



The ROYAL  
SOCIETY of  
MEDICINE



Newsletter Issue No.63  
December 2018

# RFS

Retired Fellows Newsletter



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**Cover:** Spitfire, in commemoration of the 100th anniversary of the RAF and also 100th anniversary of the end of WWI

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# Editorial:

Catherine Sarraf

I live on the banks of the Thames in Rotherhithe. It's a very pleasant location, with the Brunel Museum nearby, which itself is close to St Mary's Church Rotherhithe and the Mayflower pub. The former, an 18th century church, is particularly proud of its connections to the Pilgrim Fathers; the latter is located on the river and abuts the jetty at which the Mayflower would moor. The ship of course, continued its trading with the New World after 1620 and its captain Christopher Jones is buried in St Mary's churchyard. The Brunel Museum sits on top of the Overground Railway next to Rotherhithe station. At this point, the Overground Railway line dives beneath the Thames in Brunel's 1825 tunnel.

The museum exhibits artefacts of that time, recording building of the tunnel between 1825 and 1843. Originally it had been designed for crossings of horse-drawn carriages and pedestrians, although these methods were quickly replaced by coal driven steam trains. Today, the carriages of TfL's Overground Railway are the epitome of everything modern.

The tunnel links Rotherhithe with Wapping and Shadwell, and from my window my direct view across the river is of King Edward VII Memorial Park. This is an extensive green space with great numbers of trees sheltering lawns and other leisure areas. There are tennis courts, a football pitch, a bowling green, masses of places for children to play and even a bandstand. On summer evenings, sometimes there are open air events there, with music and many opportunities for social interaction.

At the moment though, my view of the park is somewhat impeded. There is a works site here for the new London super sewer which is under construction. Not being a NIMBY, I have no problem with the site, in fact it is interesting to watch progress of the construction as it continues. The Thames Tideway Tunnel, as it is more properly known, in total runs 25 miles from Acton in west London to Abbey Mills pumping station and Beckton sewage treatment works in the east. There are numerous construction sites on its path and that alongside the Edward VII Memorial Park is one of these. Started in 2016, construction of the Thames Tideway Tunnel is estimated to take seven to eight years, giving a target completion date of 2023. The tunnel will connect 34 of the most polluting combined sewer overflows (CSOs), *via* transfer tunnels, and is expected to reduce the number of overflow events to a maximum of four per CSO per year at time of commissioning. The tunnel will transfer the captured sewage to Stratford for onward delivery to Beckton for treatment. Recycled clean water will then be released into the Thames.

Joseph Bazalgette's sewerage tunnel was built between 1859 and 1865, and has served the population of London superbly since then. However, its design was made sufficient for four million people. With London's population now resting at somewhere between eight and nine million, it's time for us to have this much needed update.

Catherine Sarraf  
Editor



View of the tunnel construction site from Rotherhithe.  
Catherine Sarraf

# FORTHCOMING MEETINGS

## INTRAMURAL MEETINGS

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### **Thursday 21 February 2019**

Reflections on singing from an erstwhile physician and erstwhile singer:  
Lecture Dr Hugh Seeley

### **Thursday 21 March 2019**

In search of Churchill – body and soul:  
Lecture by Mr David Lough

### **Thursday 18 April 2019**

Real secrets of alternative medicine:  
Lecture by Dr Richard Rawlins

### **Thursday 16 May 2019**

The Wallace Collection – past, present and future:  
Lecture by Dr Xavier Bray

### **Thursday 20 June 2019**

Annual oration – the mental capacity jurisdiction: past, present and future:  
Lecture by His Honour Denzil Lush

## EXTRAMURAL

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### **Friday 8 February 2019**

(SOLD OUT) The British Library tour

### **Tuesday 30 April 2019**

Westminster: The hidden city – walk by Sue Weir

### **Tuesday 21 May 2019**

West of St Paul's – walk by Sue Weir

### **Wednesday 19 June 2019**

East of the tower – walk by Sue Weir

### **Tuesday 10th September 2019**

Back streets of Covent Garden – walk by Sue Weir

# Camera Club programme 2019

**2018**

**Tuesday 20 November**

Michael Pilkington: *Infrared photography*

**2019**

**Thursday 24 January**

*Members Meeting*

**Tuesday 26 February**

Hermon Dowling: *Everyday Life in Southern India with an emphasis on farming and fishing communities*

**Wednesday 27 March**

Presentation Meeting: *Two or three members will present their variety of topics*

**Tuesday 23 April**

Richard Schunemann: *On taking snaps and making pictures, in the digital age*

**Wednesday 22 May**

*Members Meeting*

**Thursday 27 June**

Micki Aston: *My life in photography*

For more information or if you are interested in any of the camera club events, or if you are interested in joining the Camera Club, please get in contact with **Richard Lansdown**

rglansdown@yahoo.co.uk  
0207 267 6982



Dunraven, past Witches Point, Wales



A wild stag, Dyrham Park



Waterfall at Dunraven



Alpine view, Switzerland

*All photos by Alistair Macintosh (alistairmack@outlook.com)*

# Recent restructuring at the RSM

Jemma Hemsworth



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Perhaps you know that the RSM has been undergoing a number of changes. Following the Departure of Caroline Langley, Director of Education and Wayne Simes, Director of Library Services, a new position has been established which bridges both of these departments. In September, the Royal Society of Medicine welcomed Bridget Gildea to this inaugural role as Director of Learning. Ms Gildea joins the RSM from Harvard Kennedy School, where she spent four years as Director, Strategic Market and Programme Development, in Executive Education.

Following this, our Education Department has been undergoing a number of changes recently. The management team has moved to take on relationships with our Sections and Committees, whilst having a pool of Event Executives who will focus on ensuring that events are executed to a high level. Not only that, but there is now a central Customer Services team able to assist with event booking enquiries.

The Retired Fellows Society Thematic Manager is Jemma Hemsworth who has been with the RSM for five and a half years, so hopes to bring a great deal of experience and knowledge to the Society. Thematic Managers will be working closely with Event Executives to have oversight across development of the full programme to ensure that all is run successfully.

The RSM's first priority continues to be to deliver this year's programme of events with the Society, whilst starting to explore new opportunities with ways in which we can grow and develop.

We really appreciate you bearing with us during this transition period. We hope that the changes will allow the RSM, alongside the Sections and Committees to strengthen its educational offering and be even more responsive to educational needs of today's medical community.

Jemma Hemsworth can be contacted on [rfs@rsm.ac.uk](mailto:rfs@rsm.ac.uk) For event booking enquires email [events@rsm.ac.uk](mailto:events@rsm.ac.uk)



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## Previously held by

Helen Gordon



## Director of Learning

Bridget Gildea  
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## Previously held by

Caroline Langley (Director of Education)  
Wayne Sime (Director of Library Services)



## Director of Development

Vacant

## Previously held by

Paul Summerfield

*For Wall of Honour enquiries please contact Membership Director [janice.liverseidge@rsm.ac.uk](mailto:janice.liverseidge@rsm.ac.uk)*

Happy Christmas  
to Everybody

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The Christmas  
Carol Concert at  
*The* ROYAL SOCIETY of MEDICINE

Tuesday 18 December 2018

Enjoy a wonderful welcome reception and a delightful evening of carols in the heart of London, followed by a four course dinner to enjoy great food and wine with your fellow guests. Book your place for just £110 today at [www.rsm.ac.uk/christmascarols](http://www.rsm.ac.uk/christmascarols)

Doors open at 6 PM

1 Wimpole Street, London, W1G 0AE

# MEETING REPORT

## Annual oration – children, parents and society in the family jurisdictions

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Lecture by The Right Honourable Sir James Munby, President, Family Division, High Court of England and Wales



Sir James began his talk by stating that it was not his intention to be controversial, and that he had many years of experience in work which involved a degree of medicine within its content. He had witnessed changes in which law, medicine and ethics intercede with each other. Great challenges have been presented by recent cases involving children. Much of the foundation of modern law relates to a House of Lords ruling of 1989 which involved sterilisation and lack of capacity; the rule allowed patients to contribute an opinion. Three years later the tragic Tony Bland case revolved around a

decision to withdraw medical treatment. The patient was a victim of the Hillsborough tragedy and the central theme was what was in his best interests. Defining decision-making between parental rights, parental responsibility and medical opinions had become blurred. The legal system has to define overriding principles, now often referred to as 'Gillick competency' - a term used in medical law to decide whether a child under the age of 16 is able to consent to his or her treatment. While the originating principal had revolved around the issue of contraception the theme of a doctor saying 'yes' and parent saying 'no' begged the question of what is the defining principle. At the end of the day it was established that it is the Court that has the final word in such matters.

