

Britain's TOP SURGEONS

Melanie Reid introduces our special issue

I know my surgeon only from a hazy, morphine-filled conversation pre-op, but I will remain daily in her debt. Jennifer Brown is a neck neurosurgeon; she cut open my throat and screwed in a plate to stabilise the vertebrae around my spinal cord. Easy to say in a sentence; easier still to gloss over the knowledge, dexterity, precision and almost unimaginable coolness and composure required to do such a thing.

Very few jobs on the planet require 15 years of intensive training before qualification. But that's how long it takes, from entering a UK medical school as a raw undergraduate, to become a fully fledged consultant surgeon at the age of 32 or 33. Is it any wonder that Britain possesses among the most skilled practitioners in the world, and boasts some of the best post-operative survival rates? Or that our training is the most prestigious and prized? →

'It only hurts when I laugh'



The top BRITISH SURGEONS

In very rare instances where comparisons can be made between like and like, British surgeons are world leaders. Figures for 21,248 operations for coronary artery bypass grafts and aortic valve replacement performed in the UK in 2009, for instance, show actual survival rates of 98.4 per cent, compared with a survival rate for the same surgery in America of 97.9 per cent.

This is not a definitive list of the UK's leading surgeons: no such thing exists, and probably never will. It is genuinely impossible to compare the results of someone who routinely removes varicose veins with that of the person who repairs brain aneurysms, so vast is the gulf in risk and complexity. Likewise, how can one compare the mechanics of replacing worn-out hips day in, day out, with the work of someone who performs pioneering heart surgery on newborn babies? Yet all these tasks are, arguably, equally vital.

What we have attempted to do here, therefore, is pull together some of the brightest and most respected names from the 19,500 surgeons and surgical trainees in the UK. Jennifer Brown, incidentally, is one of the fewer than 1,500 who are female. Although the intake to medical school is now 60 per cent female, an overwhelming 92.5 per cent of consultant surgeons are men.

For this special issue, we asked numerous experts for their recommendations and sifted out just a few. This is, therefore, a guide to British surgical brilliance rather than a scientific study. There are many other superb consultants who work quietly away, saving lives, bringing freedom from pain and release from disease; and this special edition celebrates them as much as it salutes the more well known.

History bestows high expectations upon British surgeons. Next year sees the centenary of the death of Joseph Lister, the Essex-born doctor who revolutionised modern surgery in the late 19th century by introducing aseptic operating theatres. His legacy, to judge by the skills we describe on the following pages, should be in safe hands.

WHO'S WHO IN OUR LIST OF SURGEONS?

Compiled by
John Naish

GENERAL

Despite its name, a surgical specialty dealing with all things abdominal

Lord Darzi of Denham

Imperial College Hospital NHS Trust and the Royal Marsden Hospital, London

Head of surgery and Paul Hamlyn chair of surgery at Imperial College, honorary consultant surgeon at Imperial and the Royal Marsden, and chair of surgery at the Institute of Cancer Research. Recently appointed chairman for the Institute of Global Health Innovation, he has been at the forefront of surgical innovation for the past 15 years and established a world-leading technological research unit with the Institute of Biomedical Engineering to develop robotic surgical platforms. Has made substantial contributions to health policy and clinical safety (see interview, p64).

Mike Dixon

Western General Hospital, Edinburgh

Consultant surgeon, senior lecturer and specialist breast surgeon in the busiest breast unit in the United Kingdom. Key researcher on the hormonal treatment of breast cancer and involved in the introduction of many of the newer drugs now used in treating breast cancer; particularly well known for ultrasound-guided biopsies and ultrasound-guided removal of tumours. Published more than 250 papers, contributed 76 book chapters, and written or edited 27 books; also managing editor of the journal *The Breast*, former editorial board member of the *British Medical Journal*, and reviewer for 30 cancer-related journals. Has given more than 150 lectures worldwide.

