Editorial:
Catherine Sarraf

Since the December issue of our journal, the world keeps moving on. There have been the terrible earthquakes in Syria/Turkey, and the war in Ukraine persists. How lucky we were though to have had the lecture on 16th of February, by Shane O’Rourke on the history of Ukraine, written up here on page 18 by Richard Lansdown. At the Syria/Turkey border, these days the city of Antakya represents the ancient city of Antioch. Antakya was one of the main centres of February’s earthquakes, although very, very many such events have previously been recorded throughout history in the region, being situated at the junctions of the East Anatolian fault and the Dead Sea transformation fault. Hopefully by now the devastated areas will be burgeoning with medical helpers of all kinds from many local and distant places. Historically and biblically, Greek speaking St Luke was born in Antioch in the first century AD, and trained as a doctor possibly in Tarsus (see ‘Is there a Guidebook?’, James P S Thomson, Retired Fellows Society Journal, December 2021, pages 20-23). His gospels are textually eloquent and are peppered with medical terms and references, taken from Hippocrates, Arctaeus, Galen, Discorides and Aristotle (Cooper 2014). His texts were originally written in Greek, as were the medical treatises of Galen. In this issue (pages 22-25) we have an article which aims to trace some of the links between ancient/mediaeval/modern medical texts following their pages and languages through Moslem Cordoba, where translations were made, from their original tongues, sometimes via Arabic, into Latin.


As ever, I invite our Fellows to submit an article, filler, photographs to future issues of this journal. Everyone has a tale to tell, and this is the place it can be shared between us. There is no peer review ahead of publication here, and ‘Information for authors’ can be found on page 48.
Forthcoming Events Spring and Summer 2023

Programmes

Internal Events

Jane Reeback

20 April
Caroline Swash:
Best stained glass in London

18 May
Frances Wood:
The Silk Road

15 June
Professor Robin Dunbar:
The (neuro-)anatomy of friendship: a multidisciplinary approach

External Events

20 June
Sue Weir:
Visit to Watts Gallery and Artist’s Village, Compton, Near Guildford

Walks with Sue Weir

April

18
Around Holborn’s Past - an opportunity to see a once very fashionable square, some elegant streets and the haunts of duellists and barristers, not forgetting hidden churches and a unique pub.

May

26
Further Along the Embankment - to continue our exploration of the gardens, statues, small streets, a Roman bath and the law, from Somerset House to Blackfriars.

June

9
From Farmland to Fashionable Faubourg - elegant Kensington was home to writers, composers and seafarers, come to discover where they lived.

July

13
King’s Cross - something old and something new, water & a wild life garden plus a university and ‘The place to live’ - it is not just a station!
Camera Club

Richard Lansdown
All in house at the RSM, coffee 10.30, meeting 11.00

April
14 | Gerry Temple My life in photography

June
22 | Presentation Meeting

May
10 | Members’ Meeting

September
11 | Carl Doghouse Title to be arranged

Michael O’Brien is now on the CC Steering Committee and will be able to report on our activities.

Camera Club Report

The Camera Club welcomes anyone with an interest in photography, of whatever level of skill or experience. Meetings are held in the Seminar Suite at the RSM, starting at 11.00, with coffee at 10.30; they normally end around 12.30. In the last few months we have had two excellent talks and more are planned for the rest of the year.

Members’ Meetings are what they say; they give the opportunity to members to display examples of their work, to seek advice or to lead a discussion. Presentation Meetings involve members giving brief presentations on a topic of their choice. We also offer one to one tuition in Photoshop, Photoshop Elements and Lightroom.

Our exhibition in the Atrium has just been changed; we have a new one twice each year. There is no extra charge for RFS Fellows for any of the above.

Richard Lansdown
rglansdown@yahoo.co.uk

Galapagos birds - blue footed booby and frigate bird (inflated).
Harold Ludman
Lecture abstracts and biographies of speakers

London’s stained glass
Caroline Swash ATD FMGP
Thursday 20 April

Caroline’s father and grandfather were stained glass artists, living and working in Gloucestershire where she grew up, studying at the Cheltenham School of Art then The London Institute in preparation for a teaching post. Her first school was one of the earliest Comprehensives, Mount Grace, Potters Bar and it was there, as staff on a French exchange that she saw coloured glass used for the first time in a radically modern way. Back home, she learnt the rudiments of the craft from her father before returning to Mount Grace to made heraldic panels for them. Then, on a car journey, she fell in love with Michael Swash, they married and went to Cleveland, Ohio where Michael was studying Neurology at Case Western Reserve University.

Here she was commissioned by Rev W Chave McCracken to create a series of stained-glass windows for St Paul’s, Cleveland Heights. Back in the UK, Michael returned to The London Hospital, later they had three sons and Caroline continued building windows. She also became Hon Secretary of the British Society of Master Glass Painters (BSMGP) organising lectures, talks and exhibitions with this lively organisation. As commissions increased, she worked with Goddard and Gibbs Studios designing and making windows for Portsmouth, Salisbury and Gloucester Cathedrals as well as the entire stained-glass scheme for St Barnabas, Dulwich. She also ran the Glass, Fine Art and Architecture courses at Central Saint Martin’s College of Art and Design for several years. Alumni have since created many fine works in unique and architectural glass. However, she feels that her most significant contribution to the craft has been Professor Johannes Schreiter’s Medical Science and Stained glass windows in the Medical Library at the Royal London Hospital in Whitechapel. Caroline continues to work in glass, currently completing a window for Dr Luise Parsons based on the Belladonna window, originally created for the Parlour at the Worshipful Society of Apothecaries’ Hall in Blackfriars.

The Silk Road: jade, cucumbers, spies and treasure-seekers
Dr Frances Wood
Thursday 18 May

The Silk Roads were ancient trading networks stretching from China to the West, generally assumed to have been named by the German geographer Ferdinand von Richtoven in 1877. For westerners, it was the arrival of silk in ancient Rome that prompted the name but the Chinese, transporting rocks from Khotan to Chang’an (today’s Xi’an) might have called them the Jade Roads. Crossing the deserts of Central Asia the roads passed through the
many different cultures and kingdoms that rose and fell throughout the centuries and the discoveries of archaeologist/explorers such as Sir Aurel Stein in the first years of the 20th century revealed much about long-forgotten entities such as the short-lived Tangut empire and the mercantile Sogdians who dominated Silk Road trade from the 4th century. Visiting distant desert sites such as the long-abandoned cave temple complex of Dunhuang, Stein collected more than 20,000 artefacts for the British Museum, including the world’s earliest printed book, produced in 868 AD, some 500 years before Gutenberg. Dr Wood studied Chinese at Cambridge, spent a year at Peking University as a worker-peasant-soldier student and wrote her PhD on Peking’s domestic architecture. She looked after the Dunhuang collection of manuscripts in the British Library, collected by Sir Aurel Stein in 1907, an archive of some 14,000 paper documents dating from the 5th to 11th centuries.

The (neuro-)anatomy of friendship: a multidisciplinary approach

Professor Robin I.M. Dunbar
Thursday 15 June

Friendships are a primate speciality, and have evolved to buffer us against the stresses of living in large social groups. They have a bigger affect on our psychological health and wellbeing, as well as our physical health and wellbeing, than anything else. Friendships are, however, extremely expensive to create and to maintain, both in terms of their time cost and in terms of their underpinning neurobiology. The basis of this lies in the dual process mechanism that allows primates to manage their relationships. One arm of this forms the Social Brain Hypothesis that sets a cognitive limit on the number of relationships we can have; the other is formed by the endorphin system and the way this is triggered by physical touch acting through the afferent C-tactile neural system. In this lecture, Professor Dunbar will explore the behavioural, cognitive and neurobiological bases of friendships in comparative perspective, and show how we use these as a basis for forming communities.

Robin Dunbar MA PhD DSc(Hon) FRAI FBA is Professor of Evolutionary Psychology at the University of Oxford, an Emeritus Fellow of Magdalen College, and an elected Fellow of the British Academy, the Royal Anthropological Institute, the Finnish Academy of Science & Letters and the Hungarian Academy of Sciences. His principal research interests focus on the evolution of sociality (with particular reference to primates and humans). He is best known for the social brain hypothesis, the gossip theory of language evolution and Dunbar’s Number (the limit on the number of manageable relationships). His publications include 15 academic books and 550 journal articles and book chapters. His popular science books include The Trouble With Science; Grooming, Gossip and the Evolution of Language; The Science of Love and Betrayal; Human Evolution; Evolution: What Everyone Needs To Know; Friends: Understanding the Power of Our Most Important Relationships; and How Religion Evolved.
Meetings Reports
Recent Advances in Medicine and Surgery
One-day conference held by the Retired Fellows Society at the Royal Society of Medicine, 1st December 2022

Session One
Bariatric surgery: the only cure for obesity
Professor Jonathan Barry, Consultant Surgeon, Morriston Hospital, Swansea

Expanding waistlines are a national problem leading to a spate of metabolic disease plus the risk of premature death. A bare three per cent of individuals who lose weight on a diet retain that weight loss after three years, hence the growing need for bariatric surgery or, as the speaker prefers, metabolic surgery. The statistics are frightening; two-thirds of the UK population are overweight, and 28 per cent are obese (body mass index >30). The underlying cause – impaired satiety mechanism – reflects a combination of genetic and environmental factors including the ready availability of cheap ‘fast food’. Current drugs seem to be of limited value, although the use of glucagon-like peptides (GLP-1) offers some promise. Professor Barry stressed the need for a detailed selection process for operation including psychological assessment. The usual criterion is a BMI >40 or >35 in the presence of co-morbidities, but a lower threshold may be appropriate for those at special risk including certain Asian populations. The simplest surgical procedure is the insertion of a gastric band, but problems such as slippage and erosion of the band and gastric dysmotility have led to its being largely abandoned in favour of either sleeve gastrectomy or Roux-en-Y gastric bypass.

Virtually all operations nowadays are performed laparoscopically. An extensive gastrectomy based on the greater curve and using a mechanical stapler converts the remaining stomach into a tube or sleeve; the procedure is relatively quick and straightforward and produces a 67 per cent loss of excess weight. The bypass procedure creates a small pouch of stomach that is joined to a Roux loop of jejunum; weight loss is a little greater, but the operation is more demanding and the complication rate is higher. At Swansea, the only centre for metabolic surgery in Wales, the emphasis is on early mobilisation and discharge without the need for an intensive care bed. Their mortality rate is less than 0.5 per cent, with an anastomotic leak rate of 2 per cent for sleeve gastrectomy and 4 per cent for gastric bypass.
Perhaps the most remarkable gain is the remission of type 2 diabetes in over 80 per cent of patients, which illustrates the ability of islet cells to recover when their excess workload is reduced. The speaker ended his impressive lecture by discussing ‘bariatric tourism’, that is, patients going abroad to countries such as Turkey to have a cheap operation with fewer questions asked. When things go wrong afterwards it falls to the NHS here to try and cope with the problem, often without proper documentation on what has actually been performed.

Air pollution and health
Professor Sir Stephen Holgate, Professor of Immunopharmacology, Southampton

Here followed a detailed and sobering account of another modern problem – air pollution – given by a leading international authority on the subject. Professor Holgate began by reminding us of the Great Smog of 5 December 1952, which led to some 4,000 early deaths in and around London and three times that number over the following year. It also led to the Clean Air Act of 1956, which banned the use of ordinary domestic coal. Yet air pollution remains the fourth leading risk factor for premature death worldwide, including an estimated 36,000 annual deaths in Britain from respiratory and cardiac disease. Besides harmful gases such as sulphur dioxide, ozone and nitric oxide we inhale tiny particles of soot or dust, notably particulate matter less than 2.5 microns in diameter (PM$_{2.5}$). There is a linear relationship between PM$_{2.5}$ levels and mortality levels, with low-income and non-white populations being disproportionately affected. Pollutants affect every organ in the body but especially the lungs, where they contribute to carcinoma in non-smokers as well as to asthma and chronic obstructive pulmonary disease. After maternal exposure, carbon particles can be found in the placenta as well as foetal tissues such as lung, liver and brain. The resultant oxidative stress in the foetus can give rise to developmental disorders, especially during the critical third trimester when air sacs are being formed. If the evidence of adverse effects is incontrovertible, what can be done to improve matters? Here Sir Stephen pointed to some promising initiatives.