In 1990 a Gillick competent child joined his parents in requesting not to be given a blood transfusion. The child was a Jehovah's Witness aged 15, and suffering late stage leukaemia. The judge decided the child should be given the transfusion. A dramatisation of these events has now been released as a film called *The Children's Act*. The three basic legal points in current law relating to treatment are well defined but still open to a degree of interpretation. First, in relation to a child, anyone can make an application to a Court. This ruling ends when the individual reaches the age of 16. Sir James outlined a harrowing case in 1997 of the necessity of active intervention to assist a patient with anorexia nervosa. A second issue in family law confirms that a Court can authorise restraint in the treatment of a child. The third issue refers to thresholds relating to limitation, on Local Authorities applying for an order. The threshold has two components, the first is about a child being at risk of significant harm and the second component defines that if a Local Authority is requesting a care order, that potential for significant harm is attributable to parental level of care. The

### DID YOU KNOW?

William Wilberforce, the anti-slavery campaigner, spent £8,000 in 1780 bribing voters to elect him as an MP.

If the iPhone were a separate company its revenue would be larger than McDonald's and Coca-Cola combined.

New Zealand was the first country to give women the vote, in 1893 all adult women were enfranchised.

*Acknowledgements to Prospect magazine*





The Alfie Evans case drew protests and controversy

Court can only make an order if parental failure has, or is likely to create, significant harm to the child. This theme is central to the interpretation of the 1989 Children's Act. This does not apply in relation to NHS Trusts in relation to treatment issues. This was highlighted in the Alfie Evans case of a male infant suffering from a neurodegenerative disorder. The argument was made that there was no threshold which involved the necessity of Local Authority intervention. Fundamentally the arguments revolved around medical

treatment of the boy. In this position the Court has to decide what is in the best interests of the child, but it is the Judge who has the final say on the matter. This can in turn lead to challenges. Relating to another issue - we do not have a system of compulsory immunisation in the United Kingdom. A parent may not want their child to be immunised due to fear of side effects of vaccination. If the parents' request appears reasonable then the Court should not interfere.

A situation of high tension can often be found in care of gravely ill or dying babies or young children. Three cases in recent history became high in the public profile. These involved the management of three children, Ashya King, Charlie Gard and Alfie Evans. First amongst the issues raised in the care of these little boys was the fact that in the case of a request from the NHS, there is no threshold. The second, that if the application is by a Local Authority, what kind of process should be adopted? A third issue involves allowing parents to remove their child from hospital and even take it overseas for further treatment. The Court can be faced with making decisions on gravely ill children in whom death can be considered to be imminent. The Judge must not make decisions on quality of life but with due regard to the nature of burdensome treatment. Due consideration must also be given to the involvement of loving parents and their desire to regularly visit their child. Occasionally the NHS accepts a situation of managing a gravely ill child expected to die, but within an uncertain time span.

An application for the transfer of care from parents, by the Local Authority, may lead to different opinions. While threshold responsibility must be established, for example in the case of unreasonable parental behaviour, there may be challenges. In relation to care provided by an NHS Trust, threshold responsibility for ongoing care of a child does not need to be established. Clinical examples were discussed including the care of Ashya King. The child had been diagnosed with a brain tumour (meduloblastoma) and the parents wished to remove him from NHS care and take him overseas for treatment. He was subsequently removed by the parents from the hospital in Southampton and initially taken to Spain. After urgent treatment in Malaga he was eventually taken to Prague and received proton beam therapy which had always been the parents expressed wish. At the time of writing, the child is still alive following apparently successful treatment. The initial response of the NHS was that he had been kidnapped. The parents were arrested in Spain and there was considerable public interest in the proceedings with high media coverage.

The argument made by the NHS was that proton beam therapy was relatively untested. The Crime Prosecution Service in the UK eventually backed off and advised that the process of criminal detention

## AN ASTERISK

An author had an asterisk,  
he kept it in his den,  
wherein he wrote some spicy tales  
of erring maids and men.  
And every time he reached the spot  
where carping censors lurk,  
he called upon the asterisk  
to do his dirty work.

*Author unknown to the editor,  
thanks to Dr John Crooks*

should not proceed, allowing the child to be transferred from Spain to the Czech Republic.

Recent discussion has been taking place on the abortion law relating to the Republic of Ireland. Issues arise over a request to remove a young person to another country with more liberal laws to allow the procedure. It is unlikely that any UK Judge would stop a parent bringing such a person to the UK to seek advice on a termination. While every case is different, questions are raised by the desire of parents with a needy child in the UK and the desire to travel to another country to seek appropriate treatment. Solutions may result in a fudge but the overriding concern of the Court should be to give due consideration as to whether parents are acting reasonably.

Difficult problems may also arise in a non-clinical context when parents flee abroad with their offspring, fearing a Court Order regarding the young person's care. The Court should at all times give due weight to what is in the best interests of the child. Occasionally a situation arises where a child is extremely ill and being cared for at home. The NHS and Local Authority may not be able to agree on a care package, the parents may be devoted but exhausted and in the context of institutional care or foster care, costs could increase. The Judge in a family court has to wrestle with these difficulties.

Sir James was not in agreement to restriction of the press, even in the most emotive of situations. In the case of Ashya King, without extensive media coverage it is possible that care would not have been resolved in the sympathetic way it was. Alfie Evans was an infant from Liverpool who was suffering from an undiagnosed neurodegenerative disorder. The medical team and the child's parents disagreed about whether to maintain life support. He died in April 2018 following removal of ventilation. Outrageous attacks were made by sections of the press on devoted staff at Alder Hay Hospital. The case of Charlie Gard, also received extensive press coverage. The boy suffered from mitochondrial DNA depletion syndrome (MDDS). The medical team from Great Ormond Street Hospital differed from the parents on agreeing whether experimental treatment would be in his best interests. He died in July 2017 following withdrawal of mechanical ventilation. One witness at the Court Hearing was assaulted while leaving the Court, yet despite pressures and concerns, Sir James reminded us that no attempts should be made to excluding the press in the coverage of such cases.

Doctors need to show humility in the light of issues which may arise in terms of ethics and medical treatment. While maintaining authority over diagnosis and prognosis, care may extend further and other parties have a justified opinion on care. While discussing treatment, people may have different ideas. Society needs aid, and it may not be sufficient to only accept views of doctors on an approach to sensitive issues. The growth of challenges in relation to the law has been enormous over the course of the last forty years. Judges, lawyers and doctors cannot provide all the answers and we need all the help available to improve our thinking on ethics and moral aspects of patient management.

**David Murfin**

## SISTER CAT

Is feline purring a survival ploy.  
a final touch to Schiller's Ode to Joy.

some *ruse biologique* which guarantees  
to cats survival and to humans ease?

Is it by chance or randomness unplanned  
reward or happenstance for stroking hand,

a soothing celebration of the bond  
of artful creature and of human fond?

What inborn privilege does it convey?  
in evolution what tried function play?

In their own world of sacred privacies  
where cat-like they do everything they  
please

when a new litter nudges up to Ma.  
that is *ma chatte*, do these soft cellular

fur-ball creations with their vision dim  
purr in close unison a rumbling hymn?

*Courtesy of Tom Madden*

# ARTICLES

## Memoirs of a pilot officer

James Malpas



James Malpas recounts his service with the RAF

A recent flight in a Spitfire prompted me to remember my early days in the RAF as a junior Medical Officer. As soon as I finished my house jobs, FY1 and 2 in today's parlance, I was called up to do my National Service. It was on a cold wet afternoon in February 1957 when I arrived at RAF Warton in Lancashire carrying a blue holdall containing a change of clothing, and a copy of Cecil and Loeb's *Textbook of Medicine*; as a National Service medical officer, I had arrived for one month's induction course. I was led into the ante-room where the commanding officer welcomed us and said what was expected of us in the next month. There would be lectures on hygiene, the horrors of VD, and how to inspect kitchens and latrines.

We were issued with our blue uniforms including a blue beret which would not stay on my head in the approved fashion. Someone said I looked like a U-boat sailor. We then had to have our

inoculations. I reacted badly to the typhoid injection and awoke about midnight with a high fever. It had been snowing so I induced a fall in my temperature by rolling in the snow. I felt better next day which was just as well as we had to learn how to march and give orders.

