



**THE HARVEIAN SOCIETY OF LONDON  
REVIEW OF THE YEAR 2023**

**President:**

**DR DAVID TREACHER MA FRCP**

**President Elect:**

**MR ROBERT MAURICE-WILLIAMS MA MB Bchir FRCS FRCP**

## **Introduction By The President**

In 2023 we were happily free from Covid restrictions and our meetings were all held at Lettsom House with between 33 and 55 members attending each meeting. Sadly, our April speaker was unwell at the very last minute with possible Covid but we were most fortunate that Andrew Graham stood in on the morning of the lecture and gave us a fascinating talk on the Apollo missions and the moon dust collected at earlier expeditions.

The annual visit to Folkestone in June to celebrate Harvey's birthplace was a most enjoyable event. After lunch we processed to Harvey's statue where a brief ceremony was held. Later the Lady Lord Mayor entertained us to tea & gave us a lively speech of welcome.

The annual Buckston Browne dinner held at the Governors' Hall at St Thomas Hospital was very well-attended and much enjoyed by all. The guest speaker was Dr Oscar Duke who gave a suitably witty response to the president's toast to the memory of Sir George Buckston Browne and Sir Norman Gray Hill and who also proposed the health of our society & its members.

At the Christmas party held in the early evening we were superbly entertained by guitar music played by Mr Anthony Orr and treated to an excellent meal prepared by Celia and her team. This was followed by a raffle & an auction conducted with great aplomb by our Executive Secretary which raised over £1000 for the Society.

Finally, I should like to thank all our members who attended these events, our speakers, our Council members for their helpful input and advice and particularly our Executive Secretary Mike for his unfailingly calm support and technical expertise and Betty for all her work behind the scenes liaising with and chasing up our speakers. I would also like to record our thanks to Celia and her catering team for ensuring that we were so well wined and dined throughout the year and last but by no means least, Leon who greets us with his characteristic and welcoming smile each time we arrive at Lettsom House.

Dr David Treacher MA FRCP

## **Minutes of the Meeting of the Harveian Society**

**Held on Wednesday 11 January 2023**

The President, Dr Robina Coker, welcomed guests and reminded them that this was a private meeting. The Minutes of the meeting on 9 November 2022 were read by the Honorary Secretary and approved. The President then inducted Dr David Treacher as her successor and presented him with his Chain of Office. Dr Treacher thanked Dr Coker for her excellent year as President and presented her with her miniature badge of Office.

Dr Treacher then introduced Professor Mervyn Singer, Professor of Intensive Care Medicine at University College London, and invited him to present his lecture entitled

### **Lessons from History**

Prof Singer noted that when one looks back at the past, it is often found that apparently new discoveries were first thought of decades or even centuries beforehand.

His first topic was the ‘discovery’ of penicillin. Alexander Fleming at St Mary’s Hospital. He was not a very tidy person. Fungal spores settled on the staphylococcal cultures in petri dishes that he had left open by an open window and on his return from holiday he noted that in the cultures had been killed. He identified the spores as penicillium species and published a paper on his findings in the British Journal of Experimental Pathology in 1929. However, his observation was not followed up until Florey and Chain sought to make it a clinically therapeutic reality in 1938. They worked out the chemical constitution of the toxin, purified and concentrated it and trialled it successfully in mice. In its first trial in a human, the staphylococcal lesions healed rapidly, but the quantity of drug available was insufficient and the patient died. World War II accelerated medical advances. Florey approached pharmaceutical companies in the USA and penicillin production was upscaled spectacularly. As a result, numerous infections became treatable.

Fleming, Florey and Chain shared the Nobel Prize. But they had not discovered penicillin. Sir William Roberts, Professor of Medicine in Manchester, had developed Pasteur’s ideas and in 1874 he had noted that growth in some flasks in his bacterial germination experiments was inhibited by fungal spores, which he identified as penicillium glaucum.

