after 34 years, Janet Hignett, deputy sister on Kilverstone Ward, after 32 years, Jane Farley, community midwife, after nearly 28 years, Susan Seekings, nursing specialist in

### BY APPOINTMENT

**FROM 7 APRIL** patients will be asked to book appointments for the hearing aid repair service at Cromer Hospital, with 10-minute slots being made available on Tuesday afternoons and Friday mornings.

This change to the drop-in service is designed to cut waiting times. It follows a survey of patients who use the hearing aid clinic, many of whom were unhappy about the long queues. The questionnaire asked if a booked appointment service was preferable and 75 per cent of those who responded agreed that it was.

Patients are asked to call 01603 646204 to book an appointment, with the first of the appointments taking place on 13 April. More than 2,000 people attend the

Cromer clinic every year.



A&E, after 27 years, Lesley Turner, medical secretary in medicine for the elderly, after 26 years, Mary Twist, sister in medical out-patients, after 25 years, Christine Kemp, clinical support worker in MRI imaging, after 23 years, Dr Peter Sampson, general practitioner in genito-urinary medicine, after nearly 22 years, Valerie Knights, senior healthcare assistant in gynaecology, June Malachowski, senior assistant in pharmacy and Janet Worrow, secretary in medicine for the elderly, all with more than 21 years service, Maria Yarham, junior sister in Occupational Health, after nearly 21 years, and Anne Rutherford, staff nurse Dermatology, after 20 years.