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O. James Garden

Royal Infirmary, Edinburgh

Regius Professor of Clinical Surgery at the University of Edinburgh, surgeon to the Queen in Scotland, and internationally renowned liver and biliary surgeon who established the Scottish Liver Transplant Unit. Leads one of the strongest academic research surgical groups in the UK and has led innovative distance-learning initiatives for surgical trainees. Past president of the Association of Upper Gastrointestinal Surgeons of Great Britain and Ireland, president-elect of the International Hepato-Pancreato-Biliary Association and honorary fellow of two of the oldest American surgical organisations: the American Surgical Association and the Society for Clinical Surgery.

Michael Griffin

Royal Victoria Infirmary, Newcastle upon Tyne

Professor of gastrointestinal surgery at the University of Newcastle and an international authority on management of cancer of the oesophagus and stomach. In 1989 founded, and now leads, the Northern Oesophago-Gastric Cancer Unit at the Royal Victoria Infirmary – the largest such unit in Europe, dealing with 550 new cases a year and renowned for pioneering aggressive surgical treatments. On the national steering committee for two major oesophago-gastric cancer trials. A past president of the Association of Upper Gastrointestinal Surgeons of Great Britain and Ireland and a council member of the Royal College of Surgeons of Edinburgh.

Nagy Habib

Hammersmith Hospital, Imperial College Healthcare NHS Trust, London

Lead clinician for integrated gastro-intestinal services and professor of hepato-biliary surgery at Imperial. Has published more than 200 papers and sits on the editorial review panels of the *European Journal of Cancer* and the *Annals of the Royal College of Surgeons of England*. A leading proponent of adult stem-cell research; has led trials that have saved the lives of alcoholic liver patients by treating them with their own stem cells. Developed the use of radio frequency in liver re-sections, allowing tumours to be removed with minimal loss of blood, a technique published in the *Annals of Surgery*.

Richard Hardwick

Addenbrooke's Hospital, Cambridge

Specialist upper gastro-intestinal tract surgeon with an interest in keyhole and hiatus-hernia surgery and gastric and

oesophageal cancer. Lead clinician for upper GI cancer at the Cambridge Oesophago-Gastric Centre, which he co-founded in 2001, lead for the National Oesophago-Gastric Cancer Audit and past chairman of the Association of Upper GI Surgeons Audit and Clinical Services Committee. Research interests include early diagnosis of upper GI cancer, Barrett's oesophagus and hereditary forms of stomach cancer. A vociferous campaigner for improved NHS resources.

Fiona MacNeill

Royal Marsden NHS Foundation Trust, London

Consultant breast surgeon at the Royal Marsden hospital and tutor at the Royal College of Surgeons who is an expert in reconstructive procedures and has rolled out techniques nationwide that limit the amount of surgery that a woman has to undergo. Awarded the Silver Scalpel Trainer of the Year in 2006, she acts as an adviser to Department of Health committees to optimise breast services and plan future cancer strategy.

COSMETIC

It's not all celebrity facelifts, you know. Reconstructive surgery, hair transplants, post-cancer treatments – these are the self-esteem specialists

Maurice Collins

Medical director, Hair Restoration Blackrock

Hair transplant surgeon who practised as a consultant surgeon in England and Ireland before specialising in hair-transplant surgery for high-profile men (see interview, p34).

Rajiv Grover

King Edward VII Hospital, London

Consultant plastic surgeon and president-elect of the British Association of Aesthetic Plastic Surgeons known for his natural-looking facelifts (see interview, p68). Practises privately at the King Edward VII and in Harley Street. Primary focus is aesthetic surgery of the face and breast as well as reconstructive surgery in those with skin cancer. Hunterian Professor at the Royal College of Surgeons; responsible for the UK national audit of cosmetic surgery.

Norman Waterhouse

Chelsea and Westminster Hospital, London

Consultant craniofacial plastic surgeon at the Chelsea and Westminster. Privately, undertakes all aspects of cosmetic surgery in addition to reconstructive and craniofacial surgery; his modifications on traditional facelifts are set to become an international standard. Co-founder of Facing the World charity, which helps children in poor countries to undergo facial reconstruction.