Prof Singer reminded the audience that in times of crisis, things happen apace. The concept of mRNA vaccines had been around for some time and they had not successful, but the advent of Covid-19 pushed their development. Going back over 60 years, polio vaccines were developed in response to a polio epidemic and were highly successful. But at that time there was a significant anti-vaccination lobby, a situation that is now being relived.

He then discussed the concept of ‘drowning by fluid’. A paper in 2006 showed that after initial fluid resuscitation, patients fared better if their fluid balance was kept neutral than if they were over-perfused. However, this finding was not new. The first description of Acute Respiratory Distress Syndrome was a report of twelve cases in The Lancet in 1967, where one contributory factor was clearly excessive fluid infusion. However, in a letter in The Lancet in May 1832, Dr Latta of Leith near Edinburgh described the infusion of large volumes of saline in the successful resuscitation of patients with late stage cholera. But in a follow up letter in October that year he mentioned that sometimes ‘incredible quantities’ of

saline were used, resulting in 'evil consequences'. He stated that 'judicious quantities' were required.

Turning to other instances of fluid infusion, the first blood transfusion, in France in 1667, was of sheep blood. This was successful in one case, but some patients died and the practice was banned. The procedure was repeated in London later that year and appeared to be harmless. But after a second transfusion the volunteer claimed that he had been transformed into a sheep and the practice was banned again.

In 1907, Lord Moynihan advocated rectal saline infusion for resuscitation in peritonitis. Kellogg in the USA believed that rectally administered oxygen could be used in resuscitation. Others described a possible benefit of small volumes of oxygen administered rectally. In 1916 intravenous oxygen at a rate of 500ml/hour was advocated for the relief of cyanosis and dyspnoea. Now lipid-based microparticles with a core of oxygen gas for intravenous injection are being developed in the USA.

In 1940 JBS Haldane observed an experiment in Moscow in which a dog was exsanguinated and was effectively dead, and was then revived with an artificial blood product. Almost 80 years later, in 2019, a report in Nature described the revival of pig brains by perfusion 4 hours after death.

Prof Singer then discussed randomised trials, the first of which is ascribed to James Lind, described as the 'father of naval medicine'. The cause of scurvy was unknown. Lind conducted a study among sailors with the condition, dividing them into six groups of two patients whose location and diet on board ship were standardised. Of the 6 supplements that they were given, citrus fruits were shown to be the most effective treatment. However, it was 42 years before the navy ordered the distribution of lemons to sailors. Captain Cook preferred to offer sauerkraut. In 1929 it was confirmed that the vitamin C content of cabbage increased with pickling.

He then dealt with trials of prevention of infection in hospital patients, reminding the audience of Semelweis's advocacy of hand washing in the prevention of childbed fever. His full advice on hand treatment resulted in skin damage. Alcohol gel was later advocated, but was found to be associated with an increased risk of *C. difficile* infection in vulnerable patients as alcohol does not destroy clostridium spores. The Centers for Disease Control advised soap and water hand washing and wearing gloves and this has resulted in the decrease in *C. diff* infections.

Sometimes 'out of bad can come good'. Nitrogen mustard (mustard gas) was used in World War I. But its mechanism of producing cellular aplasia in some patients led to the development of mustard compounds, the first forms of cancer chemotherapy. A symposium in 1949 also suggested that hormones might be used for the treatment of some cancers.

Peter Safar, an anaesthetist in the USA, developed the modern approach to resuscitation. In his studies in the 1950s, healthy volunteers were anaesthetised and paralysed with succinylcholine, and then had their tidal volumes measured during various methods of resuscitation. He demonstrated that mouth-to-mouth resuscitation was far more effective than established methods of artificial respiration. But Prof Singer concluded such studies would now be regarded as totally unethical and unacceptable.

Following several questions and recollections, the vote of thanks was proposed by Dr Helen Graham.

28 Members and Guests attended

### **Minutes of the Meeting of the Harveian Society**

#### **Held on Wednesday 8 February 2023**

The President, Dr David Treacher, welcomed guests and reminded them that this was a private meeting. The Minutes of the meeting on 11 January 2023 were read by the Honorary Secretary and approved. The President invited three new members and a new associate member of the Society to sign the obligations book.