A grim-faced flight sergeant took us to a nearby lane. We marched up and down and finally halted. It was very icy underfoot and the lane had a steep camber with ditches either side - and I was called upon to give an order, any order. The only order I could remember was 'open order march' I gave it as loudly as I could. The front row advanced safely but the back row slithered backward and ended in the ditch. For a brief moment I saw the trace of a smile on the flight sergeant's lips. This ended any further drill. The man was a martinet. Later I heard him shout as an airman passed on a bicycle: 'Put that man on a charge, he's idling whilst cycling'!

Somehow, I got to know that my room was due for ransacking that night, probably as a result of the morning's fiasco. We had all been given little cards with our names on which we put in little holders on the door to our room. It was a matter of moments to swap the cards around, and so I slipped away from dinner for that purpose. Later that night I heard the room with my name on it being ransacked.

At the end of the course, for the first time the phrase: 'It's not what you know, but who you know', was impressed on me. Two of our number who never attended any of the lectures passed out with top marks. It appeared that they were expert golfers and had spent the

month helping the CO to reduce his handicap!

At the end of the month we were asked to apply for postings either at home or abroad. I learnt another principle, that you should always request the opposite of what you really want. All of us wanted to go overseas except for one officer who wanted to be near his invalid mother. The only officer to get an overseas posting was the one who had wished to be near home. He was posted to Malaya, at the time of the communist insurgency, and was sadly killed in an ambush up country sometime later.

I was posted to what was then Number 12 Group Fighter Command. The groups covered the same areas of country that they had at the time of the Battle of Britain. As Pool Medical Officer I was expected to provide locums for medical officers on leave throughout East Anglia. I hardly settled in one station before I had to move. My laundry became scattered throughout East Anglia at the tender mercy of my temporary batmen. Sometimes I was able to retrieve it but usually only after a long consultation about the medical problems besetting the elderly civilian batmen. An early morning cup of tea would be repaid by the close examination at my bedside of a smelly ulcerated foot.

I started on my rounds of inspection and sick parades as laid down in Queen's Regulations and I ended my first day with a visit to the helicopter hangars. I went inside: 'Ah Doc, you are just the man we have been looking for', said an aging flight lieutenant. He told me that they needed to practice landing a doctor on a ship and it would help them greatly if I would be prepared to be winched down onto a nearby disused airfield. He said it might help me one day if I was posted near to the sea. I agreed reluctantly and was instructed in how to manage the various clasps and fastenings and then we got in the chopper. I was taken to the airfield and told to wait until they returned. To be taken up I needed a dangling rope with the loop at the end, which snaked across the grass towards me. I grabbed the rope and then panic struck; had I remembered the right way to fasten the various clasps? A trial lift showed that all was well and I was winched up safely. It was not the height that was scary but the deafening noise of the rotors as I was brought inside of the chopper. I did not inspect helicopter hangars again.

I had just finished the sick parade a few mornings later, and was standing looking at the row of planes of various types lined up near the runway. As I mentioned, it was never wise to



The iconic RAF Spitfire in flight

appear to be doing nothing - you should walk briskly from place to place, preferably with a clip-board under your arm. The Wing Commander flying looked at me distastefully 'Have you done any flying, Doctor? Come with me, I will show you what we have to put up with'. I got into some overalls and then climbed into the plane. The officer took the controls while the member of ground staff who strapped me in grinned and murmured 'Watch out'.

We dived and looped the loop from every imaginable angle. When we were upside down, flakes of dried vomit from previous occupants fell like confetti around me. I was determined not to be sick though I hardly knew where my stomach was. At last it was over and I was unstrapped and got out of the plane. 'What did you think of that?' he grinned maliciously. I replied that it was a tremendous experience but I had to get back to work. I saw he was visibly disappointed as I walked (albeit unsteadily) away.

There were some rather eccentric characters, especially among the senior officers. My senior Medical Officer was an elderly doctor who had a great interest in mathematics, particularly algebra. On one occasion I went to see him about a medical problem to find him deeply immersed in a textbook. It was open at the page which dealt with the binomial theorem which was obviously causing him some concern. I recognised the book as 'Batten and Brown' a book which I had used for advanced maths in the sixth form at school. In fact, Tom Batten had been my maths teacher. After I disclosed this I could do no wrong. I enjoyed discussing how Batten would have solved these problems and we got on well together. Later when I had a look at what Queen's Regulations said about getting married, I found that you were supposed to get permission of your senior officer. When I went to him and asked permission 'Good Lord' he exclaimed, 'I have not had anyone ask my permission since I was on the North-West frontier in 1936'. We both had a good laugh and he gave me permission!

Towards the end of my time as Pool Medical Officer I was involved in a small way with the defence of the realm. I had just arrived at a fighter command base near Norwich when it was announced that there would be a major exercise to test our defences. There would be a mock attack by Russian planes on East Anglia. The morning of the exercise I had a phone call from the Wing Commander flying, asking me to see him. He had a bad cold and had developed ear ache. On examination, one of his drums was markedly inflamed, so I told him that there was no flying for him that day as he could do serious damage. This advice was accepted without demur. Pilots know the hazards of upper respiratory tract infections especially when ears are involved. He was upset to be out of the major exercise of the year.

Later that day at the height of the exercise I had a call from the station commander, a famous Battle of Britain ace, saying he had a bad pain in his stomach and would I send over some of 'that white medicine'. He would send an airman to collect it right away. I nearly complied but a warning bell started to ring in my mind. Exercise or not, I decided that I had better go and see him. I got in the medical officer's car and drove over. I went into the headquarters to find the CO looking very unwell. I took a brief history and then examined him. There were all the features of a perforated duodenal ulcer. I explained the seriousness of the situation and said that he should go to hospital right away, and I would phone the consultant on duty, who I knew as I had been his houseman. The CO looked at me with a wry smile on his face 'Damn it, Doctor, you've grounded my Wing Commander flying, and now you have eliminated me from the exercise. Are you a Russian agent?' It was a great relief to see the ambulance draw away. Two weeks later I was posted to an RAF hospital in the Midlands.

## DID YOU KNOW THAT

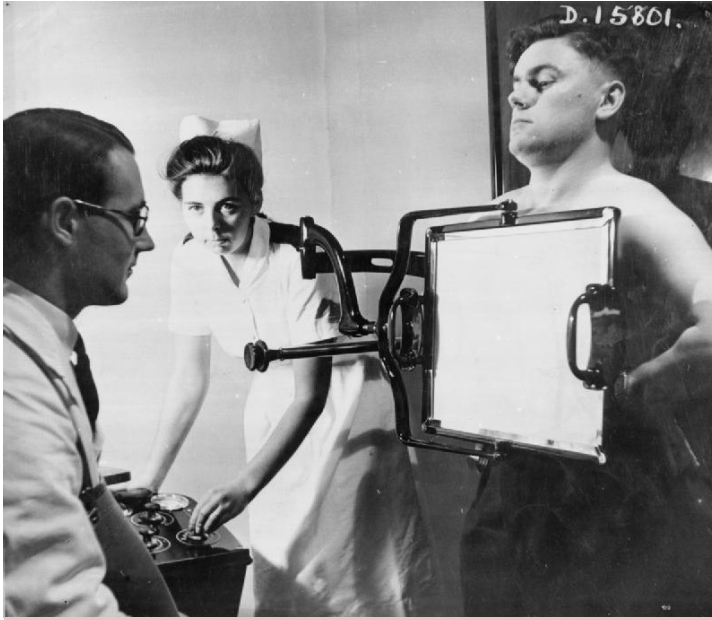
When Buzz Aldrin returned to earth after a trip to the moon he claimed for his travel expenses: \$33.31.

The Japanese have a practice they call *inumeri* which involves falling asleep intentionally at work, including during a meeting. Doing so implies that employees are so dedicated to their work that they have worn themselves out.

*Thanks to the Telegraph, the Guardian and Prospect magazine*

# My life in relation to the history of tuberculosis

Kenneth Citron



Treating tuberculosis - An X-ray taken to look for signs of TB at Harefield Hospital, Hertfordshire, 1943. *Imperial War Museum*

I was born in 1925. At that time tuberculosis (TB), was a major killer in Britain. About 80,000 cases were diagnosed every year, and well over half the patients died. There was no effective cure. In 1943 I became a medical student at Guy's Hospital London where there were many patients suffering from TB. Even some of the lecturers there were short of breath due to lung damage from previous infection. BCG vaccination had been developed 20 years before but was not routinely given to medical students and so we were unprotected. The war ended in 1945. Several young doctors from Guy's went to care for people in the liberated concentration camps. One doctor caught TB there and died of it soon after.