CARDIOTHORACIC

Heart disease may be Britain's biggest killer, but these surgeons are ensuring that survival rates have never been better

Roberto Casula

Imperial College Healthcare NHS Trust, London

One of the world's leading pioneers in robotic-enhanced and minimal-access surgery. Has operated on several thousand cardiac patients, performed the UK's first coronary bypass without opening the chest in 2002, and has carried out the procedure more than 135 times since.

Christopher McGregor

The Heart Hospital, University College London Hospital

Leading heart transplant surgeon, credited with performing the first successful lung transplant in Europe in 1987, the first successful infant heart transplant in the UK in 1988 and the first successful heart, lung and liver transplant in the US in 1996. Now chair and director of cardiothoracic surgery at UCLH.

John Pepper

Royal Brompton Hospital, London

Consultant surgeon who has performed some of the most advanced heart surgery in the UK. Currently working to try to speed up the diagnosis of acute aortic dissection, a cardiac condition that can quickly lead to death.

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GYNAECOLOGY

From reproductive medicine and surgery to foetal medicine and microsurgery procedures – Britain's gynaecologists are setting new standards

Roy Farquharson

Liverpool Women's Hospital, Liverpool
Consultant gynaecologist and the president of the UK Association of Early Pregnancy Units. The consultant who has pioneered an operation to prevent recurrent miscarriage: shifting the womb – and baby inside – to one side of the woman's body and stitching the cervix. Also author of the book *Miscarriage* and on the editorial team of the *British Journal of Hospital Medicine*.

Sailesh Kumar

Queen Charlotte's Hospital, London
Kumar is senior lecturer at Imperial College and consultant in foetal medicine, obstetrics and gynaecology at Queen Charlotte's. Kumar specialises in high-risk pregnancy, multiple pregnancy, invasive foetal therapy and vaginal surgery. Pioneered a DNA-based testing system to warn when a pregnant woman with rhesus-negative blood is carrying a baby whose blood type is rhesus positive, a condition that can be fatal to the baby.

Geoffrey Trew

Hammersmith Hospital, London
Consultant in reproductive medicine and surgery at Hammersmith and Queen Charlotte's and one of the very few European surgeons to practise open microsurgery to correct congenital abnormalities and reconnect Fallopian tubes after the removal of blockages. Highly experienced in treating complex surgical problems ranging from difficult endometriosis through fibroids to congenital abnormalities. Trew lectures internationally, holds private clinics in Harley Street and has written

more than 50 peer-reviewed papers and contributed to 10 books.

NEUROSURGERY

Haemorrhages and strokes, head injuries and tumours... When a patient's brain is at stake, you need the safest pair of hands

Helen Fernandes

Addenbrooke's Hospital, Cambridge
The first female surgeon at Cambridge University Hospitals, appointed consultant neurosurgeon in 2002. Specialises in the treatment of patients with brain and spinal problems, and is lead paediatric neurosurgeon at Cambridge University Hospitals. As associate director of postgraduate medicine at CUH she is responsible for teaching more than 80 junior doctors; also chair of Women in Surgery. Published more than 30 papers and is a member of the academic sub-committee of the British Paediatric Neurosurgical Group (see interview, p48).

Owase Jeelani

Great Ormond Street Hospital, London
Consultant paediatric neurosurgeon specialising in craniofacial surgery and honorary senior lecturer at the Institute of Child Health, University College London. Recently worked on the neurovascular separation of conjoined twins Rital and Ritag Gaboura, who were born with fused skulls (see interview, p20), and has also helped to develop a technique for saving the lives of babies born with skulls that have fused and won't grow to accommodate the expanding brain.

Neil Kitchen

The National Hospital for Neurology and Neurosurgery, London
Lead neurosurgeon for neuro-oncology at Britain's first dedicated brain-tumour unit, which opened in February. Special interests include brain and spine tumour surgery, intracranial microsurgery, trigeminal neuralgia and radiosurgery. Medical advisory board member of the Trigeminal Neuralgia Association UK.