Dr Treacher then introduced Professor Sir Mark Walport FRS FMedSci, previously Professor of Medicine at Imperial College London, Director of the Wellcome Trust, UK Government Chief Scientific Adviser and First Chief Executive of UK Research and Innovation, and currently Chair of the Kennedy Memorial Trust and the Imperial College Academic Health Sciences Centre and a Trustee of the British Museum.

Dr Treacher invited Sir Mark to present his Harveian Lecture entitled

#### **A Harveian Approach to the NHS**

Sir Mark started by reminding the audience that Harvey had challenged the status quo of the knowledge of physiology by careful observation and experimentation. In this 75th year of the NHS, its development should follow the Harveian example, grounded in rigorous observation, evaluation and experimentation where possible and deliverable.

Yet Harvey had achieved his knowledge of the circulation without knowing of capillaries, although he did hypothesise various possible links between the arterial and venous circulations. The identification of capillaries had to wait for the development of light microscopy and it took several more centuries for blood corpuscles and the structure of the capillary linings to be elucidated. And only in the past half century have we begun to comprehend the complexity of the cell. The monumental book 'Molecular Biology of the Cell', was first published in 1983 and is now in its seventh edition.

The challenge to medical science is to understand both health and disease and to manage knowledge and uncertainty to improve the practice of medicine. For example, reviewing the knowledge of non-pharmaceutical interventions acquired during the Covid pandemic involved assessing thousands of papers in each area, only very few of which actually produced useful advances in knowledge.

All these factors reflect on managing the complexities of the NHS. At £150 billion per year, the NHS represents 8% of the British economy. The demand pressures in managing it are enormous, particularly with demographic issues such as the ageing population. The issues of the NHS could be placed in the category of 'Wicked Problems' – where proposed solutions are often worse than the symptoms. On a world scale such problems are a stimulus for social unrest, war and migration, the past three years having exposed a global lack of resilience.

The supply side pressures in the NHS relate to capability versus capacity. There have been extraordinary advances, driven by genetics, genomics and molecular and cell biology,

chemistry, physics and engineering, together with the current industrial revolution in computing and information technology. The NHS is proving to provide an exceptional partnership with basic science, but the logistics of provision needs to improve by using systems engineering and technology, in order to improve the working experience of NHS staff and the experience of patients and their relatives.

So in looking at a Harveian approach, an evidence-informed approach is needed for the necessary transformation of the system. Root cause analysis is needed and not a reliance on poorly evidenced magic bullet solutions. In addition to discovering, inventing and implementing new medicines and devices, preventative measures are needed to reduce the burden of disease, especially chronic diseases. And the very best such measures are those that achieve a high compliance rate, such as clean water and vaccines in the past two centuries and newer vaccines and cell therapies that are currently very expensive but which will become cheaper. Covid exposed the deficiencies of the NHS and other healthcare systems. The traditional silos of clinical practice need to be changed, not with single interventions but with multiplex solutions.

Who should pay for such change? Taxpayers will always pay in the end, but there is an issue with ageing in that it is the young who have to bear the burden of funding the future old. All such questions are political and the ballot box is needed to give the answers – but based on the best possible analysis of the evidence.

Prof Walport ended with an account of his experience with a new Artificial Intelligence program, ChatGPT. He had tested it by feeding in symptoms that would have suggested that he was suffering from meningitis. The advice he received was generally unhelpful and he had concluded that AI would not replace doctors, but that it could well aid them.

After several questions, the vote of thanks was proposed by Dr Robina Coker. 49 members and guests attended.

### **Minutes of the Meeting of the Harveian Society**

#### **Held on Wednesday 8 March 2023**

The President, Dr David Treacher, welcomed guests and reminded them that this was a private meeting. The Minutes of the meeting on 8 February 2023 were read by the Honorary Secretary and approved. The President marked the death of former President Dr John Harcup on 9 February and announced the nomination of one new Associate Member of the Society.