In 1948 I qualified in my final examinations and was the only one of my group to be awarded Honours in Medicine by the University of London. 1948 was an auspicious year, the start of the National Health Service about which we young doctors were very enthusiastic.

I had the privilege of being awarded a House Physician post, on the medical wards at Guy's. As I finished an appointment I felt unusually tired. A friend of mine insisted that I had a chest X-ray, which showed that I had, indeed, contracted pulmonary TB. I was devastated because there was no certain cure. I thought my promising career was finished. I resisted advice to have an artificial pneumothorax (AP), which when having worked in chest clinics, I had seen to cause grave complications.

In 1946 a small supply of streptomycin arrived from the USA. The British Medical Research Council undertook a controlled trial in pulmonary TB - it was a ground-breaking study. Bradford Hill's statistical analysis was the gold standard for future research and procedures. The committee concerned consisted of Phillip D'Arcy Hart and Guy Scadding; Dennis Mitchison did the Microbiology and John Crofton coordinated the clinical side. These men together with Wallace Fox were world leaders in the fight against TB and I knew them well (they all had long active lives, surviving to at least their 90s, Dennis to 100 and Phillip to 107). The study showed that streptomycin cured 10% of TB patients but 90% failed and developed resistance to the drug. This triggered the search for other antibiotics which given together with streptomycin would prevent resistance.

I elected to try rest, relaxation, good food and sea air, in a flat in Broadstairs under the devoted care of my mother, in order to build up my natural resistance. After a year of this treatment I appeared to have recovered and restarted light medical work; it was this personal experience that

## DID YOU KNOW?

That the word "goulash" meaning stew, is in fact the Hungarian word for "cowboy" and comes from a dish called "cowboy soup"?

*Thanks to the Telegraph and Prospect*

stimulated my professional interest in TB. In 1953 I was appointed Registrar at the Royal Brompton Hospital. I was fortunate to be attached to the firm lead by Guy Scadding, a brilliant and kind physician who had developed academic and research activities of the hospital work. He was my inspiration and had a major influence in stimulating my medical enthusiasm.

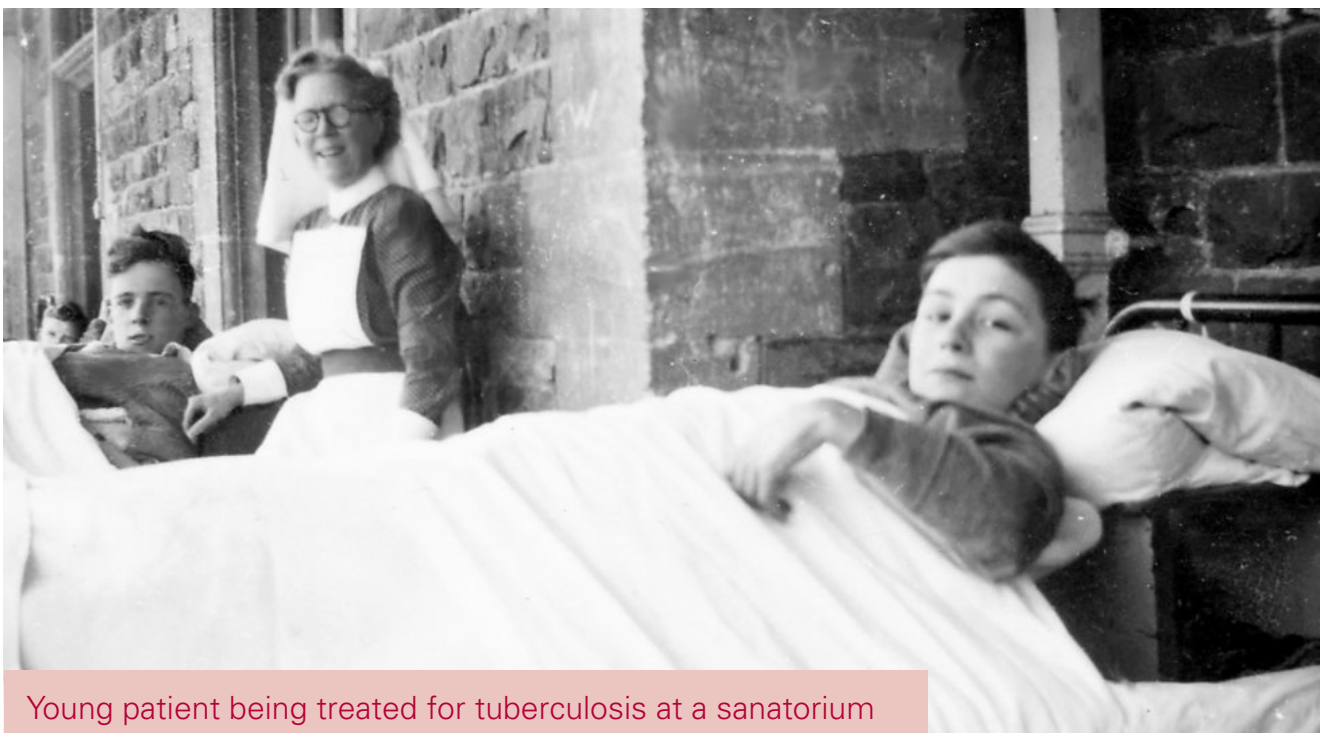
The Brompton had been founded as a charitable institution in the 19th century for treatment of 'consumption' (that is, TB). At that time in the UK, the disease killed a third of the population aged under 50, and consumptive patients were not admitted to general hospitals. My work in the Brompton in 1953 consisted mainly of care for tuberculous patients.

The Brompton Sanatorium was situated near the pine woods at Frimley. I found my visits there emotionally moving and unforgettable, seeing so many young people whose lives hung in the balance. Treatment consisted of bed rest, fresh air, gradual mobilisation and strict self-discipline. Many patients had remissions, suffered relapses and spent their lives in and out of sanatorium care. One did not speak of cure. Having TB was a lifelong occupation, artificial pneumothorax being a popular treatment at that time - the procedure consisting of injecting air around the lung to collapse and rest it. There were no available studies to show whether or not this was effective, and working in AP clinics I observed that serious complications were frequent. Major surgery to remove diseased lung was usually ineffective and often mutilating. Eventually new anti-TB drugs were discovered; PAS, isoniazid, pyrazinamide and rifampicin.

I was appointed consultant respiratory physician at the Brompton in 1959 and much of my work thereafter was devoted to research into TB, and developing TB services worldwide. In the 1970s I was Chair of the Research Committee of the British Thoracic Society performing



Exterior view of Brompton Sanatorium, showing the garden which patients planted and maintained.



Young patient being treated for tuberculosis at a sanatorium

## DID YOU KNOW

Cows display reasoning skills equivalent to a five to seven year old child.

Beer was banned in Iceland until 1989.

The longest time between individual twins being born is 87 days.

The top of the Eiffel Tower leans up to 18 cm away from the sun as the metal facing it heats up and expands.

*Acknowledgements to Prospect magazine*

trials of various durations and drug combinations for TB therapy in the UK. Then, I became involved in worldwide studies with Wallace Fox, director of the Medical Research Council Tuberculosis unit.

For years it was difficult to persuade patients to take drugs that had unpleasant side-effects, and we observed multiple drug resistance emerging among those who did not take their medication regularly.

I was involved in international studies of various regimens, finally reducing duration of the standard system to 6 months, either self-administered or given intermittently under supervision.

I travelled widely including to India, Africa and Hong Kong, helping to set up TB services, as it was recognised that TB was also a Third World problem. I became advisor to the Department of Health and was particularly involved with the BCG scheme started in the early 50s, that was shown to be highly effective.

However, the MRC TB unit was disbanded in the 1980s. I argued strongly against this because TB remained a major world killer and the UK should continue to contribute to defeating it. But in the 1990s it was thought likely that TB would be eradicated from the UK; it was becoming a forgotten disease.

In 1993 though, the World Health Organisation declared TB to be a global emergency, compounded by the HIV/Aids epidemic and widespread multi-drug resistance. In HIV infected people TB frequently is the cause of death, within 3 months of infection.

In the 1980s UK TB rates began to rise, particularly in cities and among immigrants. The charity TB ALERT was founded in 1998 by Sir John Crofton, Peter Davis, myself and others, to raise awareness of the threat of the disease in the UK and worldwide, and to assist in its control.

I retired as a physician at the Brompton in 1990 but remained busy in TB teaching and research.