WHO has tightened its air quality guidelines with particular regard to concentrations of PM$_{2.5}$, ozone and other harmful gases. Introduction of the Ultra Low Emission Zone (ULEZ) in London has already helped to lower pollutant concentrations in the air and seems likely to be adopted by other cities in Britain. Although pollution is often considered a specifically urban problem, rural populations are not immune; damage from ammonia contained in fertilisers is increasingly recognised. Moreover, it has been calculated that the average individual spends up to 85 per cent of their time indoors, and the home environment contains injurious chemicals derived from hairsprays, air fresheners and perfumes. There is also the potential for damp to cause fungal moulds, as highlighted by the recent death of a child in Rochdale. The speaker opened our eyes to some of the hazards faced by industrialised countries while suggesting further ways through which better air quality can and must be achieved. Although many such changes are costly, they can also prove cost-effective in improving overall health of the population.
**Carcinoma of the prostate: screening and therapy**  
Professor Roger Kirby, Consultant Urological Surgeon, London

An update on this common and often lethal disease was delivered by the President of the Royal Society of Medicine with his customary panache and slices of surgical humour. Prostate cancer affects one in every ten men and is a leading cause of death in Britain and many other countries with an ageing population. There is a genetic predisposition, which may help to explain its prevalence in individuals of Afro-Caribbean descent. Prostate cancer is strongly age-related, and it is also linked with obesity. Initial diagnosis still depends on raised serum level of prostate-specific antigen (PSA), a glycoprotein secreted by the gland which liquefies semen after ejaculation. Routine PSA measurement remains controversial because of high false-positive rates. The test is sometimes dismissed as a ‘Promoter of Stress and Anxiety’, yet to-date no other tumour marker has proved superior in routine clinical practice. Professor Kirby described some important developments in the management of prostate cancer, both diagnostic and therapeutic.

Imaging techniques include computed tomography (CT), positron emission CT to look for metastatic disease but especially magnetic resonance imaging (MRI) to display the local extent of tumour and its spread beyond the capsule of the gland. The clarity of the MR images allows accurate targeted biopsies, with the transperineal route being increasingly preferred to the old transrectal route. Besides confirming the presence of cancer, biopsy specimens allow histological grading of the cancer, using the Gleeson score, which helps to predict the likely behaviour of the tumour and avoid overtreating the many patients with a good prognosis. Robotic prostatectomy has transformed the operative approach to laparoscopic prostatectomy. Improved visualisation and instrument control help the surgeon sitting comfortably at a console to reconstruct the urethra and also to spare nerve bundles that subserve continence and sexual function. The speaker covered alternative therapeutic modalities that are available in particular circumstances: radical radiotherapy using a larger targeted dose, hormonal manipulation to block androgen receptors and chemotherapy with docetaxel for metastatic disease to bone or elsewhere. As for the future, the hunt is on for a more specific tumour marker to use in screening the population. Lastly we learned about prostate specific membrane antigen (PMSA), a protein elaborated to excess by malignant cells, which can be labelled with radioactive isotopes to help identify metastatic deposits and potentially also to treat those that are resistant to conventional therapy.

Robin Williamson

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**Session Two**  
**Acute Intervention for myocardial infarction**  
Professor Nikita Patel, Consultant Cardiologist, East Sussex

Professor Patel, who is Chairman of the Academic Board at the RSM, gave an update on myocardial infarction and its treatment.
on an emergency basis. For many years, coronary heart disease has been the leading cause of death in the world, but it has recently been overtaken by Covid-19 and Alzheimer’s disease. At the same time improvements in management have lowered the overall mortality rate of myocardial infarction in the UK from 15 to 5 per cent. The mainstay of diagnosis remains ST elevation on a 12-lead electrocardiogram, but ST changes can be seen in other conditions such as pericarditis. Moreover, partial blockage of a coronary artery can cause an NSTEMI or non-ST-elevation myocardial infarction in which electrical changes are minimal. Although cardiac troponins are sensitive and specific markers of myocardial damage, false-positive elevations can be a problem. In equivocal cases echocardiography can confirm the diagnosis of myocardial ischaemia or infarction by showing abnormal wall motility in patients with or without chest pain. Once the diagnosis is established traditional treatments have included pain relief, nitrates and oxygen supplemented by thrombolytic therapy, but emergency angioplasty produces better results. There are 58 centres in the UK that offer an acute angiographic service. The aim is to relieve the arterial obstruction within two hours of an ambulance being called or within one hour of the patient reaching hospital. Inpatient stay is generally less than 48 hours. Angioplasty should be followed by antiplatelet drugs, either aspirin or clopidogrel; clopidogrel is less effective than aspirin but safer in terms of the risk of bleeding. The coronary arteries are usually accessed via the radial artery at the wrist, which is more comfortable for the patient than an approach via the femoral artery in the groin. Drug-eluting stents can be placed to help prevent cell overgrowth and re-thrombosis. Intracoronary imaging is now possible using intravascular ultrasound to check on the completeness of the angioplasty and/or optical coherence tomography, which produces excellent pictures of the arterial anatomy. In addition, physiological measurements can be made via the coronary artery catheter to determine pressure and flow through the stenosis. Less invasive, CT can be used to measure coronary artery diameter and avoid the need for some angioplasties. Statins have been shown to improve the stability of atheromatous plaques and reduce the risk of rupture. Lastly, the subset of patients with cardiogenic shock from myocardial infarction have a high mortality rate of 60-70 per cent. Here the use of a balloon pump placed within the aorta or even inside the left ventricle can improve flow and help to prolong life.

**Malaria**

Professor Peter Chiodini, Consultant Parasitologist, London School of Hygiene and Tropical Medicine

At the 2021 Recent Advances meeting we had a talk on dengue fever, and this year it was the turn of another mosquito-borne scourge of the tropical world, namely malaria. Professor Chiodini described the two most important malarial parasites, *Plasmodium vivax* and the more dangerous *Plasmodium falciparum*, which causes cerebral malaria and accounts for many of the deaths. We were reminded of the life cycle of the malarial parasite. The female *Anopheles* mosquito ingests the parasite in a blood meal from an infected person and transmits it by biting another
individual. The injected sporozoites are rapidly taken up by the liver, where they develop into schizonts. Eventual rupture of the liver cell releases thousands of merozoites into the circulation to destroy the red cells that they infect and cause the clinical symptoms of malaria. In *P. vivax* and *P. ovale* (only) some of the parasites termed hypnozoites remain dormant in the hepatocytes for months or years before giving rise to relapsing malaria in the absence of a new mosquito bite. Placental malaria can cause anaemia, foetal growth retardation or even stillbirth of the foetus; primipara are usually affected because the mother develops subsequent antibodies. Britain sees 1,600 imported cases of malaria per year, which exceeds the total for most other countries in Western Europe. The majority of affected patients are returning from visiting friends and relatives in tropical countries; we learned, for example, that one million British people visit India every year. In 2020 the global figures for malaria were 241 million cases and 627,000 deaths. About 80 per cent of cases arise in Africa, where *P. falciparum* is the dominant organism; South America and South-East Asia are the other endemic areas. Sickle cell disease conveys some protection against the parasite.

Two countries are responsible for 40 per cent of all the deaths, Nigeria and the Democratic Republic of Congo. Prevention of malaria includes the use of mosquito nets at night and insecticide creams by day, together with prophylactic drugs such as primaquine and mefloquine; a new agent tafenoquine kills the hypnozoites but has not yet been licensed. Since malaria is only one cause of a febrile illness, rational treatment requires a parasitological diagnosis, that is, identification of the parasite in a blood film. Although current malarial vaccines can only protect 30 per cent of individuals, the prevalence of the disease in some endemic countries underlies the huge potential scope for this form of prophylaxis.

**Session Three**

**The evolving world of evidence**

Professor Gillian Leng CBE, Dean of the Royal Society of Medicine

Professor Leng is also a former CEO of NICE, and her talk on the evolving world of evidence, well demonstrated that her career has allowed her to develop an enquiring mind, so that she often feels an urge to ask questions across the field of medicine and to query why we do certain things. Professor Leng’s involvement with the Cochrane Collaboration Foundation has helped her greatly as it has many other research minded doctors. The first randomised controlled trial she described was conducted in 1747 for the study of scurvy, but it was some time before its positive findings were adopted. Progress in the field of trying to implement research evidence in the UK included an MRC common cold study in 1943, and a study on the use of Streptomycin to treat TB was initiated in 1946. Building on this early work the concept of randomised controlled trials had become established by the early 1980s. The concept of meta-analysis was encouraged to try to formulate the best correct answer which in turn lead to the concept of guidelines, as evidence can in turn be used to change practice if appropriate.
We need to move to feeling more welcoming to the culture of accepting evidence. Thus, the concept of clinical guidelines has had mixed response from the profession and inevitably some replies from Colleges suggest changes are not always gratefully received. Advantages of viewing a number of trials relating to a study makes it more likely that the right answer is obtained, but the issue of giving recommendations on clinical practice can be emotive.

Getting the various Colleges to encourage implementation of guidelines has been seen as a step forward. It may take up to two years to arrive at a position to suggest publishing a guideline. The possibility of making a controversial statement is always there and avoiding uncertainty is challenging. Ultimately one is trying to stimulate change and as much as is possible to be prepared for accusations of uncertainty which makes accepting change challenging and indeed contestable. Evidence should be seen as a dynamic issue. The formation of a committee should be multi-professional and should also involve patients; every attempt should be made to avoid conflict of interest. The ultimate goal of attaining pure, clean knowledge to support a medical statement may set the bar too high.

Artificial Intelligence is helping to analyse data which at times can be enormous. Populations on which a research team might often base its guidelines may be seen as different from those met by the clinician in practice. Data on an issue may vary considerably and a research team becomes challenged to find the important answer. Professor Leng described analysis on the use of antibiotics which revealed choice was not compatible with risk. Compliance by patients prescribed statins has been variable with many not taking them as directed and thus diminishing benefit.

Challenges of the recent Covid pandemic have focused minds of clinicians globally. Best practice relies on three issues, motivation, capability and opportunities. Living guidelines have been internationally accepted and may require regular updating.

The RSM continues to focus on high quality Continuing Professional Development allied to its educational programme. Conflict of interest must always be checked and it is incumbent on speakers to either list their interests prior to an event or at the beginning of a lecture. Any funding sources should be openly revealed and information kept up to date. They should use their best endeavours to be certain the material presented is current, appropriate and recent. Clinicians may be concerned at the treatment interface as to the accepted approach to a challenging situation. It is important to keep a degree of perspective and see clinical decision-making being supported by ‘guidelines not tramlines’. A situation may arise when one is challenged to override a guideline.

The GMC advice to a doctor includes that reference has been made to a guideline prior to making an alternative decision. This would ensure a valid reason is made for a decision ideally having been discussed with the patient with clear documentation supporting the change. Guidelines may be appropriate in some 80 percent of decisions. Questions included the speaker being challenged regarding the position of NICE on prophylactic penicillin prior to dental extraction, and a line of questioning related to worsening situations...
over primary care access. Professor Leng defended the concept of NICE which compares well on an international basis. It tries to maintain a robust process of decision making but will always be subject to scrutiny.