Andrew McEvoy

The National Hospital for Neurology and Neurosurgery, London

Consultant neurosurgeon at the National Hospital and honorary consultant neurosurgeon to Great Ormond Street. Has a particular interest in the preservation of function during neurosurgical procedures and the reorganisation of brain function around brain tumours and is known for performing "awake" brain operations, using high-tech Gamma Knife and CyberKnife techniques, to minimise neurological damage.

David Mendelow

Newcastle General Hospital, Newcastle

Professor of neurosurgery at the Newcastle University School of Surgical and Reproductive Sciences, and head of neurosurgery at Newcastle General. Authored more than 130 papers on cerebrovascular disease and head injury, with particular specialisms in haemorrhage and stroke. A qualified pilot, he introduced flight-style checklists and logbooks to surgery in 2007, ahead of a worldwide trend.

ORTHOPAEDICS

Damaged bones and ligaments, debilitating joint issues – where would our country's top sports stars be without the men who know how to mend them?

Justin Cobb

Imperial College Healthcare NHS Trust, London

Professor of orthopaedics and clinical lead in orthopaedic surgery at Imperial. This year developed the world's fastest knee replacements, and co-invented the world's first custom-made partial knees inserted with robotic assistance that minimise the amount of bone removed. Civilian adviser in orthopaedics to the Royal Air Force.

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John Fairclough

Cardiff and Vale NHS Trust

Consultant trauma and orthopaedic surgeon known for pioneering arthroscopy in knees and new ways of cleaning the joint. Regularly treats elite athletes from a number of sports, including former Olympic hurdler Colin Jackson and ex-world champion boxer Joe Calzaghe. Professor of sport and exercise medicine at the University of Wales, chairman of the medical committee for the Welsh national football team, a member of the Medical Committee of the Wales Rugby Union and a former president of the British Sports Trauma Association. Has been surgeon to Cardiff Rugby Club and Glamorgan cricket team, and past president of the British Orthopaedic Sports Trauma Association.

Andre Jackowski

Royal Orthopaedic Hospital NHS Foundation Trust, Birmingham

Consultant spinal neurosurgeon and clinical director at the Birmingham Spinal Centre who is a pioneer of spinal microsurgery and the use of numerous spinal implants and co-inventor of the Neodisc, an artificial cervical disc. Has overseen the treatment of professional footballers such as the Welsh international Robbie Savage and former Manchester United striker Dion Dublin, lectures nationally and internationally and is a world expert on disc replacement.

Simon Kay

Leeds Teaching Hospitals

Consultant in plastic and reconstructive surgery, in particular surgery of the hand, at Leeds Teaching Hospitals, and an acknowledged leader and innovator in microsurgery, the treatment of children's hand deformity and nerve injuries. Kay is professor of hand surgery at the University of Leeds, a past leader of the British Association of Plastic, Reconstructive and Aesthetic Surgeons and the British Society for Surgery of the Hand, a widely published author and the current editor of the *Journal of Plastic Reconstructive and Aesthetic Surgery*.

Andy Williams

Chelsea and Westminster Hospital, London

Sports surgeon who has treated stars such as rugby's Lawrence Dallaglio, the former Wasps and England player (see interview, p52), and the cricketer

Andrew Flintoff, with a particular interest in knee surgery, notably multi-ligament reconstruction. Currently the primary knee surgeon for many of the UK's leading professional sports teams, including a number of Premier League football clubs and many Premiership rugby clubs. In January 2000, Williams was appointed consultant at the Chelsea and Westminster; he is also a visiting professor at Imperial College, London, and a member of the knee surgery unit at the Wellington Hospital, London.