Between 1992 and 1994 I worked with the homeless on the streets of London in association with the charity Crisis. I surveyed people for TB and amongst them found a rate of infection 200 times that of the general population. In a survey of London boroughs performed later, after publication of the report, I found that control measures were woefully inadequate, and now, in 2018, there seems to have been a great increase in homelessness in London. I remember discussions with my friend Sir John Crofton who had succeeded in virtually eliminating TB from Edinburgh, previously a high prevalence city. We thought it feasible that eventually TB could be eliminated worldwide. I am now 93 years old but I remain enthusiastic and hope that new research and effort will eventually defeat, once and for all, this great scourge of human kind.

## JAM TODAY

"The rule is, jam tomorrow and jam yesterday but never jam today," Through the Looking Glass and What Alice Found there, 1871

Did you know that this was Lewis Carroll playing with the Latin word *iam*? It means now.



# Rescuing the heritage of Sir John Carew Eccles FRS (1903- 1997)

Ulrich Koppitz



Sir John Carew Eccles using a laboratory microscope, November 1963

In 1977, Australian Sir John Carew Eccles observed 'The last journey of my odyssey is now ended, again across the ocean to Europe... I have here all my books and journals - many thousands of volumes and a large collection of reprints, so that I can continue my academic life, concentrating on the field that lured me into neurophysiology over 50 years ago - the mind-brain problem' (Ann Rev Physiol 1977: 39;17).

Declaring this intention in the same year as the publication of his book with Karl Popper '*The Self and its Brain*'. Eccles also published a further 150 scientific papers and 14 books, as well as numerous re-editions and translations. After 50 years of experimental research in England, Australia, New Zealand and lastly in the USA, he moved from Buffalo to Locarno in Switzerland. As he had pictured himself moving from one university to another with his laboratory equipment like a snail with his house, this was even more true for his ever growing treasury of books and documents.

Following his death in 1997, Lady Helena Eccles donated his private library, manuscripts and correspondence to the appropriate institute of Basel University. Sadly later, due to organisational restructuring and a change in direction of the work of that institute, the collection remained uncatalogued, preventing any practical use of this important historical resource, and it faced being abandoned. As was happening elsewhere, staff costs and the need for valuable space in laboratory-based institutes, meant that their libraries became less accessible for archival research. It was against this background that Lady Helena urgently inquired from Sir John's former colleagues whether they could help in finding an alternative home for the collection, somewhere in the English-speaking world. Due to similar financial and other constraints, no other institution was prepared to take over the whole collection, or any of its major parts. Archives would not store printed material, nor could libraries take on the huge task of cataloguing large amounts of unique source-material while enforcing their bylaws on annotated duplicates, reprints *etc.* Eventually, through a chain of personal contacts, the flexibility of a small institution and, significantly, a German Research Foundation grant, that home materialised as the Eccles Archive in the Library of the Institute for History, Theory and Ethics of Medicine, of Heinrich-Heine-University, Düsseldorf.

In 2011, a splendid Symposium celebrating Sir John's life's work was held to launch this project. This was jointly organised by a basic scientist and former colleague of Sir John, Professor Tom Sears (PhD, Hon. FRCP, King's College London) in collaboration with the former Chair of Neurology, Professor Hans Joachim Freund (Heinrich-Heine University Düsseldorf). The overall theme centred on the way one academic school begets another, epitomising Eccles' life-long contribution to this process, from his time with his Oxford mentor Charles S. Sherrington, to witnessing academic success by his own scientific

progeny and, in turn, theirs also.

The Archives and Library are now fully open for historical research, subject to usual conditions (cf. [www.uniklinik-duesseldorf.de/eccles](http://www.uniklinik-duesseldorf.de/eccles)). Opportunities are available for study of original material against the background of the Eccles library displayed on open stacks, and even seated at Sir John's personal desk that had also shared his 'odyssey'.

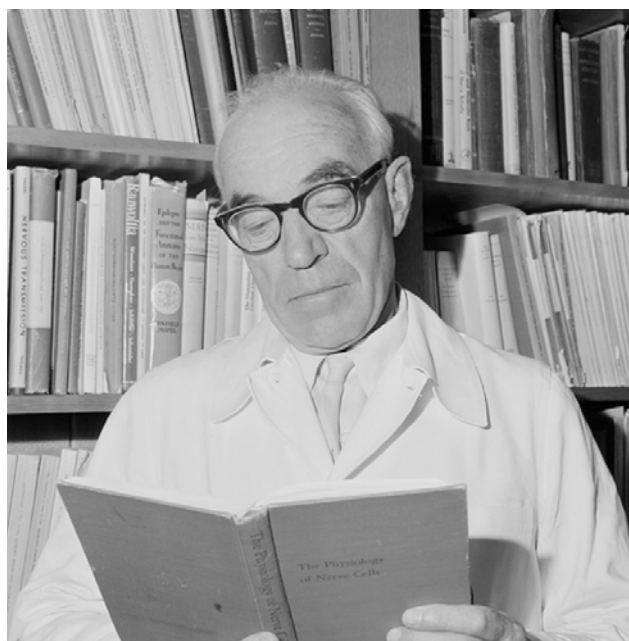
Subsequently, an international historian of the neurosciences was hired to catalogue the most important sources and to advise the Institute's librarian, specifically on neuroscientific matters. Since then, cataloguing has continued successively from older to newer material, and descriptions of the currently accessible files can be searched *via* the internet portal 'Kalliope', a central database of personal archives in Germany and Austria; due to history and federalism, such sources are distributed over many regions and institutions in Central Europe (<http://kalliope.staatsbibliothek-berlin.de/en/index.html>).

One of the most difficult tasks for historians initially working on the heritage of John Eccles was to concentrate on the library rather than first exploring the unpublished material. The private library proved of enormous value both in finding and later sorting important manuscripts and relevant correspondence, some being enclosed in corresponding books. John Eccles's personal library comprised a vast offprint collection of 571 scientific articles authored by himself, already bound in series, as well as numerous voucher copies of books. These circumstances greatly favoured completion of the catalogue, which not only matched the already comprehensive bibliography published by the Australian National Academy, but added over 60 entries and 220 bibliographical specifications. Most of the additional contributions have been discovered in edited volumes published later in his career. And to highlight the difference between articles and books, publications can be weighted by the number of pages. Thus in comparison to the 5,367 pages recorded in the Web of Science (articles, 38%), the now completely revised list of 631 original works amounts altogether to 14,062 pages; this number excluding translations and re-editions, which come thus far to a further 706 bibliographical entries.

In contrast to Charles Sherrington (who he had initially joined in 1925 as a Rhodes Scholar, to study for his PhD), Eccles was not a bibliophile collector of rare books. Instead, his library reflects the needs of academic life in the 20th century, ranging from medical text books to voluminous handbooks (many decorated with extensive annotations, corrections and, on copies for review, very forthright comments that normally no publisher would allow), to prestigious books dedicated to Eccles from academic institutions, friends or former students.

Most impressive is the collection of conference volumes, most of which he had attended himself (just in a few cases the cover bears the note 'I was not there'). Sometimes initial notes inform the reader in which year(s) Eccles studied particular articles in edited collections of works. As would be expected, for such a prolific author on mind-brain relationships, over 1,000 interdisciplinary books on the broader topics of evolution, body and soul, and others, form the core of the library; indeed, some of the archival copies have also been used in teaching medical students and those of other faculties. Seminars have been held for '*Studium Universale*' as well as for postgraduates pursuing studies in Translational Neurosciences.

Perhaps, more important than the library itself is the archive, containing a vast amount of correspondence to and from various workers,



John C. Eccles, Australian of the Year 1963

all over the world, together with many diplomas and some unpublished manuscripts and laboratory notes. This is not surprising as Eccles, although Australian, studied and worked in Oxford, leaving Europe just a year before WWII broke out and returning to Sydney as Director of the Kanematsu Institute. A postwar professorial Chair in Otago, New Zealand was followed by his appointment at the newly established Australian National University in Canberra, as Head of the Department of Neurophysiology where he hosted many international research fellows as well as PhD students.

As an Australian and veritable cosmopolitan academic, Eccles belonged to a letter-writing culture, deepening and strengthening international academic discourse of their times. Much information concerning scientific disputes and networks provided in Eccles' early correspondence can also be found in British archives, especially of the Royal Society, but every archive can contain previously unknown treasures. In this regard here, over a hundred sheets of letters exchanged between Karl Popper and John Eccles while in New Zealand and Australia, have been discovered! Karl Popper had not included these in his personal archive although he had stored microfilm copies in Britain and in the United States, besides the originals at Klagenfurt University, Austria.