Dr Treacher then introduced Professor Hugh Montgomery OBE, Professor of Intensive Care Medicine and Director of the Centre for Human Health and Performance at UCL, and invited him to present his lecture entitled

#### **The Facts About Climate Change**

Professor Montgomery commenced by stating that this was a story that we had written and that we were responsible for the ending.

The first description of the ‘greenhouse’ effects of certain gases including CO<sub>2</sub> was by John Tyndall in a Royal Institution lecture in 1859, when he showed that such gases trap longwave radiation and that industrialisation, especially coal burning, might threaten the future of

human life by causing escalation in energy trapping. Since then, science fiction depictions of climate change have progressed to depictions of horror.

The first warnings on the effects of climate change were given in the 1990s by the United Nations Intergovernmental Panel on Climate Change. By 2009 the panel stated that to avoid dangerous climate change, global temperature rise needed to be limited by 2020 and just two years later the data was so much worse that the date was brought forward to 2015. This call was ignored. In 2009, The Lancet and UCL Commission on Climate Change, of which Prof Montgomery was a member, reported that climate change was the greatest global health threat of the 21st century. No action was taken. In 2014 the Commission found that climate change was not just a threat to human health, but to human survival, with a time frame of 30 years, but possibly as little as 15 years.

Humanity is burning vast quantities of fossil fuels, releasing monumental amounts of CO<sub>2</sub> into our limited atmosphere. The concentration is now showing an astonishing vertical upturn, resulting in energy trapping equivalent to 5 Hiroshima atomic bombs per second, with that figure very recently upgraded to 8.7. The unprecedented global rise in temperature is melting of over 1 million tons of polar ice per minute and resulting in meteorological events including temperature records, droughts, floods and extreme cold. On the day before this lecture, the highest March temperatures ever were recorded in China and Korea. The predicted global temperature rise by 2100 was 5.5°C in 2020; now it is 10°C which will trigger a Permian-type mass extinction event. In the next 50 years three billion people will be outside survivable climate conditions and 2/3 billion will live below the high tide mark.

The rise in emissions is exponential, with effects of carbon monoxide from fires, methane from heated carbonate rocks and tundra and atmospheric retention of heat by smoke. Destruction of rainforests has resulted in their being net emitters of CO<sub>2</sub>. Projections of weather changes are generally too optimistic. A 2003 Pentagon report, now released unredacted, predicted that without significant action, climate change will cause a significant drop in the human carrying capacity of the earth's environment and that billions will die. Prof Montgomery gave various examples of currently developing environmental crises and stated that changes in the circulation of Atlantic currents and the northward migration of the jetstream will eventually result in the cessation of rainfall in the Iberian peninsula.

The 27 United Nations Climate Change Conferences (COP) have not done anything to change this trajectory. No COP agreements have produced binding changes, and the last conference in 2022 removed some of the proposed targets in moving towards climate control.

Could healthcare contribute to reducing the world's emissions? Healthcare makes up a significant proportion (about one-eighth) of the world GDP and it could contribute significantly to decarbonisation by reducing direct emissions, indirect emissions from power sources and indirect emissions in its extensive value chain. Prof Montgomery gave numerous examples in which individuals and healthcare providers could achieve such direct and indirect reductions of carbon emissions. Some steps, such as providing healthier food in hospitals, would even have direct health benefits. Power use could be 100% renewable. Many care pathways could eliminate unnecessary steps. Less carbon-intensive travel to healthcare settings could be encouraged. Procurement procedures should favour companies that are committed to decarbonising by 2030.

He concluded by saying that it was up to all present to take action to slow the progress of climate change. He returned to his introduction, stating “We wrote the story. We can write the ending. We can be the villains – or the heroes.”

After several searching questions, the vote of thanks was proposed by Professor Mike Hughes 42 members and guests attended.