OTOLARYNGOLOGY

From paediatric ear, nose and throat specialists to world-renowned rhinologists and the surgeon developing a radical new voicebox operation

Martin Birchall

Royal National Throat, Nose and Ear Hospital, London

Professor of laryngology at University College, London, and consultant laryngologist at the Royal National Throat, Nose and Ear Hospital, the leading European centre in the field. Just got permission to perform the UK's first voicebox transplant, only the third such operation to be performed worldwide. Voted one of the Great Britons of 2008 after a world first operation, working with Spanish doctors, to create and transplant the first whole organ to be grown from the Spanish patient's own stem cells (the woman's windpipe was replaced with the laboratory-grown tissue).

Peter Clarke

Royal Marsden Hospital, London

Specialist known for neck surgery, including surgical voice restoration, skull-base surgery and neck dissection. Medical-team volunteer for the charity Facing the World, which offers life-changing treatment to children with severe facial disfigurement. Clarke has written chapters for three of the leading ENT textbooks, as well as a chapter of a recently published book on skull-base surgery.

Ben Hartley

Great Ormond Street Hospital, London

Consultant paediatric otolaryngologist, a leading paediatric ear, nose and throat, head and neck surgeon at GOSH and a senior lecturer at University College London. Specialises in complex head and neck tumours in children, malformations and airway surgery. Has developed many surgical procedures in this area, particularly for cystic hygromas (birth defects that cause a mass to grow in the head and neck area) and vascular malformation. Has an extensive research portfolio and lectures all over the world.

Valerie Lund

Royal National Throat, Nose and Ear Hospital, London

One of Britain's leading specialists in sinus tumours, awarded a CBE for services to medicine in 2008. Professor of rhinology at the Ear Institute, UCL, as well as consultant ENT surgeon at the Royal National Throat, Nose and Ear Hospital, Moorfields Eye Hospital, University College Hospital and Imperial College. Chief editor of the journal *Rhinology*, co-chair of the European Academy of Allergy and Clinical Immunology Taskforce on Rhinosinusitis, president-elect of ENT UK and former chair of Women in Surgical Training.

Hesham Saleh

Charing Cross Hospital, London

Leading figure in sinus surgery and rhinoplasty, both cosmetic and functional. Consultant rhinologist and facial and ENT surgeon at Charing Cross and Royal Brompton hospitals and lecturer in ENT surgery at Imperial College. Secretary of the Section of Laryngology and Rhinology at the Royal Society of Medicine who speaks regularly at conferences worldwide and has published more than 70 peer-reviewed articles.

Janet Wilson

Freeman Hospital, Newcastle

International authority on swallowing disorders and only the second UK female chair of a surgical discipline. Appointed professor of otolaryngology, head and neck surgery at the University of Newcastle in 1995, and runs a clinic at the Freeman Hospital. Awarded the BMA's Walter Jobson Horne Prize this year in recognition of her national and international work in voice and swallowing disorders. The author of more than 190 publications.

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PAEDIATRICS

Developing minimally invasive surgery for children

David Dunaway

Great Ormond Street Hospital, London

Consultant plastic and reconstructive surgeon and head of the craniofacial unit at GOSH with a special interest in facial deformity, paediatric craniofacial tumours and vascular anomalies; led the reconstructive team that successfully separated conjoined twins this summer (see interview, p20). Works on the facial deformity service for adults at University College London Hospital and the Eastman Dental Hospital. A past president of the plastic surgery section of the Royal Society of Medicine and lead reconstructive surgeon for the charity Facing Africa.

Martin Elliott

Great Ormond Street Hospital, London

Chief of cardiothoracic surgery and director of transplantation and the tracheal service at GOSH and professor of paediatric cardiothoracic surgery at University College London. Established and leads the national service for severe tracheal disease in children and helped to establish paediatric heart and lung transplantation at GOSH, and started the European Congenital Heart Defects Database. Recently pioneered the world's first stem-cell supported tracheal transplantation in a child and this year performed a lung transplant on the smallest UK recipient. Has written more than 250 peer-reviewed publications and delivered more than 300 lectures.