**Gaucher and Parkinson Disease; the Janus of GBA1 and the beginning of the end?**

Professor Tony Schapira, Head of the Department of Clinical and Movement Neurosciences at University College, London (UCL) and Professor of Neurology, at the National Hospital and the Royal Free London Hospital

The main thrust was to aim to explain the modern approach to treating Parkinson’s Disease by targeting genes of affected individuals. The talk related heavily on the desire to target the GBA1 gene. Deficiency of gene function may be responsible for development of two entirely different diseases. A condition which took his name was described 140 years ago by Gaucher in France when he was a medical student. It results in one of the most common lysosomal storage disorders. Biochemical studies led to the first treatments of the condition involving enzyme replacement and identification of an increased prevalence of Parkinson’s Disease in patients with Gaucher’s took another one hundred years to highlight. Studies in Israel some 26 years ago raised awareness to the link and Ashkenazi Jews have a notable increase in birth incidence of Gaucher’s. The disease occurs when a patient inherits two defective copies of the GBA1 gene that codes for glucocerebrosidase and leads to enzyme deficiency. The result is an accumulation of the protein in cells and certain organs. This in time led to an observation that parents of children with Gaucher’s appeared to have an increased tendency to develop Parkinson’s. The area of biochemical studies and identified protein deficiencies is notably allied to a cluster of neurological diseases. Gaucher’s may present in infancy or in young adulthood. Some individuals remain relatively asymptomatic. Adult patients have an increased risk of cancer, notably myeloma. Initial presentation may include a range of potential multisystem disorders – skin bruising, fatigue, anaemia, low platelet count and liver and spleen enlargement. Management is usually under a haematologist and involves enzyme replacement therapy. The patient is given a drug every few weeks and effectively becomes cured. The link between Gaucher’s and Parkinson’s has been confirmed by a multicentre Worldwide study.

The same gene mutations result in completely different diseases. It has been estimated that those carriers of abnormal GBA1 gene have a 20 to 30 percent chance of developing Parkinson’s. It can be described as an autosomal dominant with variable penetrance. Global studies indicate that 10 to 15 percent of Parkinson’s patients have the abnormal gene. It is the commonest variant in genetic studies. In Ashkenazi Jews 25 percent have the abnormality. The challenge to research is to identify why two diseases act in such dissimilar ways and how to identify potential new lines of treatment. Research on patients with the potential to develop Parkinson’s have been noted to have a reduced sense of smell. This
change could occur some 10 years before identified suspicious clinical signs. This led to the observation that these patients were developing subtle motor symptoms, early cognitive decline, rapid eye movements and a tendency to depression. Onset of these patients developing clinical Parkinson’s was a little earlier than those not carrying the genetic abnormality. Their average age was around 55 years as opposed to 60 in those patients not carrying the gene mutation. There were many similarities between the two groups and the pharmacological response was the same.

Brain scans have failed to reveal any difference between the two groups. The challenge is to identify those patients who are going to develop Parkinson’s Disease. The brain cells which die and create neurological signs are in the substantia nigra. The surviving cells show Lewy bodies. They are a sign of neuronal degeneration and alpha – synuclein is a major component. The challenge is to try to take out this aggregated protein. Post mortem research focused on the brains of patients who have died with Parkinson’s. Both patients with the gene mutation and those without had considerable reduction of the substantia nigra as a result of enzyme deficiency. Complex biochemical pathway studies reveal a reciprocal arrangement when the enzyme is reduced. This has been a great step forward and the challenge is to relate treatment to the general Parkinson’s population.

The GBA pathway is central to both groups developing the disease. The challenge that remained was to find a pharmacological chaperone which could attack the enzyme at the lysosome level. An enormous amount of evidence has accumulated in the recent past. Professor Schapira outlined the range of possible interventions to attack the GBA pathway. He discussed a drug which has been around for some fifty years. Abroxol has enjoyed years of use as a cough suppressant. Research revealed that it is an excellent chaperone of GBA1 protein. It enters the damaged lysosome allowing it to turn back on lost activity. It has shown a very promising portfolio of symptom improvement in animal studies over some eight years. Early human studies have revealed promising results. A major study on the use of Abroxol in patients diagnosed with Parkinson’s is to commence next year led by a team at UCL. The challenge will be to see if the drug slows down the progress of Parkinson’s disease and involves a two-year study on over 300 patients. The fact that a finding made only some 13 years ago supported by intense studies on biochemical pathways has resulted in a possible major breakthrough to help patients.

Chair of Session 3, Dr David Murfin
Self-driving cars, are we nearly there yet?

On the 17th of November, Professor Nick Reed introduced us to the idea of whether self-driving cars are an imminent possibility. Self-driving cars have been promised for many years but we are yet to see the rapid proliferation of this technology that was once expected. In helping us understand the challenges in the journey towards them, Professor Reed described their history, which is rather longer than one might have anticipated. Prototype self-driving vehicles were trialled in the UK in the 1950s, 60s and 70s, however, their emergence as a realistic proposition was really established with US military research in 2004, 2005 and 2007, where computing and sensor technologies were installed in vehicles to make them capable of completing a range of driving tasks without a human driver. This kicked off a scramble amongst car manufacturers, technology companies and venture capitalist investors to create vehicles capable of self-driving on regular roads.

Prof. Reed highlighted safety as one of the major objectives for the companies and investors to develop self-driving industries. Playing the hype around this possibility, he showed a headline from 2016 that suggested hospitals may run out of transplant organs because self-driving cars had reduced the number of car crashes! It was explained that such accidents have contributory factors which typically fall into one of three categories – human factors (errors, lapses or violations by drivers or other road users), vehicle factors (faults with a vehicle for example, tyre blowouts, brake failure and so on or environmental factors (issues with the road infrastructure - potholes, black ice and more). Self-driving vehicles offer the opportunity to address the most frequent contributory factor in collisions – those involving the mistakes or misjudgements of humans. Unlike human drivers, automatons are not subject to fatigue, distraction or after intoxication and would have a continuous 360-degree view around the vehicle, therefore having greater awareness of a traffic situation. However, this safety benefit for self-driving vehicles has yet to be proven. Nick cited two high profile cases in the US that have somewhat curtailed enthusiasm around self-driving technologies. The first was in 2016 when the driver (Joshua Brown) of a Tesla operating in ‘autopilot’ mode, did not respond to alerts to resume control and continued on, beneath a trailer crossing the highway, resulting in catastrophic fatal injury to

Subsequent investigation by the US National Transportation Safety Board highlighted that the design of the system allowed drivers to become complacent and that this was likely to have contributed to the accident. The second was in 2018 and involved a self-driving vehicle being tested by Uber. The safety driver at the controls of the car was inattentive and did not notice a pedestrian (Elaine Herzberg) who was pushing her bicycle across the carriageway. The automated driving systems had difficulty recognising this type of hazard and failed to brake in time to prevent fatal collision. In both incidents, there was lack of...
appreciation of how automation of driving tasks changes the ways in which humans might behave – sometimes with tragic results. Professor Reed quoted experiments from the Applied Psychology Unit at the University of Cambridge, which was established to work on the new fields of ergonomics and human factors.

In 1948, trials examined for how long participants could remain attentive at a relatively boring task similar to sonar screens on submarines. It was found that performance deteriorated markedly after ten minutes. Nick asserted that if a self-driving car requires the person sitting at the controls to resume attention after a period of automated driving, it is difficult for them to regain awareness of the driving situation at short notice. If we expect safety to improve, Professor Reed described the level of performance we need self-driving vehicles to achieve.

Considering only collisions involving cars and just those where human error was not a contributory factor, Department for Transport statistics indicate that there were 134 fatalities in 2019 for 278 billion miles driven by cars. This means one fatality for every 2 billion miles driven. For a company developing self-driving vehicles, it would be incredibly costly and impractical to try to prove that their vehicles could exceed this level of safety performance using real world driving data. It has been suggested that simulation will be a useful tool to help address this challenge, but this raises the question of simulation validity – whether virtual tests are sufficiently realistic to be able to confirm safety in the real world when lives are at stake. Professor Reed’s answer to the question ‘are we nearly there yet?’ was ‘it depends’! The futuristic vision of everyone stepping from their front door into a self-driving vehicle that can take them anywhere they wish to go is many years if not decades away. However, over the course of this decade they will start to emerge. This is likely to be in strictly defined areas and probably involving movement of goods rather than movement of people, but gradually they will become part of everyday life, with the potential to contribute to a future where transport is safer, more accessible and more sustainable. Let’s hope he is right.

Michael O’Brien and Nick Reed
Professor Nick Reed MA(Cantab) DPhil (Oxon) Founder of Reed Mobility and Chief Road Safety Advisor at National Highways

appreciation of how automation of driving tasks changes the ways in which humans might behave – sometimes with tragic results. Professor Reed quoted experiments from the Applied Psychology Unit at the University of Cambridge, which was established to work on the new fields of ergonomics and human factors.

In 1948, trials examined for how long participants could remain attentive at a relatively boring task similar to sonar screens on submarines. It was found that performance deteriorated markedly after ten minutes. Nick asserted that if a self-driving car requires the person sitting at the controls to resume attention after a period of automated driving, it is difficult for them to regain awareness of the driving situation at short notice. If we expect safety to improve, Professor Reed described the level of performance we need self-driving vehicles to achieve.

Considering only collisions involving cars and just those where human error was not a contributory factor, Department for Transport statistics indicate that there were 134 fatalities in 2019 for 278 billion miles driven by cars. This means one fatality for every 2 billion miles driven. For a company developing self-driving vehicles, it would be incredibly costly and impractical to try to prove that their vehicles could exceed this level of safety performance using real world driving data. It has been suggested that simulation will be a useful tool to help address this challenge, but this raises the question of simulation validity – whether virtual tests are sufficiently realistic to be able to confirm safety in the real world when lives are at stake. Professor Reed’s answer to the question ‘are we nearly there yet?’ was ‘it depends’! The futuristic vision of everyone stepping from their front door into a self-driving vehicle that can take them anywhere they wish to go is many years if not decades away. However, over the course of this decade they will start to emerge. This is likely to be in strictly defined areas and probably involving movement of goods rather than movement of people, but gradually they will become part of everyday life, with the potential to contribute to a future where transport is safer, more accessible and more sustainable. Let’s hope he is right.

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Putin’s war in Ukraine: an imperial fantasy

Thursday talks are unfailingly worth listening to; on February 16th Shane O’Rourke (who teaches history at the University of York), was outstanding. Even the slides were a delight. In essence we heard that the Ukraine war has to be seen in the context of Russian imperialism, dating back many centuries. Putin, an old man in a hurry, is looking, along with the Moscow élite, to Peter the Great and Catherine the Great as role models. Neither NATO expansionism nor the need to support Russian speakers in Ukraine are significant factors. By the 17th century the Russian imperial state was immense, reaching the Pacific coast, and by 1867 Alaska was Russian. This expansion was in some ways no different from that of European empires - a grab for land, the desire to bring civilisation, exploitation. But there were specific characteristics to the Russian endeavour, notably Mongol roots; Moscovites saw themselves as the heirs to Genghis Khan. Putin is now obsessed by an imaginary unity, harking back to the days when Ukrainians were called ‘Little Russians’, when their language (described by O’Rourke as no more similar to Russian than Dutch is to English) was suppressed. As the commentator Brzezinski concluded ‘with Ukraine, Russia automatically becomes an empire’. This was also a time when Stalin’s attempt to collectivise farms led to Ukrainian opposition and to five million deaths from starvation. Putin is a prisoner of his past; as a past KGB officer, paranoid, constantly looking for conspiracy, totally failing to acknowledge that people can exercise their own agency. He has a particular hatred for the UK. But Putin is not alone, the Russian élite sees a democratic Ukraine with links to Europe as an existential threat to itself. He is not, incidentally, anti-Ukraine, his fantasy is of one sole people. He really did think that his troops would be welcomed by the Ukrainians, hence the phrase ‘Special Military Operation’ rather than war or invasion. The ironic result of his invasion is a strengthening of NATO and a deep hatred of Ukraine among Ukrainians today, that will take two to three generations to dissipate. With media being tightly controlled, the Russian people are now presented with the story of a colonial expedition, in practice aimed at the destruction of a state and its people.
Local art, language and education are all in Putin’s sights, even food production has been weaponised. A chilling example of the brutality of the war was a Russian television presenter who announced that children who opposed Russia should be drowned! Putin makes much play of ‘denazification’, a word that actually has no meaning other than being a reference to anyone who opposes the Russian aims, in his sense.