Frequently, historical research cannot be satisfied in one archive alone. For example, in order to investigate causes and effects of the Nobel Prize shared between Eccles, Hodgkin and Huxley in 1963, files from Stockholm proved very informative about the long process of nomination and decision making. The strategy of proposals and reviews to evaluate precedence of discovery and excellence are only one side of the medal. The other can be characterized by a network analysis of the protagonists' position in relation to the formal and informal thought processes of the Laureate/s, that is, in citation networks of articles compared to his correspondence.

As a further step in interrogation of the collection, hypotheses were tested as to if and how Eccles' publication or citation behaviour changed in the decade after the Nobel Prize, while he kept on performing laboratory research; conversely if the Nobel population and wider scientific community quoted him more frequently in comparison to the previous decade. On the one hand, online tools of the ISI Web of Science Core Collection database were used for that purpose, and on the other we compared an extensive review Eccles published as non-Nobel laureate in 1961 to the monograph he developed from that article which he finalized being aware of his imminent Nobilitation, so that the first copies were delivered to Stockholm right on the ceremony days. However, our simplistic hypotheses were not correct, citations or co-authorships within the group of neuroscientific laureates rather declined between 1964-74. Thus, belonging to the Nobel elite did not mean that much in terms of scientific citation behaviour, although both in publications and correspondence Eccles frequently highlighted the scientific value of meetings and academic societies.

As the autobiographical quotation at the beginning of this article illustrated, Eccles' withdrawal from the laboratory in 1975 changed his life and works in a more contemplative direction. This was foreshadowed in an exchange of letters with the surgeon Sir George Douglas Robb of Auckland who congratulated him on the Nobel Prize and pondered: '... How does one, these days, succeed in marrying the sort of things you and the molecular biologists do, with the simple compassion of the Samaritan whose sphere of action is still often a dusty roadside going down from Jerusalem to Jericho, or something like it... Without the compassion and the close contact with ordinary human beings, medical practice loses its *raison d'être* and without molecular biology and the like it would rapidly tail off into terrible superficialities. You and your party have a *raison d'être* which will propel you along indefinitely, but this has nothing necessarily to do with medical practice. Please help me...' (Eccles Archives Dusseldorf 2AU-2221-1963-10-21c).

To which John Eccles replied: '... I could agree that there are great problems in the future of medical science. However, I do hope that as we learn more about man scientifically, we begin to appreciate the humanistic side of life...'

# Evolution of Darwinism

Maurice Cohen

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Statue of Charles Darwin at the Natural History Museum

I was reading an article in the *Journal of the RSM* a while back which sent me to my physiology textbook for refreshment of knowledge. As usual, the object of my quest soon got lost in the other areas that popped up and caught my eye, which I couldn't resist reading.

After an hour, I sat back and thought: 'what a wonderful and complex organism the human being is! So complex that we still don't know fully how we work'. But there was nothing sudden or original in that realisation. What did come to mind, was how we had evolved to this condition: which led on to thinking about the Darwinian Theory. Could we humans have reached this degree of detailed complexity in the time we believe it has taken, on the basis of Darwin's Theory? Random mutations, natural selection, survival of the fittest, these are all time-consuming events. Surely, other factors must be involved that helped accelerate our evolution?

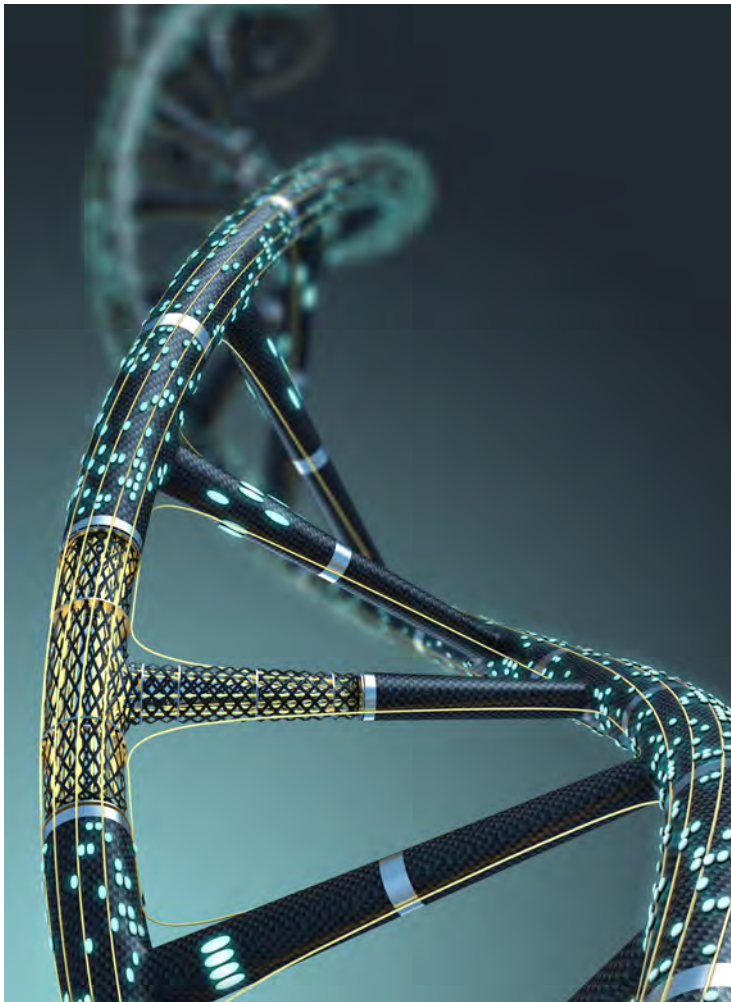
I am not an original thinker, and there is nothing new under the sun. So, I felt there must already exist other findings out there that may help provide an answer to this question. I found two possible starters (there may be many others). One is *via* epigenetics, where it has been shown that the activities of genes have been modified to help us acclimatise to certain extreme environments that might have been encountered. If I remember correctly, such was shown in one study of an isolated community in the far north of Sweden; modified genes are then inherited by subsequent generations. So, adapted genetic activity may have provided a more rapid additional developmental progression.

The second one is the very old and well-known occurrence of symbiosis, in which organisms live together to mutual benefit. We humans have a microbiome in the gut, other bacteria on our skin, and mitochondria (derived from former bacteria-like organisms) in our cells, which keep us functioning to best purpose. Their additions to our make-up, have been basic to our evolution. These propositions have been related to humans, but they are equally applicable to the rest of the living world. Symbiosis is well-known in plant life. Epigenetics applies equally.

There must be other factors that have hastened the developmental complexity of living organisms, which have yet to come to light. So, we have Darwin's theory of evolution, with some possible additions and perhaps more to unfold, as long as we keep looking, until we get, what we think is the complete story. Let Darwinism evolve.

# Animated about the inanimate

Maurice Cohen



Should we consider the possibility that Artificial Intelligence (AI) could evolve and develop a self replicating code akin to our very own DNA?

Recent articles about artificial intelligence (AI) and its future development have been quite fascinating. Some read like science fiction, but are considered serious prognostications. In fact, the question is posed, 'Will AI eventually, in its various forms, take over from, and control, human beings?' The immediate and intuitive response is, that it is unlikely, for three main reasons: AI will always, at some point/s, be reliant on programming by humans; it will also be dependent on humans to provide its energy source; and it will not be able to reproduce itself following the deprecations of wear and tear and time. It is not animate.

But on deeper consideration, what is animate? Even highly developed and complex animals like human beings raise questions about what constitutes living as opposed to non-living. We don't have to be programmed, we pass on information from generation to generation *via* our genes. But the latter are found on a double helix of nucleotides, which are chemical entities, known to be inanimate. What is more,

these inanimate chemical entities, not only pass on heritable characteristics, but control our metabolism, turn each other on and off, and help maintain the body's dynamic equilibrium, without any conscious input from us. If we accept these unexplained abilities of the inanimate within ourselves and other living things, then should we consider the possibility of the evolution of AI into a similar state, when it will be able to bestride the non-living and the living, take control of itself, and arrive at independence?

Humans have taken millions of years to reach their present stage of development. But it has largely been dependent on the effects of mutations, chance and environment. With man's increasing knowledge, and active, positive participation, could this timing be reduced in the advancement of AI, at a rate, and in a manner, we had never dreamed of? Human scientific achievements over the last century put this accomplishment in the realms of possibility. Dare we think how it might progress? All depends on that subtle interchanging process between inanimate and animate, which occurs daily within our living selves that we accept in ignorance of the mechanism, and without question. Perhaps, when quantum theories and Einstein's theories have been reconciled into a Theory of Everything, we shall have an answer as to what is animate.