### **Minutes of the Meeting of the Harveian Society**

**Held on Wednesday 12 April 2023**

The President, Dr David Treacher, welcomed guests and reminded them that this was a private meeting. The Minutes of the meeting on 8 March 2023 were read and approved.

The following were nominated for membership:

**Dr Patricia Woo – Nominated by The President**

**Dr Shahana Uddin – Nominated by The President**

There having been no objections **Dr Shefa Jahan** was elected as an Associate Member

**Dr Luigi Camporata** was admitted to the Society and signed the Members Book.

The invited speaker, Professor Lui Forni, was unable to attend due to ill-health and at very short notice his place was kindly taken by Dr Andrew Graham, Society Member and a retired geologist and chemist, who presented his lecture on

#### **The Apollo Programme 50 years on: What have we learned about the moon?**

Dr Graham pointed out that in 1961 there was a space race between the USA and the USSR and President Kennedy stated that there would be a US moon landing by 1971. The first Apollo manned moon landing took place in 1969, followed by several further manned and unmanned landings at different sites and by different countries. Landings always took place in flat areas – the first was on Sea of Tranquillity

The moon has light and dark areas and centuries ago the dark areas were thought to be seas. The craters were formed billions of years ago and there are different types of craters. Only a small part of the moon’s surface consists of meteor fragments, but the lunar rocks contain considerable amounts of titanium and iron. Moon rock tends to be either dark (basaltic) or light (feldspar). Bombardment by large meteors has caused circular basins and filling of these over time by lava formed the dark areas. All this information has been provided by rock samples brought back to earth. The age of the lunar rock ranges from 4600 to 2900 million years, very similar to the age of the earth’s rocks.

After several questions, the vote of thanks was given by Dr David Horwell.

33 members and guests attended.



## Minutes of the Meeting of the Harveian Society

Held on Wednesday 10 May 2023

The President, Dr David Treacher, welcomed members and guests and reminded them that this was a private meeting. The Minutes of the meeting on 12 April 2023 were read and approved. Dr Treacher announced that Professor Patricia Woo and Dr Shahana had been elected as members of the Society. He drew attention to the upcoming William Harvey commemoration in Folkestone and the Buckston Browne-Gray Hill Dinner to be held at the Governors' Hall at St Thomas' Hospital.

Dr Treacher then introduced the speaker, Professor Julia Wendon FRCP FFICM, Clinical Director for Critical Care and Director of the Liver Unit at King's College Hospital and Medical Director of the London Clinic, and invited her to give her lecture on

### **Recent changes in the management of liver disease**

Professor Wendon described herself as 'besotted with the liver', believing it to be the most important organ in the body. In her lecture she discussed acute liver failure, acute on chronic liver failure (generally due to cirrhosis) and liver trauma, in all of which there have been transformative developments in management.

Acute liver failure (ALF) is associated with some insult causing liver necrosis, leading to rapid deterioration in health and multiple organ failure. Paracetamol overdose is the commonest cause in this country, although the incidence has been reduced by the reduction of permitted purchase quantities. Other hepatic and systemic diseases are also causes.

Brain swelling due to ammonia toxicity is common fatal consequence of ALF but such toxicity is now rare due to haemofiltration and chilling. Transplantation has revolutionised management of ALF, with a survival rate of over 90% of those transplanted. Plasma exchange has changed the outlook for those too sick or unsuitable for transplantation.

Acute on chronic LF has recently been defined although it has probably been present for years but not recognised. Cirrhotic patients are often well until something makes them decompensate, for example taking non-steroidals. Decompensation results in ascites, encephalopathy and bleeding. Transplantation is very effective if done early. But there is a 20% mortality while waiting due to lack of organs. This has been helped by the development of donor liver perfusion.

Prof Wendon then discussed the value of infused albumin especially if a large volume of ascites is being drained. Outpatients with decompensated cirrhosis appear to benefit from albumin infusions to improve their status before transplantation. She discussed varices and variceal bleeding which had become less of a problem than previously, with treatment by endoscopy, but the major development in the management of varices has been shunting, transjugular intrahepatic portosystemic *shunting* (TIPS), *which prevents death from varices*. Unfortunately, too few patients are referred for TIPS procedures – the proportion needs to increase.