There were numerous questions from the audience, both in-house and watching by Zoom, sadly more than time allowed for. One was on Ukraine having given up its nuclear capacity a few years back. This is now seen as a mistake, but the questioner was promised that in so doing Ukraine’s borders would still be safeguarded. A further question led to the point that the war has brought catastrophic damage to Russia. During its first couple of weeks, it is just possible that accepting Crimea as Russian might have ended the conflict but now it is by no means certain that either side would accept this. Another questioner pointed out that a difference between European and Russian history is that the former experienced a Reformation and a Renaissance while Russia had neither. There were actually some examples of a Russian Renaissance but their religion has no place for pluralism. The Church is closely aligned with the State and is no more than ‘a pagan cult worshipping the god of war’. Did we miss a trick when Gorbachev was in power? Perhaps, to some extent, but Putin resented criticisms of human rights abuses in Chechnya, and once he was in place rupture was inevitable. There was an ominous conclusion; the war is part of a larger pattern, while Putin remains in power he is a threat to us and to the rest of Europe. The Baltic States and Poland are next on Russia’s list.

Richard Lansdown
External events

Visit to Linley Sambourne House and Leighton House Museum

On Monday 28th November 2022, Sue Weir organised a visit for RFS Fellows to Sambourne House, 18 Stafford Terrace in the morning, and to Leighton House, 12 Holland Park in the afternoon. Both houses were popular in the nineteenth century as meeting places for Victorian artists and writers. Expert guides in each house described the family history of the owners as well as architecture of each house, design of wall & floor coverings, furniture and collections of paintings, photographs, statues, vases and other artefacts. Archived letters and other documents were on display. Both houses are now in the care of the Royal Borough of Kensington & Chelsea.

Sambourne House was the home of Punch illustrator, Edward Linley Sambourne. He moved into this townhouse in 1875 when it was almost new. After Sambourne’s death, it passed to his bachelor son Roy and then to Roy’s niece Anne (mother of Lord Snowdon, Princess Margaret’s husband). Foundation of the Victorian Society in 1957 by Anne continued preservation of the house to what it had been when lived in by Linley Sambourne. It was opened to the public in 2022. The house contains decorative stained glass panels &
windows, a fine selection of William Morris wallpapers and a collection of blue and white porcelain, as well as many other articles reflecting late Victorian taste and style. We were also shown the steep-sided marble bath which Sambourne used - for developing his photographs! Leighton House was the combined home and studio of the painter Frederick Leighton (President of the Royal Academy 1878 - 1896). The house has been open as a museum since 1900. Some parts have a Venetian theme but it is particularly noted for its magnificent Arabic hall extension, with oriental wall tiles, a large ‘bath’ area and a fountain. This area has been featured in various film and television programmes. The house has been extended several times and includes a winter studio and a top-lit picture gallery. The museum section contains some of Leighton’s most notable oil paintings as well as his sketch books, albums and watercolours. There are also paintings by the pre-Raphaelites including Millais, Burne-Jones and Watts. An excellent morning and afternoon, with lunch being taken between venues. Thanks so much Sue!

David and Elizabeth Shanson.
It always depends on which way a picture is painted, and of course 1492 was a great year for Spain, and its married rulers Ferdinand of Aragon and Isabella of Castile. For us in northern Europe it is the year in which Columbus crossed the Atlantic and also when the Spanish finally drove out Moslem occupiers of Andalusia. However, this account is about the previous days of southern Spain, particularly its major city Cordoba. Moslems had invaded the Iberian peninsula (from Africa) between 711-718 and had initiated a civilisation there, different from the life and times of northern Europe, but cultured and educated in its own way. The term Andalusia (Al-Andalus) here refers to areas ruled by Moslems, initially the Umayyads. The learned north African élite had brought with it a wealth of ancient and historical literature, some of it still in the original language, some already translated into local vernaculars. Ultimately, to eventually reach our modern ears, texts needed then to be translated into Latin. The Umayyad dynasty of caliphs ruled Cordoba until 1031AD a period of intellectual development, consolidation of ancient learning and of new research. Rahman I, heir to the Umayyad throne of Damascus, had escaped from there under threat of death from rival Abbasids in 755, and eventually
found a home in southern Spain. He settled in the already gracious town of Cordoba, thus transferring the Umayyad dynasty from Damascus to Cordoba. His heirs - Rahman II his great-grandson (born 792), followed by Muhammad I (born 823) (who also supported gathering ancient texts from all over the then-known world), Rahman III (born 929) and his son Al-Hakam II (born 961) ruled in the eighth, ninth and tenth centuries, all enthusiastic promoters of scholarship. Although the Umayyad caliphate fell by infighting, Moslem rule prevailed in Andalusia for over a further 400 years.

Cordoba is situated on the river Guadalquivir (derived from the Arabic ‘large river’), and already had a long history before Islam arrived. Romans had invaded the Iberian peninsula after their defeat of Carthage in 241BC, thus, following extensive previous trading settlements of Greeks and Phoenicians. When Rahman I arrived (although rule by Visigoths had intervened), there was still the sturdy Roman bridge and multiple Roman remains in various stages of use, decay or reuse. The Visigoth cathedral of San Vicente had deteriorated, but in 784 Rahman I commissioned a huge new mosque La Mezquita, to be built on its site. In the fashion of Islamic architecture, the mosque has numerous multiple internal arches, supported by (not particularly matching) ancient columns from previous local Roman structures. This fabulous building, now incorporating a cathedral (yes a glorious cathedral!) in its centre, is still a major site in the city.

In these early middle ages publications of classical research and practice of medicine travelled from ancient times and places, to the boundaries of east to west, north to south, in mediaeval Andalusia. Although the ‘Eastern Roman Empire’, Byzantium, centred on Constantinople was still recognisable up to the fifteenth century, fall of western regions of the Roman Empire had left western Europe in political disarray. Emergence of Islam in the 7th century took advantage of the political void in the Middle East and North Africa, Umayyads looked west but the Abbasid component set up a caliphate in Baghdad in the mid 8th century. In scholarly terms, intellectuals of Constantinople were active in copying and transcribing ancient texts, but it was Baghdad that was the centre of advanced learning, and encouraged translation of works into Arabic and extensive copying of texts for distribution to secular libraries (much later, English scholars Daniel of Morley and Adelard of Bath, brought further translated texts to England).

Classical Greek philosophies originate from around 400BC, and until the 8th century AD, had wafted and waned from their places of origin, often via the great early libraries of classical Alexandria and later Baghdad, to disparate centres of learning, losing prominence due to local political situations. Many originals and copies of these went east and were translated into eastern languages, then back into Latin, largely well before 1492 when Moslem rule ended in Spain. Written on scrolls, particularly in Greek, their revelations came to be lost or destroyed. Happily, early scripts were often copied (by hand) multiple times before being translated into local vernaculars. Thus today (if not exact texts from ancient times) and although diminished due to historical vandalism, we have some good specimens and copies – but their transit to us encompassed passage through places and languages not initially conceived of. Few pieces of original writings of Socrates (470-399BC), Hippocrates (460-370BC), Aristotle (384-322BC) Plato (348-347BC) or Archimedes (287-212BC) reached Cordoba,
but portions or early copies of Euclid (~300BC (Greek, mathematics, *The Elements*, written in Greek but translated into Latin *via* Arabic) and Ptolemy (not related to pharaohs) 100-170AD (Greco-Egyptian, astronomy, *Almagest* written in Greek but translated into Latin *via* Arabic) did. Here, ethnic diversities (and linguists) were tolerated by the Umayyads, and translations were undertaken. Ancient texts were not just venerated and translated in Cordoba, based on the literature available, they were used to make it also a centre of medical research, practice and development.

**Crucial ancient texts that reached Cordoba**

*De materia medica* - in Arabic

*De materia medica*, Dioscorides 40-90AD, a Greek officer and physician. Written in Greek, translated into Arabic, then into Latin.

This book is a fully illustrated pharmacopoeia of medicinal plants (plus some animal and mineral components), and examples of medicines that can be obtained from them. It was NEVER rediscovered as it has never been out of circulation, in one language or another. It was a basic text used by medics and apothecaries for around 1,500 years until studies in the Renaissance expanded learning in its area. A number of manuscripts and even early printed versions (post 1440) of *De materia medica* still survive.

*Corpus of multiple medical publications*, Galen 129-216AD. Galen was Greek, but became a Roman citizen and practiced mainly in Rome. Galen published maybe as many as 500 treatises (sadly many lost) on his exceptionally wide knowledge of research, treatments and observations. Even in his own time Galen was hugely famous as a physician, surgeon and philosopher (bearing in mind that he never hid his own light under a bushel). He was one of the most accomplished of all medical researchers of antiquity, influencing development of various disciplines including anatomy, physiology, pathology, pharmacology, and neurology, as well as philosophy and logic. Developments in medicine during and after the Renaissance often overcame his writings, however, he was the central author on medicine up to that time. Although working in the Roman Empire, he wrote in Greek and originally his manuscripts were not translated into Latin. His work is a prime example of the wanderings of crucial medical texts before their return to Europe, and finally being translated into Latin, from other languages (including Arabic) and being distributed widely.

*Kitab al-Tasrif*, Abu Al-Qasim Khalsa ibn Abbas Al- Zahrawi (Latinized to Albucasis) 936-1015AD. Albucasis was born near Cordoba, and wrote in Arabic, later translated into Latin.

The treatise contains Albucasis’ detailed information concerning a wide variety of illnesses, injuries, medical conditions, treatments, and surgical procedures. It is even more fascinating as it describes in detail (with pictures) over 200 different surgical instruments of his time, and their uses.

Albucasis was clearly a very keen surgeon, and developed a wide variety of new methods of surgery, some of which were still acknowledged up to almost modern times. He considered surgery to be the highest form of medicine, although only to be practiced after mastering all other branches of the discipline. An example of this book and accurate sketches of the surgical instruments, is owned today by the Calahorra Tower Museum in Cordoba.
The Canon of Medicine, Ibn Sina (Latinized to Avicenna) 980-1037AD. Avicenna was Persian and wrote in his vernacular as well as in Arabic, later translated into Latin.

Avicenna’s Canon is said to have originally consisted of around 450 pieces of work, although only 240 have survived to this day, including 150 on philosophy and 40 on medicine. In addition to the Canon of Medicine, his second most famous book is The Book of Healing. These two became standard medical texts at many mediaeval universities and remained in use up to the 17th century. Avicenna was one of the most significant physicians, astronomers, philosophers, and writers of the Golden Age of Islam and the father of their early modern medicine. He was a true polymath and also wrote widely on astronomy, astrology and poetry.