# 'A magician is an actor playing the part of a magician' (Jean Eugène Robert-Houdin)

*Part two: To what extent is a doctor, an actor playing the part of a doctor?*

**Richard Rawlins**

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Poster for Jean Eugène Robert-Houdin's magic show

In part one of my discourse on magic and medicine (previous RFS Newsletter), I accounted for my career as a medically trained magician. Here, I combine my intuition as a magician with experience as a surgeon to consider the extent to which some gullible and vulnerable patients may be taken advantage of by some doctors, and to what extent is a doctor an actor playing the part of a doctor?

'Twas ever thus. Patients of yore could not distinguish between priests, shamanic healers, witches, physicians ... or magicians. Cultures

then endorsed priests who claimed their authority came from 'on high'. Witches were burned, but physicians slowly became respected, and regulated. Magicians became tolerated for the entertainment they provided. False claims of healing powers led to disparagement as charlatans and quacks. Magicians well understood the methods of fake healers, snake oil salesmen and mediums who claimed contact could be made with the departed. As side lines to their regular entertainments, many magicians developed good careers as exposers of these frauds. JN Maskelyne and David Devant had forty year careers presenting magic shows in London - not far from the RSM, but they also revealed the tricks used by spiritualists and psychics. In 1870 they gave a private demonstration of the methods employed, to the then Prince of Wales, and afterwards styled themselves as 'Royal Illusionists'.

In 1997, having been asked by Sir Rodney Sweetnam, President of the Royal College of Surgeons of England, to prepare a briefing paper on 'non-conventional therapies', and being stimulated by the BMA Junior Doctors Committee's insistence that students in Glasgow should no longer be required to attend modules at its Homeopathic Hospital, I began exploring the world of Complementary and Alternative Medicine (CAM). In the US, commercial pressures on academic institutions is now leading to the term 'Integrative Medicine' being applied – CAM proponents want their modalities incorporated with conventional medicine - and want them supported by Medicare and other funders. In the UK, the favoured term is 'Integrated Medicine'.

This does not mean the integration of primary, secondary, tertiary care with social care. 'IM' refers to the integration of modalities such as homeopathy, acupuncture, naturopathy, osteopathy, chiropractic and 'energy medicine' such as Reiki, with conventional orthodox medicine. Evidence-based scientific consensus has it that there is no plausible reproducible evidence that 'energies' can be engaged by the pills, potions, pins, pushing, pummelling and preternatural powers of these modalities, for which I coin the term 'camistry'. If there was such evidence, or demonstrable effects on specific conditions, the methods would have become incorporated into 'medicine'. Others, including HRH the Prince of Wales, want to see

these un-proven modalities and the alternative non-evidence based mindsets their proponents expound, to be paid for by NHS funds. Is this wise? Are patients being fooled? Are funds being misapplied? You must judge, but consider: The Medical Act of 1858 established formal statutory regulation of doctors by the General Medical Council precisely to more effectively protect the public from charlatans, quacks and fraudsters. The GMC requires, *inter alia*, ... 'that doctors: give patients the information they want or need in a way they can understand; are honest and open and act with integrity; must always be prepared to justify decisions and actions; must prescribe drugs or treatment only when satisfied that the drugs or treatment serve the patient's needs; must provide effective treatments based on the best available evidence; and must be satisfied that consent or other valid authority has been given before carrying out any examination, investigation or providing treatment.'

Developments continue. The law on informed consent has changed following a recent Supreme Court judgment in the case of *Montgomery v Lanarkshire Health Board* (2015). Doctors must now ensure that patients are aware of any 'material risks' involved in a proposed treatment, and of reasonable alternatives. Which means patients should be told of the evidence to support the use of a 'camist' modality, and the extent to which patients risk losing valuable time and money on treatments which are not supported by scientific consensus, and which are unlikely to affect the disease condition. This is a marked change to the previous tests under *Bolam* and *Bolitho*, which simply asked whether a doctor's conduct would be supported by a responsible body of medical opinion. Those tests will no longer apply to the issue of consent. In future, claims might result in the courts needing an expert witness on magic!

In 1980, Isaac Asimov commented: 'Anti-intellectualism has been a constant thread winding its way through our political and cultural life, nurtured by the false notion that 'my ignorance is just as good as your knowledge.' In 2016, Oxford Dictionary's Word of the Year was 'post-truth' - characterised by a culture in which debate is framed largely by appeals to emotion and by the repeated assertion of talking points to which factual rebuttals are ignored. BMA council chairman Mark Porter suggested 'It's not difficult to see the dangers of a world in which objective facts are less influential in shaping public opinion than appeals to emotion and



John Dee, who straddled the worlds of magic and science, performing an experiment for Queen Elizabeth I



A magician entertains two aristocratic ladies and a child. Engraving by Rhodon after Watteau, 1882

justifications. Some patients may selectively accept information which confirms and is consistent with their pre-determined biases. Magicians deliberately engage emotions and attempt to be misleading. Ethical doctors should be more circumspect, and ensure their patients are fully informed. The really big change now affecting both magic and medicine, is the internet. Not only are many magic effects exposed, but many healthcare web sites and blogs give advice which may be rational and evidence based, but which also may not be. You must be the judge. For their part, patients need to critically consider which is more likely: (i) that their practitioners have access to forms of energy unknown to science; that harmful vertebral 'subluxations' and malalignments, which have not been identified by any practitioner apart from chiropractors or osteopaths, nevertheless can be 'adjusted' – with somatic benefit; that 'vital spirits' can be conjured by pillules or skin pricks - or (ii), whether any benefits they feel from such ministrations are the result of theatrical placebos and response expectancies.

I contend that perceived 'benefits' may be engendered by magical devices and techniques - a palmed gimmick which makes a click as a vertebral joint is 'adjusted'; the mentalist's patter of dual reality; confusion created by jargon; and misdirection from what is really going on. Some patients themselves have a tendency to be susceptible to confirmation bias and the Dunning-Kruger effect - a cognitive bias in which individuals suffer from illusory superiority, mistakenly assessing their ability as much higher than it really is.

Only patients can really judge whether they might be the victims of quackery. Magicians can help assessment by exposing methods which could be used to enable a medically qualified actor to play the part of a sincere doctor - as my own alter ego, Professor Riccardo does. Patients should be advised to think critically, ensure their doctor offers full information before they consent to treatment, stay calm and carry on. Extraordinary health claims require extraordinary evidence. Scientific scepticism is the best defence against quackery we have. And that approach requires no acting.

*Richard Rawlins is honorary consultant orthopaedic surgeon, Bedford Hospital, and continues with a medico-legal practice based in Dartmouth. He is a member of The Magic Circle, was the Riviera Circle of Magicians' 'Mentalist of the Year' in 2015, and is author of 'Real Secrets of Alternative Medicine' - available on Amazon and Kindle.*



# Random liver transplant

Ronald Millar



Liver transplant taking place in a operating theatre

Surfacing rumours of an impending liver transplantation programme had been confirmed at a monthly meeting of our small group of consultant anaesthetists. To my knowledge, however, this was not followed by forward planning or any discussion in detail. I had not sought to become involved in what would be a seriously long-term commitment. Also, my routine on-call duty was in the hospital up the road.

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By this time, 1968, a number of publications from the USA had alerted readers of anaesthetic journals to the peculiar hazards arising during liver transplantation. Loss of blood on a large scale was usual. Major haemorrhage was of course no new challenge for anaesthetists, but much had still to be learnt about the identification of lost blood-clotting factors and their replacement. Metabolic acidosis had to be identified and treated, as did electrolyte shifts which threatened cardiac arrest. And the violent blood pressure swings associated with clamping and unclamping of major vessels were unique in degree at the time. Overall, there was a pervading sense of ignorance, a 'need to know' which could only be satisfied by measurement and experience.

I had enquired about monitoring circulation by the anaesthetists in the few previous transplants. 'Blood-pressure cuff' was the complacent answer from a senior colleague, involved early because he happened to be on-call, but quite inexperienced in such marathon procedures - and justifiably pleased, lacking other measurements, to have got the patient off the table. But there was just a hint that, here in the UK, the ambitious circulatory, haematological, and biochemical monitoring already established by the American clinicians was unnecessary 'overkill'. An ECG was the only later addition to circulatory monitoring.

I think that there had been a short-term survivor by the time my turn came, unexpectedly, at number five or six. The case was scheduled for late evening - no different from any out-of-hours emergency (which this was not), and I was on-call.