Alcoholic hepatitis is increasing. The Glasgow alcoholic hepatitis score is helpful, a score of >9 being associated with a bad outcome requiring steroids. If bilirubin falls over the next 7 days, steroids should be continued, but if it does not fall, steroids should be discontinued as

complications develop. Transplantation for alcoholic hepatitis is unusual in UK, with an emphasis on alcohol cessation which is often unsuccessful, while transplantation is much more common in Europe.

Albumin is beneficial in infections in ascites, but not so for cirrhotic patients with infection elsewhere. Hypertonic albumin with terlipressin is clearly beneficial in early renal failure in liver disease, but there is a risk of respiratory failure and careful monitoring is required. Encephalopathy in chronic liver disease just needs time for ammonia to clear, but this needs improvement in renal function using rifaximin or lactulose. But there is only 22% 6-month survival in patients with cirrhosis who have been through ITU. So more such patients need intensive care management of their unstable critical illness, stabilisation and early transplantation. Perfusion increases the availability of donor livers; living related donation is unpopular in UK although it is standard practice in many parts of the world.

Turning to trauma, there have been great changes in recent years. Liver trauma causes bile leak and arterial and venous bleeding. But the liver segments each have individual vascular and biliary systems. CT scanning in the emergency room allows triage including decisions on management of liver injuries. Arteries can be embolised with coils at angiography and if necessary venous bleeding can be treated at surgery by packing or suturing. But packing and compressing the liver will stop bleeding but won't not necessarily save it. Most trauma is now treated by embolisation. The common bile duct may need stenting unless there is an ileus which causes back pressure in which case a nasobiliary tube will permit drainage.

In conclusion, Prof Wendon stated that the causes of liver damage have changed over recent decades – for example halothane damage no longer occurs – and the outlook in liver trauma is far better because of teamwork.

After several searching questions, the vote of thanks was given by Dr Philip Ind. 32 members and guests attended.

### **The Evolution of Cardiac Critical Care: the present is not the past, nor can it be the future.**

Professor Price stated that 2023 had an eventful year in the development of cardiac care and mentioned some particular cases. She reported the developments that had occurred in coronary care in the 1960s and 1970s including coronary angioplasty which had been developed in 1977. Subsequently there had been a number of developments in cardiac interventions via catheters and a number of options to provide circulatory support in the treatment of cardiogenic shock.

The treatment concerned is very complex and she described the background research in detail together with new ways of thinking about cardiogenic shock. She felt that the future of treatment was very exciting, and a number of techniques were being developed very fast.

After questions, the vote of thanks was proposed by Mr Robert Maurice-Williams.

37 Members and Guests attended.

**Minutes of the Meeting of the Harveian Society**  
**Held on Wednesday 11 October 2023**

The President, Dr David Treacher, welcomed members and guests and reminded them that this was a private meeting and, following a discussion at Council, reminded members that details must not be disclosed to anybody without the Society's consent. In particular, he pointed out that the talk should not be recorded and that mobile telephones should be turned off.

The Minutes of the meeting on 10 May 2023 were read and approved.

Dr Treacher reported the death of Mervyn Griffith, a former Executive Secretary and Members stood for a moments silence in his memory. Dr Treacher congratulated Dr Robina Coker on her elevation to a professorship and two newly elected members signed the Membership book and introduced themselves to the membership. These were Professor Patricia Woo, Consultant Paediatric Rheumatologist and Dr Shahana Uddin, Critical Care Consultant at Kings College Hospital.

Dr Treacher then introduced the speaker, Professor Susanna Price FRCP Consultant Cardiologist and Intensivist at the Royal Brompton Hospital and Professor of Practice at the National Heart & Lung Institute of Imperial College London and he invited her to give her lecture on

**The Evolution of Cardiac Critical Care: the present is not the past, nor can it be the future.**

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The treatment concerned is very complex and she described the background research in detail together with new ways of thinking about cardiogenic shock. She felt that the future of treatment was very exciting, and a number of techniques were being developed very fast.