Cordoba fell 1031, and under the influence of conservative Islamic theologians, its scientific and medical greatness came to an end. By the 11th and 12th centuries the main centres of translation of texts from Arabic (not necessarily directly) to Latin became Salerno and Toledo; Constantine Africanus in Salerno, Plato of Tivoli and Gerard of Cremona in Toledo, being the most prolific. It is said some was performed by pairs of linguists working together, one translated from Arabic into the vernacular and spoke it to his partner, who then wrote it in Latin. Concerning Gerard, an Arabic speaker known only as ‘Ghalib’, worked in the scriptorium beside him. The complex work of relating great ancient classical philosophers into Latin was not straightforward, however, the above is a brief record of how the mediaeval bridge began.

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Retirement is a launch-pad which despatches us on a trajectory whose course is that of the standard steep learning curve, as we embark upon life’s ‘third age’. The new-found freedom enables us to dust off and evaluate our store of wit and wisdom in preference to that of the mere technical know-how which has steered us safely through the rocky seas of an arduous, if fulfilling, professional career. Thus equipped, we can subject our grandchildren, or any other readily available captive audience, to endless anecdotes to entertain them, to educate them, and most importantly, to enhance our newly wilting self-esteem.

Sadly, this store of wisdom inevitably becomes depleted in the fullness of time, the files become corrupted, and the voice, croaky and readily fatigued, so one is forced to have recourse to the pen and notebook, or, if both have mysteriously been misfiled somewhere, to the laptop and the keyboard in order to dredge the dimming memory for our most inexhaustible resource – memorable patients.

Do you remember 1985? In the new NHS invented by Margaret Thatcher and Kenneth Clarke, administrators, who had generally tried to do what the doctors wanted, were replaced by managers, who tried to do what the politicians wanted. The new CEO of my hospital, in 1985, was unfamiliar with the world of medicine. For a start, he didn’t like doctors, so he was doomed to be unhappy in his workplace. He was an ideologue, and one of the first really stupid ideas he hatched was abolition of the staff canteen in favour of one
open to the population at large who wandered through the hospital and into the Food Court (yes, that was another really stupid idea). The first official complaint was on his desk within a fortnight. ‘I had just come from the ward’, wrote Mrs Bloggins, ‘where the doctor had given us some terrible news about all the scans and things my Bert’s had done since he’s been in there. And here was the same doctor, at the next table to us at lunch, laughing and joking with the rest of the staff. I thought it was disgusting!’ Sorry, Mrs Bloggins, I might have said, stuff happens. Doctors are like everyone else, they find things to laugh about in their day-to-day lives, and those things often involve other people, and that does not mean that we find other people’s suffering and sorrow remotely funny – but there are quite a lot of things about patients which can be funny when viewed in isolation from the context of their illness. The CEO didn’t see it like that, and wrote back to say that he would investigate her complaint and make sure it never happened again.

The first time I discovered the funny side of medicine, was about three weeks into my very first house job. Someone needed to speak to the real Mrs Bloggins (the one mentioned above was totally unrelated biologically, geographically, or socially to the real one but the names of more recent patients get blurred by the sheer numbers who came through the department). The senior registrar had kindly volunteered me for this task and I was either too confident, or perhaps too lacking in confidence, to suggest that it might be helpful if I could be present on one occasion when an experienced clinician was breaking bad news to a close relative, before going solo. That evening, visitors’ hour found me ensconced in Sister’s office with a disconcertingly dry-eyed Mrs B. ‘I’m very sorry to have to tell you that it’s spread very widely’ I told her. ‘It’s not just in his colon now, but it’s spread to his liver and his lungs’. We lacked today’s comfortable reliance on scans, but evidence from chest x-rays and examination of the abdomen, supported by the arrogance of youth, emboldened me to blunder on. ‘I’m afraid that the best we have to offer now is to keep him comfortable, but we’ll certainly do everything we can to make sure he doesn’t suffer’. She digested this information in silence for a few minutes, and then looked straight at me as if daring me to argue. ‘He’s got a wonderful strong constitution’, she declared with pride – ‘I’m sure he’ll shake it off’.

It was clear that my carefully rehearsed words had had no effect whatsoever, and that no answer of mine would establish any meeting of minds. She insisted that he return home where she could feed him up and restore him to health, and a couple of days later we said our farewells to Mr B, who was certainly looking more at peace than he had during his stay with us, but how many days or weeks it was before his wife’s confidence in his indestructability was inevitably shattered, we will never know.

Those were the days before physicians felt obliged by necessity to interest themselves in those aspects of their patients’ lives which they were powerless to influence favourably, notably their domestic circumstances. It is a matter of some surprise to recall that when we were taught, as medical students, how to take a history, the ‘social history’ was
fitted in somewhere after ‘family history’ but was usually forgotten because nobody ever asked. In any case, the only staff member who needed to know was the Lady Almoner, a person whose earnestness and benevolence gradually mutated into brusque efficiency as she evolved into the Social Worker. Geriatric Medicine, like most medical specialties, is rather more a language than an academic discipline, and this part of the patient’s history is generally expressed in a single question – ‘Who’s at home?’.  

The answer, as provided by almost every eighty-year-old gentleman I interrogated during my years as a consultant, was equally formulaic. ‘No one…’ is the initial response, followed by the sudden guilty awareness of the equally aged female occupant of the other chair in the consulting room, ‘…only the wife’. The practice of inviting the nearest and dearest to participate in the consultation certainly helps to complete the social history, but often at the expense of prolonging the interview. ‘How long have you been noticing this pain in your tummy?’ invites the response ‘About a couple of months, I suppose’ – which your pharmaceutical company ball-point can neatly scribble down as ‘Duration 2/12’ until it is amplified by a helpful intervention along the lines: ‘Well it first came on much longer ago than that, didn’t it, but wasn’t really a pain, as such, was it, dear, until the Christmas before last, and then you had it ever so badly that I quite thought I was going to lose you and they had to rush you to hospital…’ Pharmaceutical ball-point pauses politely at this critical juncture in the HPC (History of Present Complaint), and then inserts ‘(±)’ after the ‘2/12’.  

During my first few years in the post I was informed rather sharply on more than one occasion that I was much too young to be able to understand the sufferings of older people. After a while, the patients stopped doing that, and after a few more years, the regulars started greeting me with a solicitous and faintly surprised ‘How are you, Doctor – it’s nice to see you again!’.

**Episode 2**

A variation on the Living Arrangements theme was the admission by a very eminent professor of geriatric medicine during the course of a lecture, of his reliance on his spouse. Showing a slide of an aerial view of the university city where he lived and practiced, he pointed to a pleasant suburb where, he said, the majority of the generously accommodated households comprised only two people. His own typified this overprovision, and consisted of himself and the person whom he described unromantically as his ‘community care package’. The two of them had arrived at a most equitable arrangement, as befitted the centre of civilisation where they had established their abode. The duties of the partnership were distributed, roughly, into those undertaken in the study, which could be described as creative, cerebral, or financial, falling 80% to him, and those which were mainly physical and undertaken in the garden or kitchen, some 80% devolving on her.  

That part of the clinical history which is referred to as ‘PMH’ (past medical history) is generally much more rewarding than the SH, and in the case of geriatric patients, can be time-consuming as well as really quite
Mr Green was a scrawny 75-year old who had managed to avoid the attentions of the medical profession until a respiratory infection hospitalised him a number of winters ago. Nothing much emerged from examination or investigations apart from an elevated left diaphragm, which was initially thought to be related to the current illness, perhaps due to collapse of part of the left lung. A course of antibiotics and a few sessions with the physiotherapist later, and he was his old self and almost ready to be allowed home.

He was sent back for a repeat of his chest x-ray, this showed that the left diaphragm remained obstinately higher than that on the right, and this being the pre-MR and even pre-CT era, the only ways of exploring the possibility of cancer of the bronchus would be via cytology of his sputum (which he didn’t produce) or bronchoscopy. Mindful that phrenic nerve crush had been in vogue as a way of collapsing, and thereby healing, a cavity in a tuberculous lung prior to the advent of effective antibiotics, we checked whether there were any scars to be found on the back of his neck. Bingo! A jagged, untidy scar an inch long was visible just below the hairline on the left-hand side, most unlike a neat surgical incision. Mr Green remembered exactly how it had happened – how could he possibly have forgotten? He had been born - to his British parents - and brought up under the colonial regime in India. At the age of ten or eleven, give or take, he was playing outside in the large and beautifully tended garden of the family’s official residence one morning, when a tiger emerged from behind a bush, took hold of him by the neck, and made off with him towards the shrubbery. Hearing his yells, an heroic and quick-thinking member of the household staff gave chase with a pole and shouted a torrent of abuse at the beast. He must have made a great deal of noise, for the animal promptly dropped the tasty morsel and slunk off back to the jungle, leaving young Master Green with nothing worse than a left phrenic nerve palsy. It was clearly an incident which it had not occurred to him to mention when the admitting house physician had enquired about any illnesses, operations or accidents during his first 75 years on the planet. Animals often play a major role in the lives of older people, but it is usually a more positive one than that just described. One’s patients can become very dependent on their pets – or ‘companion animals’ as we are told they should be called.

(Barnaby, our sporadically resident feline is inclined to wave his passive-aggressive tail at the speaker when addressed in too informal a manner. It is claimed that cats know when we are talking to them by the ‘baby-talk’ pitch of our voices, but Barnaby rather emphatically points the other way however we pitch our voices, not so much because we have offended him as because he cannot imagine that we have anything of any interest to say to him). Mr Jeremy Turnbull, for example, would never dream of going to bed without taking Scampi, the Cairn terrier, out for his second walk of the day. The first walk is at about 12:30 pm and the two walks do not differ from day to day, but do differ from each other, starting off by proceeding in opposite directions for a kilometre or two and finishing up in a pub. Not being familiar with the geography of Mr. Turnbull’s village, I have never been clear whether the two walks finish
up at two different pubs, or at the same pub, but Scampi knows, because Scampi’s role in all this is essential. His master has a degree of alcohol-induced cognitive impairment, and his spatial awareness is not all it might be. Before the acquisition of his faithful companion, he used to emerge from the saloon bar and knock on the front doors of the houses along the High Street, enquiring politely of the home-owners ‘So sorry to disturb you at this hour, but can you tell me if a Mr Jeremy Turnbull lives in the village?’. Scampi, by way of contrast, was always totally alert and keen to get home, because he found the pub quite boring and had noticed that his master’s gait and orientation were not quite as stable after the interlude at the pub as they had been beforehand. By tugging gently but insistently on the lead and refusing to be diverted by any of the various passing scents, he delivered his boss back at the correct front door with total reliability.

Alcohol was a subject treated with a degree of totally unjustified levity by the medical profession during my early years in it, but too many of its practitioners have been devastated by its effects on their personal and family lives for this attitude not to have been rejected as negligent. This does not necessarily stifle all enjoyment of the humour often to be found in the doctor-patient encounter, however. Saint-Céré is a lovely little town, about the size of Newmarket, near the Dordogne valley in southern France, and during the 1980s (and possibly still today) it had a small general hospital of perhaps 200 beds. One of the two physicians was kind enough to allow me to accompany him on a ward round. The prominent part played by alcoholic beverages in local society was very evident, particularly as we approached Mme Lebrun’s bed. The physician scrutinised her face. ‘Your skin is still quite yellow’, he observed. ‘Of course my skin is yellow, Doctor’, she rejoined. ‘You make me drink all this orange juice. All the other patients have a large glass of red wine with their lunch, and they are all nice and pink and healthy-looking’.

**Episode 3**

Alcohol is far from being the only toxic chemical which threatens the health of the more delicate members of the community. Peter Featherstone is the senior partner in the main general practice in the nearby little town with a rather large and very fine cathedral. Gerard Stewart has been his patient since time immemorial, and continues to live locally having retired from the eminent position of archdeacon some years ago. The relationship between the two is one of mutual respect in spite of the incredulity, bordering on contempt, with which each of them regards the other’s system of beliefs. Peter continues in full-time practice at the age of sixty; Gerard is almost ninety and is, if I may be forgiven the use of technical language, becoming increasingly frail. The present crisis has arisen because Gerard has made a perfectly understandable mistake which he has compounded with a second mistake, neither of which was spotted by Rover, the aged quadruped who shares Gerard’s ecological niche. Gerard has consumed most of Rover’s deworming medicine, and has given Rover the frusemide tablets which Peter has prescribed for his own cardiac failure. The outcome is fairly predictable – an incontinent dog and an
archdeacon who has taken to wandering the streets at night pursuing his hallucinations of angels and other celestial beings.