The donor, brain-dead following a subarachnoid haemorrhage, was in the neurosurgical unit where I mainly worked. But if it was merely surgical convenience to do the transplant in the neurosurgical theatre, for me it was a great relief. Here we had equipment for continuous ECG and blood pressure display, and also (fortuitously, because of an unrelated research project) for measuring blood gases and pH. So it just happened, without foresight or surgical decision, that our facilities were to some degree more in keeping with the magnitude of the operation than had been the case 'down the road'.

The male patient, deeply jaundiced and an alcoholic, was calm. I had with me an experienced registrar. Induction of anaesthesia was uncomplicated. After setting up an arterial and two intravenous lines we had some confidence about maintaining viable circulation in face of major bleeding. For that was the critical element, as the surgeon, markedly taciturn, mentioned in the only brief exchange we had, near the start of the case: 'Shouldn't biochemistry be on stand-by?' I asked naively across the drapes, 'for blood

glucose, pH, electrolytes. Blood-loss is the main thing.' And indeed it was, quite soon. But not the only critical factor.

I remember very little except for watching the monitor 'scope, and infusing blood – pumping by hand, unceasingly, from around ten o'clock until five the following morning. Our anaesthetic technique was based on nitrous oxide/oxygen, with addition of a volatile anaesthetic roughly in proportion to the blood pressure level, plus muscle relaxant. We were not distracted by having to inflate a blood pressure cuff, and could read arterial pressures at a glance. There were long periods at and below forty millimetres systolic pressure. Periodically, I hastened along the corridor to check blood gases and pH, then to correct the continuing acidosis with intravenous sodium bicarbonate. At some time of desperation we had inserted a third intravenous line, and summoned a ward staff-nurse specifically to manage just this. All six wrists suffered periodic cramps. Cardiac arrest was always a threat, but was averted except once and only for a few seconds.

Throughout, we had no measurements other than those mentioned. No laboratory back-up until the daylight hours. Taken for granted (as we did) were the unstintingly supportive blood transfusion service and those many donors - idealistic, unknowing. Total blood we transfused was around 25 units, together with fresh-frozen plasma. At the time, this was my personal record for blood given, and the sheer physical effort was unique. The patient was moved to a single room, where transfusion continued into the post-operative hours. I can still visualise the blood-soaked dressings prior to final circulatory collapse at about six in the evening.

From a surgeon's viewpoint, when the principal cause of death was certainly the consequences of blood-loss, it was probably debatable at the time whether the outcome was prejudiced by an approach which ignored proper biochemical and haematological management.

I disagree with that, of course, for it is indisputable that much of what had already been written and recommended these years ago was already improving survival, and the wide and unacceptable gulf existing between 'having a go', 'coping in the British manner', and 'best practice' was just as crystal-clear then as it is now. There was already a large amount of literature on massive blood transfusion and the need to replace specific clotting factors. It seemed that the most important consideration was to gain experience of the surgical technique.

It was especially ironic that the research programmes which I had undertaken previously for several years, in animals, had required continuous measurements of the kind which were at first ignored in the drive to implement liver transplantation programme in humans. Without these measurements, our experiments would have been wasted. In that regard, our experimental animals had been much better managed than were early human liver patients in Britain!

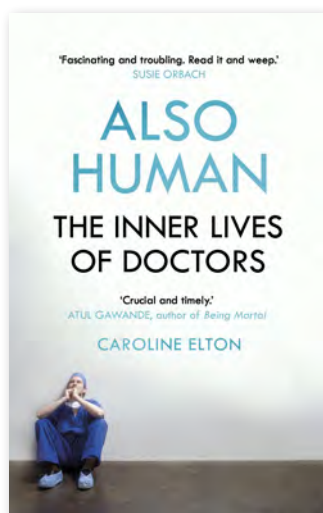
Well, this happened a long time ago. But if the account reads now like a slightly updated version of kitchen-table surgery, we were of course practising good medicine then. Given the knowledge and facilities available at the time, and in that hospital, perhaps no measures could have saved the patient. But I can still recall the frustration and guilt which I felt over that weekend. Anger, too, because the deciding forces had been surgical ambition and an arrogant disregard for planning and team-work.

It was not enough that we had maintained life throughout a threatening series of physiological insults. We should, and could, have done better.

*Sadly Ronnie Millar passed away suddenly in 2015; however his erudition lives on and he is fondly remembered.*

# BOOK REVIEW

## *Also Human - the inner lives of doctors*



by **Caroline Elton**

The weekend newspaper lists of current bestselling books usually include some with a medical theme. Doctors regularly demonstrate their writing skills with vivid descriptions of their speciality. The book *Also Human* is a little different as the author is a psychologist who specialises in helping doctors; however, it is a timely account of the pressures faced by doctors and observing their behaviour. Also, it claims to break the silence which surrounds the profession. Coping mechanisms may vary but the experience of the author is that doctors relate to each other in an often inadequate and sometimes unkind fashion. We surround ourselves in a culture of secrecy.

There is evidence that the transition from undergraduate medical school to junior hospital posts is particularly stressful, and it is rather shaming that only recently is this problem receiving due regard. It may be an exaggeration to claim that there is a depression epidemic, but figures can sometimes lie although consistently similar scores amongst junior doctors both in the UK and in the US are a source of concern.

It sometimes takes an outsider to detail issues of which we are aware but from which we choose to hide; doctors often disguise their own symptoms. Past emotional experiences may remain unresolved over many years. Trainees are sometimes attracted to the discipline of psychiatry because of their own personal psychological makeup. This choice does not always work out for the best. It was pleasing to see the author make reference to the benefits of Balint Groups. The fundamental principle of the exercise is to help doctors explore feelings experienced by patient contact. Retired GPs may recall their own early years when the formation of Balint Groups was encouraged. In this book, the author regrets how few such groups are in existence now in the UK.

The stresses associated with student anatomy dissection, undergraduate examinations, a capacity to feel diminished by unkind words from a consultant and the attitudes to women within the profession, are all discussed in an open way. We have been through experiences together and know of the need to change. This book can do nothing but help to attain a more open dialogue on less than ideal human behaviour.

Race is central to present day discussion on doctor selection and work challenges. The book gives a well written account of problems at medical school level and subsequent work bias. Problems exist not in gaining a place at medical school but regarding subsequent insensitivity and stereotyping. It is a fact however that while a third of medical students in the UK are from a 'black and minority ethnic' background this is largely accounted for by the high proportion of students from Asian backgrounds.

I found the book refreshing and honest. The author points out that medicine remains elitist with a poor record on social mobility. Despite all the difficulties and challenges, few doctors choose to leave their profession entirely; there remains a justified pride in being a doctor. *Also Human* exposes our frailties, hopefully allowing us to address change for the better.

**David Murfin**

# INFORMATION FOR AUTHORS

There are three issues per year of the Retired Fellows Society *Newsletter*, 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 Concise Oxford English Dictionary.

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

## Several types of article are core to the journal:

Solicited articles, these are 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.

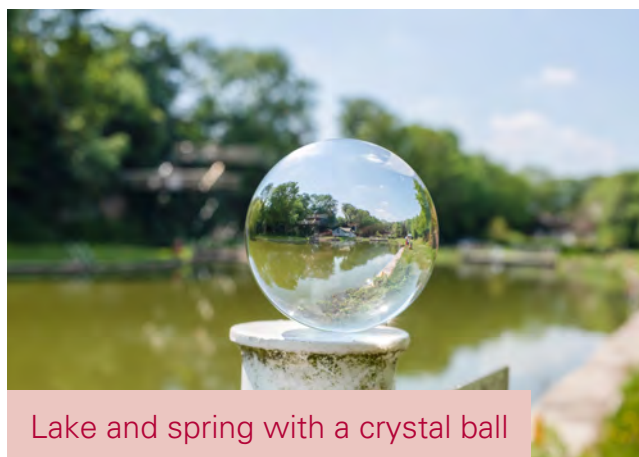
Reports of Retired Fellows Society tours – 1,000 to 2,000 words, the author invited by the leader of the tour.

Short 'fillers', text and/or photographs. Poems, quotes, amusing items – brief – less than 200 words

## Illustrations:

With reference to submission of images (which is very much encouraged), it is **ESSENTIAL** that each image is accompanied with a title of what it is, and the name of the person who actually took the photograph.

Photographs should be uploaded electronically and should meet the specifications of 300 DPI and minimum size of 297 x 210 mm (A4 paper size).



Lake and spring with a crystal ball



A red breasted robin, Dyrham Park



The shore at Witches Point, Wales



Crafnant and Geirionydd landscape, Wales

Photographs by Alistair Macintosh