After questions, the vote of thanks was proposed by Mr Robert Maurice-Williams.

37 Members and Guests attended.

**Minutes of the Meeting of the Harveian Society**  
**Held on Wednesday 8 November 2023**

The President, Dr David Treacher, welcomed members and guests and reminded them that this was a private meeting.

The Minutes of the meeting on 11 October 2023 were read and approved.

Dr Treacher reported the deaths of Professor Maurice and Dr Leila Lessof who were past Presidents of the Harveian Society. Members stood for a moment of silence in their memory.

The President nominated the following for membership:

**Mr Chris Meadows – nominated by Dr David Treacher**

Dr Treacher advertised the Christmas Dinner which was to take place on 13 Dec 23. Entertainment was to be a classical guitarist. The Dinner will be followed by a charity auction

The President announced that the next ordinary meeting of the Society would be held on 10<sup>th</sup> January 2024 when Miss Heather Mellows OBE FRCOG will lecture on

### **LESSONS FROM LEDWARD**

**This lecture was subsequently cancelled as a result of the train strike on that day**

The President then delivered his Presidential Address entitled:

Presidential Address                      **From Harvey to Modern day Critical Care**

Dr David Treacher began by reviewing William Harvey's history and the background to his initially controversial publication of De Motu Cordis in 1628. He stressed its importance not only for its detailed cardiac anatomy and the novel concept of the circulation of the blood but also for its wider significance: the development of Scientific Method.

He recounted the background of his close colleague, Ronald Bradley (1929-2023), who founded the world's first mobile intensive diagnostic unit and the UK's first purpose-built ICU (Mead Ward) at St Thomas' Hospital. This, modest man championed precise diagnosis, mathematical logic and goal-directed therapy. He invented, and clinically validated, the first pulmonary artery catheter (though he received no credit at the time) publishing 'Studies on Acute Heart Failure'. David argued persuasively that this inspirational mentor (and he) shared Harvey's medical scientific approach; emphasising the importance of close observation, a full clinical history, careful measurements, and the generation and experimental testing of hypotheses. Recognising the disadvantages of invasive measurements, these principles were applied to the non-invasive assessment of cardiac output, by 3 independent methods; estimating Systemic vascular resistance, Stroke volume and oxygen consumption. The clear advantages were that this was non-invasive, simple, quick, cheap and could also be done outside ITU, eg on a General ward. Subsequently, in several studies, he was able to show remarkable congruence of estimated vs measured oxygen consumption and final estimated cardiac output (although with a trend to slight underestimation). Later, with colleagues, he showed that this was a teachable skill, therefore meriting widespread application.

There were no questions.

A vote of thanks was given to the President by Professor Robina Coker.

48 Members and Guests attended.



The President at the Harvey Memorial Service –  
June 2023



The Annual Dinner 2023

- President-Elect Designate:* DR DAVID MUMMERY MB ChB MRCP
- Vice Presidents:* PROFESSOR ROBINA COKER BSc PhD MB BS FRCP  
DR DAVID TREACHER MS FRCP
- Honorary Treasurer:* DR HELEN GRAHAM, MB ChB DCH FRCGP FHEA
- Honorary Secretaries:* PROFESSOR PHILIP IND MB BChir FRCP  
DR DAVID MUMMERY MB ChB MRCP
- Honorary Archivist:* DR JENNIFER DOVE MB BS FRCPath
- Councillors:* DR PETER BENNETT MD FRCP DHMSA  
DR JAMES BINGHAM MB MCh BAO FRCP FRCOG  
MRS CATRIONA HEAD SRN  
DR TONY ROQUES FRCP FRCPath  
PROFESSOR TIM OLIVER MD FRCP BChir  
MS MARILYN DAVEY BA PGCE  
DR MALCOLM STODELL FRCP  
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