It is easy for the hospital geriatrician to assume that the companion animals which so vigilantly guard their ageing owners, must be benign by nature and well-disposed towards visiting doctors, who would surely be seen by them to be colleagues to whom they are bound by shared loyalty. Family doctors can assure one otherwise, as indeed Dr Susan Grey did when she asked me to visit one of her patients at his house in one of the villages. Had she not told me, I might have asked ‘Who’s at home?’ and she might have replied ‘Nobody…only the dogs…oh, and the wife…’. But Susan had warned me of the pack of hounds he kept in the kennels. ‘You know about dogs’ barks being worse than their bites?’ she asked me. ‘Well, this breed is the other way around. They’re silent biters’. I thought a bit and suggested I might get a better picture of what could be causing the abdominal pain if I saw him in the clinic, and she agreed that such an arrangement might save a whole lot of problems. But she was much less accommodating when it came to Professor Alice Church, a retired philosopher who occupied a large and ramshackle house in a suburb much favoured by the academic community. She was finding it harder to get about, but there was no obvious reason why her mobility was deteriorating. ‘Who’s at home, Susan?’ I enquired. ‘Nobody…’ she replied after a little hesitation, ‘…only Dustbin’, Dustbin, it emerged, was a large and savage beast of the same strain as the Hound of the Baskervilles - but of course, a few generations later, generations which had been systematically bred for enhanced ferocity. Sue was no longer willing to visit the house, but agreed to send the junior partner, Philip. We agreed, Philip and I, that it had suddenly become very chilly as we stood on the doorstep the following week, looking in vain for the doorbell. Giving up, we hammered loudly on the door – but not loudly enough to drown out the infernal baying which instantly answered our summons. Etiquette dictates that a consultant only visits a patient’s house at the invitation of the GP, who will introduce the visitor who then proceeds with his examination and then either invites the GP to pontificate, or does so himself, emphasising that it is a joint pontification agreed by the two of them. It was therefore natural that I should stand aside and give Philip a gentle pat on the shoulder to propel him into Professor Church’s residence ahead of me (‘since she knows you, and I’m a complete stranger’) - and equally natural that Dustbin should launch his sabre-toothed jaws at the elegantly trousered leg of the unfortunate Philip. The latter retreated with surprising alacrity, leaving a jagged triangle of navy-blue worsted in the animal’s mouth to be digested at leisure after our departure. The professor was unapologetic, and confined herself to a brief word of acknowledgement to Philip and myself and a rather more fulsome expression of appreciation to Dustbin for his gallant determination to protect her from the threatening intruders. Dustbin’s dilated pupils and rising hackles may have illustrated the body’s responses to the necessity for ‘flight or fight’, but they certainly suggested that the latter response was likely to prevail. The same reactions had been called upon some forty-five years previously in my
male patients when engaged in existential strife on the beaches of Normandy. One such gentleman was still wearing his army beret when he was sent up from the A & E Department one morning while I was sitting in the ward office having coffee with the medical staff. ‘Would you like to admit him?’ I asked Wilhelm, then a couple of months into his first house job in this country after arriving from Frankfurt where he had qualified from the medical school the year before. As always seemed to be the case with German medical graduates, his English was excellent albeit with a readily identifiable accent. He unhesitatingly approached the bed.

Perhaps he had yet to learn the British convention that you should introduce yourself before proceeding any further with the interview. ‘Good morning, Herr – I mean Mister Simpson’, he began. ‘I want that you should tell me all about yourself please’. Mr Simpson’s pupils may or may not have dilated, I wasn’t there to notice, but his hackles certainly rose figuratively if not literally. ‘Number rank and name!’ he bellowed truculently. ‘That’s all I’m obliged to tell you under the Geneva Convention, as you know perfectly well. Number rank and name, and that’s all you’re going to get out of me, however much you torture me or starve me or beat me!’.

Poor Wilhelm may not have received much in the way of military training at the university, but he knew when a strategic withdrawal was the best course of action, and hastily retreated into the office. ‘He’s mad!’ he muttered. ‘He’s demented, he’s disturbed, he’s hallucinating!’ ‘No he’s not’, I told him ‘Didn’t you notice the smell? He’s clearly been incontinent of urine and according to the nurses he has a slight fever. He most probably has a urinary infection and that’s why he’s delirious and he’s in a strange and apparently hostile environment. If he saw a non-existent enemy officer that would be a hallucination, but he didn’t, he saw you, and you certainly do exist, but you’re not an enemy officer, he was deluded when he thought you were, so please don’t take it personally – you’ll probably find it all clears up with some i.v. antibiotics and rehydration’. I was wrong, it didn’t, he clearly did have a mild degree of cognitive failure, but he calmed down and became perfectly co-operative with the nursing and medical staff. Wilhelm was no longer seen as an SS Obersturmführer but simply as an overworked foreign doctor with an underdeveloped sense of humour.

Many years ago, early on in my appointment, I had occasion to admire a military medical intervention which had proved most beneficial for the health and the life span of an old man who attended the clinic with that classic diagnostic challenge of geriatric practice, the ‘funny turn’ (sometimes known in the trade as ‘coming over queer in Marks and Sparks’ but more accurately, as ‘pre-syncope’). I had reached the point in the history when I was enquiring about any significant illnesses in the past. The patient volunteered the information that he had been rejected for military service in the First World War because the examining MO had detected a cardiac murmur. It seems to me that any MO who picked up a murmur and concluded that the WW1 recruit standing before him was unfit to be called up, had just granted his patient a life extension of more high-quality years than
any heroic surgeon or trauma consultant that I have ever come across. Was the murmur still audible, I hear you asking. Well, yes, there was a rather unimpressive mid-systolic murmur best heard over the aortic area, but the fact is that he was very well, the funny turns had only arisen over the past month or six weeks, and this all happened before the ready availability of echocardiography – I have a guilty feeling that I failed to solve either the turns or the systolic murmur, but remained convinced that they were unconnected. He had not actually fallen or lost consciousness, and appeared to be less concerned about the turns than his GP, largely because they were getting better. If he had attended the funny turns clinic today, he would probably find himself booked for an echo, a 24-hour rhythm tape, a 24-hour blood pressure trace, and possibly an EEG, thereby demonstrating the syndrome commonly seen in the geriatric outpatient clinic of going into a shop for a pair of socks and coming out with a suit, a dressing-gown and an overcoat.
Get Scribbling

Barry Monk

I had long wondered about writing a book, but the busy professional life of a dermatologist always seemed to get in the way. Then along came Covid, and shortly afterwards the first lockdown. I am easily bored, and there is only so much daytime television that you can watch. Surely this was a ‘now or never’ moment to start writing. What I wanted to write about was the NHS. We have all, over the years, seen what a fantastic organisation it can be. In Covid we saw it at its best, and the doctors and nurses (porters, cleaners and more) on the frontline, were heroes. But even before Covid, something was going fundamentally wrong. The same sort of catastrophic mistakes were endlessly repeated. Politicians and managers constantly told us that ‘Lessons have been learned’, but they never were.

I started looking at other large organisations in the UK, the railways, airlines, and nuclear power, which had had, historically, appalling safety records, but which each had experienced a moment of revelation (like Paul on the road to Damascus) and had transformed themselves. On the railways, for example, where crashes used to occur with monotonous regularity, there has only been one passenger fatality in fifteen years, and that was as the result of freak weather. I read Ralph Nader’s 1965 classic Unsafe at Any Speed, about motor cars in the United States. There had been nearly fifty thousand deaths each year in the USA from road traffic accidents, many the result of car design more focussed on consumer appeal than safety. I also thought back to an inspirational lecture that I had heard given by Professor Liam Donaldson when he was Chief Medical Officer. There had been yet another death from a patient with leukaemia being given vincristine by the intrathecal rather than intravenous route. Donaldson took the unusual step of asking an air accident investigator to review the case. The result had been very different from the standard NHS response of blaming the most junior available doctor. I listed the subjects that I wanted to look at; the GMC, the CQC, senior hospital managers, politicians, and I started writing. I set myself the task of writing 500 words a day, seven days a week. Sometimes words flowed, but sometimes the day started with me deleting everything I had written the day before, so I had to produce a double ration. Making sure that my facts were correct was, of course, essential.

The internet helped, but so did friends, and I spoke at length with people who had been involved in some of the situations that I wrote about. I had a near miss at one point, while writing about someone who I was certain had died some years ago. It was only when I was checking the final draft of the manuscript that I decided to check, and discovered that he was very much still alive and well. Occasionally tracking down information can be long-winded. I spent a whole day trying to verify a rather obscure fact, only to realise that, interesting though it was, it was completely irrelevant. When I finally thought that I had finished, I re-read the whole book, and had to delete the whole of the first chapter, which
was very interesting but simply out of place. I needed a new final chapter, but by that stage words were flowing and I produced the final 3000 words in a day, and in retrospect it was best writing in the book. The end result of my labours was my first book *Lifeline*. It pulls no punches in what it says about the GMC, aspects of hospital management, and politicians of all stripes. There are parts of the book that will make you laugh, but some will make you cry and some will make you very cross, but you won’t be bored. Much to my astonishment and delight, I won the 2022 BMA Medical book award in the category *Good Medical Practice*. Samuel Johnson once famously observed that ‘No man but a blockhead ever wrote except for money’. There was perhaps an element of self-criticism in his remark, because he laboured for some fifteen years over his dictionary for what was ultimately very little in the way of financial return. My own modest literary efforts haven’t brought me fortune, but that wasn’t the objective. I enjoyed writing and it has been fantastic to hear from people who have liked it. I have now produced a second book *The Man Who Turned Blue*. Somehow, I seem to have found a new career. It is one that I thoroughly recommend. Doctors, by their nature, are trained in observation of the human condition, and that is the essential first ingredient of any book.

(For reviews of these books see pages 42-44)

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The Riddle of the Pills

*Nick Coni*

A number of years ago, this journal ran a series of brain-teasers under the strapline *Outsmarting your grandchildren*, but I am no longer capable of outsmarting them, or indeed anybody else much. Except, that a week or so ago, I outsmarted my pharmacist, which made me so proud that I felt I had to share this cerebral triumph with the cognitively well-endowed readership of the RFS. I take rather a lot of different varieties of tablet, so have a tendency to get into a bit of a muddle from time to time. To make matters worse, I visited the GP the other day, and he took my blood pressure, which turned out to be a bit too low. Before I could express my delight and surprise, he told me to reduce the dose of the BP-lowering drug from one tablet a day to a half a tablet every other day, alternating with the current one a day. When I next needed to visit the pharmacist, he gave me a neat little gadget for cutting them in half cleanly and accurately. I told him that I would get into a dreadful muddle because the next day I would remember to cut the tablet and take one of the halves, but thereafter I would get confused and would have no way of telling if it was a whole tablet day or a half-tablet day. I needed to be able to work this out from a glance at the strip of the BP-lowering agent, according to whether the current compartment is empty, or contains a single half or two halves. I asked him to work out a rota for managing the tablet strip so that it would provide the necessary information, but he indicated that the consultation was over and that devising such a rota was beyond his pay grade. So I had to work out a rota for myself. I did, and I think it works. What is it? (answer below)

**Answer to Riddle of the Pills**

*Day 1* Take one tablet, divide the next into two halves but leave them in their compartment in the strip

*Day 2* Take one of the halves

*Day 3* Take the next whole tablet, leaving the other half where it is, observing that there is a gap left before the lonely half

*Day 4* Put the lonely half out of its misery.