David Richardson

Alder Hey Children's Hospital, Liverpool

A world leader in craniofacial and cleft surgery and consultant oral and maxillofacial surgeon at Alder Hey, Richardson has extensive experience in the surgical management of paediatric craniofacial malformations as well as trauma and tumours. Has a specialist interest in reconstruction of ear defects, nasal reconstruction and adult orthognathic surgery (operations to correct misalignments of the jaw and face). A member of the European Society of Craniofacial Surgery.

Gordon MacKinlay

Royal Hospital for Sick Children, Edinburgh

Consultant paediatric surgeon at the Royal Hospital and senior lecturer at Edinburgh University. In 1994 introduced therapeutic laparoscopic surgery to the Royal Hospital, which has led to it becoming known for its minimally invasive surgery on children and use of advanced technology, including 3-D scanning. Past president of the International Paediatric Endoscopic Group and the British Association of Paediatric Surgeons.

Victor Tsang

Great Ormond Street Hospital, London

Chief of paediatric cardiothoracic surgery at GOSH, where he has worked since 1997, and a consultant cardiothoracic surgeon at the Heart Hospital in London, with specialisms in adult congenital heart surgery and neonatal cardiac surgery. Has performed operations worldwide and is a trustee of Chain of Hope, the charity providing underprivileged children in the Caribbean with heart surgery. Has published more than 100 peer-reviewed articles and lectured widely; one of the three editors of a world-renowned paediatric cardiac surgical textbook.

PLASTIC AND TRAUMA

The frontline specialists who are rehabilitating injured servicemen

Alasdair MacMillan

Queen Margaret Hospital, Dunfermline

Expert in the management of casualties in battle who, in his civilian capacity, is lead general upper gastro-intestinal surgeon in Dunfermline. Nominated Healthcare Reservist of the Year in 2010, the lieutenant-colonel was praised particularly for his work in gross intra-abdominal trauma at Camp Bastion, Afghanistan. Known for his courage and ability to make life-changing clinical decisions coolly and calmly.

Sir Keith Porter

Queen Elizabeth Hospital, London

First chairman of the new National Institute of Health Research for Surgical Reconstruction and Microbiology and the UK's only professor of clinical traumatology. Based in the military wing of the Queen Elizabeth Hospital, has been at the forefront of developing trauma treatment for injured service personnel over the past decade. In

January, received a knighthood for his services to the Armed Forces.

Rob Scott

Birmingham and Midland Eye Centre, Birmingham

Consultant ophthalmic surgeon at the Royal Centre for Defence Medicine, the Birmingham and Midland Eye Centre and University Hospital, Birmingham, whose particular area of expertise is eye trauma from blast wounds and industrial accidents and stab wounds (see interview, p26). Works closely with neurobiologists and neurologists to develop and pilot new cures for injuries that previously would have resulted in blindness, including the BrainPort sensory device, a pair of glasses with a camera attached that sends images to sensors on a patient's tongue, and then to the brain, allowing the patient to "see".

VASCULAR

Blood-vessel experts with revolutionary ideas and research

Jonothan Earnshaw

Royal Gloucestershire Hospital, Gloucester

The man in charge of the extensive National Abdominal Aortic Aneurysm (AAA) Screening Programme, which detects blood vessels that have become overly enlarged. Last year, more than 37,000 screening tests were carried out and more than 600 men with AAA were detected. Also pioneered a revolutionary technique to treat leg ulcers and varicose veins by injecting foam into affected veins. Past secretary of the Vascular Society and senior editor of the *British Journal of Surgery*.

Ross Naylor

Leicester Royal Infirmary

Internationally respected in the field of carotid artery surgery; known for improving the safety of carotid endarterectomy, the surgical procedure used to prevent strokes. Led research to create an early-warning system to help prevent potentially fatal strokes during or soon after operations, which is now routinely used in Leicester's hospitals. The author of 340 publications in peer-reviewed journals; president-elect of the Vascular Society, and senior editor of the *European Journal of Vascular and Endovascular Surgery*. ■