*Day 5* Treat as day 1 and repeat the sequence.

SO: when there are half tablets, take one of them whether there were one or two: where there are no half tablets, take a whole, making sure to cut another whole in half and leaving the two halves.
The rise and fall of Horatio Nelson’s favourite surgeon

Ian Douglas Fraser

Michael Jefferson’s name may not spring readily to mind in Horatio Nelson’s medical narrative but towards the turn of the 18th century he was arguably the admiral’s favourite surgeon. Nelson’s misfortunes between 1794 and 1798 included the traumatic loss of vision in his right eye, the amputation of his right upper limb and a severe head injury. Michael Jefferson attended Nelson during each episode winning his valuable support. This is Jefferson’s story, one of early career success followed by a fall from favour, and finally being airbrushed from the official record. Readers of The Adventures of Roderick Random by Tobias Smollet (circa 1748) will appreciate that the qualification of ‘Surgeon’s Mate’ in the Royal Navy came low on the academic scale. Neither Jefferson’s surgical apprenticeship nor any hospital attachment are recorded, but on the 4th April 1793, aged 21, he was examined and judged suitable to be ‘2nd Mate on 2nd Rate’ by The London Company of Surgeons.

Jefferson’s rise

In February 1793 and after six years ashore, Captain Horatio Nelson received the warrant to select his crew for the 64-gun warship, the Agamemnon; Jefferson was the Surgeon’s mate. In 1794 Nelson led challenging attacks on Corsica - on 12th July at Calvi, Nelson was hit in the face with debris thrown up by a random discharge. Jefferson as ‘the surgeon ashore’ cleaned Nelson’s blood-stained face to reveal a loss of some eyebrow, multiple lacerations, and loss of vision in his right eye. Jefferson ‘drest’ the eye and signed the certificate confirming visual loss. In his letter to Lord Hood, Commander in Chief (C-i-C) of the Mediterranean Fleet, Nelson wrote, ‘I have also to recommend a most worthy Young Man Surgeons Mate of the Agamemnon who has served on Shore both at Bastia and this place and to whom we are all under infinite obligations for his attention and humanity, to be promoted to a Surgeon. He will be an acquisition to whoever may get him, his name is Michael Jefferson’. Promotion to surgeon was dependent on future examination success, but Nelson’s recommendation placed Jefferson in a favourable light.

Nelson, a Commodore now, after distinguishing himself at the Battle of Cape Vincent in February 1797, was promoted to Rear Admiral and was knighted. On the 24th July in a poorly organised attack on Santa Cruz, Tenerife, Nelson sustained the musket ball wound which required the amputation of his right upper limb. The surgeon, Mr. Thomas Eshelby, performed a high amputation probably achieving haemostasis by ligating the neurovascular bundle. Nelson experienced severe pain in the amputation stump for the next five months. He returned to England and accepted advice to procrastinate on the stubborn long ligature still projecting through
Jefferson was in London in October 1797 preparing for his examination to become ‘Surgeon’. He contacted Nelson who employed him from the 19th, and when he passed as ‘Surgeon for a 3rd Rate’, Jefferson attended to Nelson’s amputation wound and probably assisted with his correspondence. On the 4th of December the adherent ligature came away accompanied by a foul discharge. This relieved Nelson of his distressing pain and the wound healed rapidly. Jefferson was paid for his service but, more importantly, Nelson earmarked him for future employment.

In March 1798 Nelson boarded Vanguard (74-gun) as his flag ship and Jefferson joined as surgeon. In the Mediterranean on the 1st of August, Nelson located the French fleet in the Bay of Aboukir. The fleets engaged immediately in the Battle of the Nile where Jefferson attended 106 casualties and performed 3 amputations. Amongst those injured was Nelson who was struck by a stray piece of metal langridge causing a significant head injury. Jefferson wrote in the Surgeon’s log… ‘Sir Horatio Nelson, K.G.B., Rear Admiral of the Blue. Aged 40. Put on the sick list. Wound on the forehead over the right eye. The cranium bared for more than an inch, the wound 3” long. Treatment: 1st; Brought the edges of the wound together and applied strips of Emp. Adhesive… Remarks on 31st: The wound healed perfectly on the first September, but as the integuments were much enlarged, I applied every night a compress wet with a discutient embrocation for nearly a month, which was of great service’.

The intracranial effect of the injury was underestimated since Nelson complained of lancinating headaches for months. Others noticed personality changes and a lack of judgement. Nonetheless, Nelson was feted widely, awarded numerous gifts and medals, and ennobled as Baron Nelson of the Nile. Additionally, he enjoyed the attention of Lady Emma Hamilton, wife of Sir William, the ageing ambassador to Naples. Foudroyant, a new 80-gun ship, replaced Vanguard as Nelson’s flag ship in June 1799. Jefferson saw action again when the Guillaume Tell was taken as a prize in March 1800, attending to 69 casualties. In the April, Nelson’s entourage which included Sir William and Emma Hamilton, cruised to Malta in Foudroyant. Nelson and Emma’s intimacy was clear to all now (and nine months later their daughter, Horatia, was born in London). Nelson was ordered home and Sir William recalled to London. At the end of June 1800 in Leghorn (Livorno) Nelson left the Foudroyant and his entourage prepared for the overland journey back to England. Foudroyant sailed to Gibraltar with Jefferson aboard. He would not see Nelson again. However, Jefferson anticipated Nelson’s return to London and in a letter carried by the departing Captain Berry wrote on 2nd November…

‘My Lord.

Having heard of your arrival in England, I therefore take the liberty of writing to Your Lordship by Sir Edward Berry who leaves us today.

I wish much to return that I may again have the honour of serving with your Lordship whenever you may hoist your flag. Indeed, I should have returned in Le Guillaume Tell had not Your
Lordship told me, when at Leghorn, to remain in the Foudroyant till I heard of your being employed.

Should your Lordship not think of again serving, I hope you will excuse the liberty I now take of asking Your Lordship is there at the Admiralty or the Sick and Wounded Office for some place permanent for me in England. Should nothing be vacant, I shall be perfectly content to be appointed surgeon & agent to the Naval Hospital at Malta (if that Island is to be kept by England) till something better might present itself at home.’

Jefferson was seeking help from Nelson after seven years of loyal service. He admits that Nelson ‘told’ him to stay in Foudroyant until further notice, but clearly Jefferson was seeking something nearer home, perhaps a shore job at the Admiralty. Failing this then running the first British Naval Hospital in Malta would ‘content’ him ‘till something better might present itself at home’. Nelson was very busy on his return to London on 9th of November. Conflicted by a loving wife and his pregnant mistress he also re-established contact with his Admiralty superiors. Was Lord Keith, C-i-C in Foudroyant at Gibraltar, aware also of Jefferson’s wish for the hospital post? On 17th of December 1800 Michael Jefferson left Foudroyant to be installed by Keith as Surgeon in Charge to the Malta Naval Hospital. Jefferson remained there until the hospital was closed on 14th of May 1802.

Jefferson’s downfall
The first British Naval Hospital was housed in the former armoury (Armeria) of the Order of St. John of Jerusalem, and was staffed well with assistant surgeons, a matron, and several nurses. Excellent records were kept of all personnel treated there. The naval hospital closed when the Treaty of Amiens (1802) bestowed neutral status upon Malta. Personnel at the Armeria were transferred to the Military General Hospital in the former Sacra Infermeria. Tensions developed between army and navy medics and in January 1804 the navy re-established their own hospital in the Grand Prison of Valetta. Jefferson was overlooked now, clearly something had gone seriously wrong. In December 1803 Nelson, the new C-i-C, appointed Lt. William Pemberton to be the Hospital Governor with the respected Mr. John Gray as the Surgeon-in-Charge. Gray became unwell, was promoted to a less onerous position to be succeeded by Mr. John Allen who remained there until 1827.

So where did Jefferson fail? The reason appears in a letter received by Lady Emma Hamilton from Nelson in 1804. Apparently, Jefferson had contacted Lady Hamilton earlier in 1803 asking if she might help him secure the post of Surgeon on Nelson’s flagship, Victory. Nelson replied that he was very happy with his current surgeon, Mr. George Magrath, and would not replace him even if he was able do so and added… ‘Mr Jefferson got on, by my help; and by his own misconduct, he got out of a good employ, and has seen another person, at Malta Hospital, put over his head. He must now begin again; and act with much more attention and sobriety than he has done, to ever get forward again; but time may do much; and, I shall rejoice to hear of his reformation. 14 March 1804, off Toulon’. What was the nature of ‘his own misconduct’? Perhaps the answer lay in Nelson’s recommendation that Jefferson should ‘act with much more attention and sobriety than he has done’. Additional errors were not documented.

The final years
Later in London, on 10th of September 1804 Jefferson married Ann Nephram at St. Pancras Parish Church and purchased a ten-year lease on 9 Judd Place West, Somers Town (now the British Library site). He died aged 37 on the 19th of August 1809 and was buried at The Church of St. John, Hampstead. Suicide seems unlikely as this was consecrated ground. The church record refers to Nelson’s advice concerning the sobriety issue. Tuberculosis (phthisis) and typhus were common causes of death at that time but prior to 1837 there was no statutory certification of death. The cause of Jefferson’s premature death
is undocumented. In 1810 Ann appealed to *The Charity for the relief of poor widows of commission and warrant officers of the Royal Navy*. As Jefferson remained on the Admiralty list of surgeons on half-pay and had contributed to the fund, she became a beneficiary. The final indignity to Jefferson was his absence from the board recording the ‘Medical Officers in Charge. Royal Naval Hospitals Malta’. Here, the first surgeon recorded is J Gray, the surgeon who followed Jefferson at the first British Naval Hospital in Malta in 1803.

**Postscript**

Michael Jefferson’s initial good fortune was to be in the right place at the right time to secure the approbation of the man destined to become the Nation’s hero. Clearly, he ‘blew it’ in Malta thereby losing any chance to serve with Nelson aboard *Victory* at the Battle of Trafalgar. Whereas Jefferson was denied that opportunity of a legacy, a contemporary naval surgeon, William Beatty, was there to secure that prize. But that is another story…

*Ian Douglas Fraser*
Book reviews

OFFBEAT BALLET: The interesting stuff
(Brown dog books 2022)

Written by John Bennett

Offbeat Ballet advertises itself as being about all types of ballet (classical to modern) as well as other dancing types, but initially intrigues you, as it is written by a senior well-respected surgeon. A surgeon who as a young medic, also dreamt of perhaps becoming a dancing star himself. The book makes him seem a very appealing person. Until I started to read, I had had no idea that John Bennet (a Yorkshireman) had knowledge of the Welsh, however in his ‘Prolegomenon’ he quotes a Welsh saying that translates as He will not be wise who will not read; in these days, I hope that reading social media is not considered as reading! After a long, unusual but amusing and unexpected introduction, John’s first chapter (in many sections, as are all his chapters) concerns the stage and working conditions, announcing the environment of the ballet. Not only are stages and temperatures discussed, but also such matters as hierarchy of performers and details on construction of ballet slippers. I was shocked at underpayment of (perhaps younger or less experienced?) performers; from the earliest twentieth century up to the present day, some earn little more than the standard minimum wage. Dancing should convey meaning rather than a sequence of technical feats, in part portrayed by choreographed mimetic gestures. The role of the musician in the orchestra pit is addressed. The following chapter is about ballet and childhood, and Mr Bennet explores children’s first exposure to watching ballet and their recollections of it, which might be far from uniform or to have composed ambition to become a ballet dancer.

Concerning children taking ballet lessons, these should not be embarked upon in extreme youth, but an excellent teacher for ten year olds might encourage a future career in ballet. At the Royal Ballet School, each year around 200 eleven year olds are auditioned, of whom about 25 are selected. By age eighteen though, usually only around 15 remain. In ‘The workshop’ John Bennett briefly describes some elements of class training for dance, and finishes the chapter by describing Irish dancing. Famous ballets is a long chapter beginning with a very helpful list of a great number of the most famous ballets, classical and other; the list is followed by brief accounts of the most popular, with intriguing vignettes concerning some. For example, in communist times in Russia, the conclusions of both Swan
Lake and Romeo and Juliet had to be changed, because Stalin disliked sad endings, and music for Giselle, written by Adolphe Adam, was composed in little more than a solitary week. Bennett insists that his accounts are not extensive, however, they are most useful as a quick reference area. Further sections concern ballet and celebrity, ballet and diversity, ballet companies and their stages and a short history of fashion and the arts. I found the chapter on scandals and disasters wasn’t really very scandalous or disastrous. Rudolf Nureyev’s defection from Russia (which took place at Le Bourget airport, France), was a benefit for us, and Bronislava Nijinska’s escape by crossing from Russia into Poland by wading across the Bug river into Poland, was bravery itself. The explanations of ballet ticket prices, particularly with reference to Arts Council grants was illuminating. Descriptions of seating orientations and computer errors of ticket sales were amusing. Histories of the Royal Opera House, Sadlers Wells and the Birmingham Royal Ballet were informative.

The chapter on medical asides ranged from detailed to wide-ranging, then his final chapter called the Glossary, was full of fascinating mini-anecdotes. Throughout the book, John Bennett has rightly distained current examples of wokery. Also throughout he provided excellent credit to the work of women as well as men, and has addressed many cases where excellent progress is being made towards equality and diversity. The book is informative, humorous and easy to read. Well recommended.

Reviewed by
Catherine Sarraf
Here, Barry Monk has, with great clarity, delineated all the reasons why patients die needlessly in the NHS and asks why, when the Civil Aviation, rail and nuclear industries have learnt from past mistakes and remedied them, the NHS has not. From the Bristol paediatric cardiac scandal, to needless deaths of infants in Cumbria and scandalous mismanagement of Stafford, it appears that all the NHS does is commission a report and intone ‘lessons will be learnt’.

The case of Dr Baba-Gawa found guilty of manslaughter on a day a patient died - a day when her consultant was absent, not realising he was on call, a day when the hospital computer systems failed, and a day when two members of the medical team were absent, is heart breaking. Yet the medical director and senior managers in the hospital she worked in - including the consultant who seemed unable to interpret biochemistry results, all of whom presided over this debacle and knew of the problems in the paediatric department, escaped unscathed. Most troubling of all is that introduction of targets does not appear to have improved quality of care, you just get it faster, because it has led to non-medically qualified managers manipulating clinic lists, including dangerously overbooking them, so that tired surgeons are doing complex procedures when they should (like airline pilots) be resting.

Unlike nurses and doctors who are subject to the strictures of the NMC and GMC, and can be struck off for incompetence or dishonesty, no such quality control is applied to NHS managers enabling the venal and incompetent to progress from one disaster to another without losing their pensions, and with fat redundancy packages. Over the last 20 years doctors in particular have been painted as arrogant and against change - I conclude from reading this book that those attributes are more often found in senior hospital managers, few of whom are ever bought to book for their actions. The unfettered growth of manager numbers in the NHS has led paradoxically to doctors spending less time with patients, as Dr Monk lays out in his chapter on appraisal, a pointless and burdensome activity it would appear, which keeps hundreds of apparatchiks around the country in jobs administering it, and enables some doctors to spend rather
more time appraising than practicing. Dr Monk estimates that at least 50 hours a year of face-to-face doctor/patient time has been lost since the introduction of this process - from my own (SD) experience of the NHS that is 12 outpatient clinics a year - at least. Appraisal was suspended last year because of the pandemic - there has been no discernible worsening of medical practice or increase in reports of malpractice to the GMC during that period. Dr Monk also points out that appraisal was introduced after the Shipman affair. By common consent Shipman was the sort of doctor who would have sailed through appraisal because he was personable, chatty and could provide lots of thank you cards from patients. But it has, as Dr Monk demonstrates, had no effect on the quality of medical or nursing practice. We need the NHS, and it needs to get rid of many of its managers, and a Secretary of State who just for a change does not decide that yet another round of reforms is just the ticket.

Reviewed by
Susan Duncan
Once again Dr Monk has produced a highly readable and accurate reflection of life in the NHS. This time turning his attention to forty years’ worth of practice in dermatology, as opposed to his first book (*LIFELINE*, Beechwood Franklyn, 2021) which critically examined the reasons why the NHS never learns from previous mistakes. Dermatology, like neurology and psychiatry is one of those unnoticed specialties. Large numbers of patients with distressing, puzzling and life changing conditions are seen in these clinics, yet because their practice does not involve sirens, dashes along corridors, heroic surgery or the latest in genetic engineering, they are seldom of interest to camera crews or TV producers. Yet these three specialties are the ones most often called upon by other physicians and surgeons when they have exhausted their knowledge of human illness. Like all good physicians, Dr Monk puts the patient at the centre of his practice and tells their stories without mocking (as in the case of the young man who went blue), and with great sympathy. Yet he makes fun of himself as in the case of the elderly widow whose holiday plans he completely misconstrued. The root of the title ‘doctor’ comes from the Latin to teach or lead out, and Dr Monk provides a fascinating amount of science and medicine to explain the reasons why he came to certain diagnoses and the rationales behind their treatments. The chapter on scabies is both fascinating and instructive. This book is easy to read, informative and does not require any medical knowledge to enjoy. My best read so far of 2023!

Reviewed by
Susan Duncan
Simon Sharpe found that a defining experience for him was seeing how under-communicated were the health risks concerned with climate change. He was at the government approval session of the Intergovernmental Panel on Climate Change’s Fifth Assessment Report in 2014. Probably the most extreme risk discussed in that 3,000-page report was the risk of heat and humidity conditions arising that exceeded the human body’s limit of tolerance for heat stress, meaning that even a healthy person lying down, resting in the shade, tipping cold water over themselves, would die of heat stress (based on this 2010 paper [https://www.pnas.org/doi/10.1073/pnas.0913352107]). What shocked him was that this finding could not be mentioned in the Summary for Policymakers. The reason was that only one research paper had reached this finding – apparently, because only one research paper had asked the question ‘if the world gets hotter, might it get too hot for people?’
In contrast, the same IPCC report (Fifth Assessment Report, Working Group II) cited 9 papers on the impacts of climate change on skiing, and 13 papers on the impacts of climate change on grape-growing in Europe! That was one of the experiences that made him realise something must be structurally wrong in that way that the risks of climate change were being assessed and communicated. Later, he found even bigger structural problems in the economics and diplomacy of climate change. Thus, in our fight to avoid dangerous climate change, science is pulling its punches, diplomacy is picking the wrong battles, and economics has been fighting for the other side. We need to rethink our efforts, to act fast enough to stay safe.

We need to decarbonise the global economy five times faster than we have managed so far, to avoid dangerous climate change. As Greenland melts, Australia burns, and greenhouse gas emissions continue to rise - we think we know who the villains are: oil companies, consumerism, weak political leaders. But what if the real blocks to progress are the ideas and institutions that are supposed to be helping us? Five Times Faster is an inside story, after ten years at the forefront of climate change policy and diplomacy Simon Sharpe argues that in our fight to avoid dangerous climate change, science is pulling its punches, diplomacy is picking the wrong battles, and economics has been fighting for the other side. This provocative and engaging book sets out how we should rethink our strategies and reorganise our efforts in each of these fields, so that we can act fast enough to stay safe.

Opinions
This book needs to be read, and its recommendations embraced, by all those seeking to make rapid progress in the fight to preserve a habitable planet. Simon has witnessed first-hand how progress is being impeded by core failings in the way we present and process information about probable futures. His book presents a blueprint for the way climate science should be conducted and presented, how thinking about the economy should change, and international diplomacy be redesigned. It’s a much-needed new take on a problem we’ve been wrestling with for decades, but making only sporadic progress in addressing.

Baroness Bryony Worthington, leading creator of the UK’s Climate Change Act; former Europe Director, Environmental Defence Fund; member of the UK House of Lords

In a crowded market, this book promises to stand out head and shoulders above the rest as a seminal, timely and much needed synthesis of the lessons learned from five decades of effort by scientists, the business community, and politicians on how to address the threat of climate catastrophe. Simon Sharpe has been a thought leader at the core of diplomatic and government activity, and has been the originator of direction-changing insights about the science, economics, and politics aiming to achieve the scale and pace of transformations required. The lessons learned that he describes, and the approaches he recommends could genuinely cut Gordian knots and allow new levels of progress. I cannot recommend this book more highly.

Professor Chris Rapley CBE, former Director of the Science Museum, former Director of the British Antarctic Survey
Pace is truly what matters in the climate fight – and the idea in this book that intrigues me the most is that a certain kind of reductionism has blinded us to the common interests that need to guide our work if it’s going to happen in time.

*Bill McKibben, author of The End of Nature*

Now more than ever, there is an obvious need for a full assessment of the risks of climate change to be given to heads of government and their advisers. And yet still this is missing … I strongly support this book, which brings the risks of climate change and potential solutions to a wider audience. There is no-one I can think of in the world who could do this better than Simon Sharpe.

*Sir David King, Founder and Chair, Centre for Climate Repair at Cambridge University; Former Chief Scientific Adviser to the British Government; former UK Climate Envoy*

The Race to Zero is the biggest ever global campaign to deliver a zero carbon future as soon as possible. It is an exercise in radical collaboration to drive non-linear change in every sector of the economy. Simon Sharpe’s informative and accessible book will provide a manual for scientists, CEOs and policy makers to work together to deliver systemic transformation much faster than current efforts.

*Nigel Topping, High Level Climate Action Champion, UNFCCC COP26*

As the world is suffocating under extreme weather events, widespread food and water scarcity, destruction of ecosystems, and a series of other interrelated climate-linked crises, Simon Sharpe’s book is a breath of fresh air … Five Times Faster takes you on a captivating – yet alarming – journey through the complexities of climate change … Simon’s book is an important leap in the right direction.


Parts amended from the website fivetimesfaster.org

Christopher Whalen

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Information for Authors

There are three issues per year of the Journal of the RSM Retired Fellows Society, which appear in April, August and December. Articles may be submitted at any time, and accepted ones are compiled into the next available issue space.

Each manuscript should bear the title of the article, name, address and email address of the author. Please write in Arial Narrow, 12 point, 1.5 spaced and do not justify the text. Spelling needs to conform to the Oxford English Dictionary.

Text MUST be submitted electronically, as a fully editable Word document.

Authors also please be sure to complete your submission with your name on it.

Accepted articles for the Journal:

- Solicited articles, on a topic agreed with the editor, and should be 1,500 to 2,000 words in length.
- Articles submitted by readers - 500 to 1,500 words.
- Reports of presentations at meetings of the Retired Fellows Society - 500 to 1,500 words, the author invited by the Chair of the corresponding day.
- Reports of extramural events of the Retired Fellows Society - 500 to 1,000 words, the author invited by the leader of the event.
- Reports of Retired Fellows Society tours - 1,000 to 2,000 words, the author invited by the leader of the tour.
- Short ‘fillers’, text and/or photographs. Poems, quotes, amusing items, brief - under 200 words.

Imagery:

With reference to submission of images (which is encouraged), it is important that each image is accompanied with a title, description and photographer acknowledgement.

Photographs should be uploaded digitally and be as high resolution as possible.