



The ROYAL  
SOCIETY of  
MEDICINE



Newsletter Issue No.66  
December 2019

# RFS

Retired Fellows Newsletter



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**Cover:** Boats docked at Tréguier, a port town in Brittany. Photograph by John Skipper

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**Editor:** Dr Catherine Sarraf

**RFS Committee:** Dr Richard Lansdown, Dr James Carne, Mr Michael Kelly, Dr Memo Spathis, Dr Peter Watkins, Mr Harvey White, Dr Rosalind Stanwell-Smith, Dr Catherine Sarraf, Dr David Murfin, Dr Julian Axe, Professor Robin Williamson, Dr Jeffrey Rosenberg, Dr Robin Loveday, Mr Ian Stephen and Professor Linda Luxon

**Editorial Board:** Catherine Sarraf (Editor), Richard Lansdown (Chair of the Society), John Skipper, Harold Ludman, Sally Gordon Boyd

**Graphic design:** Henry Trickey

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Please address all correspondence by email to the editor [alison.catherine872@gmail.com](mailto:alison.catherine872@gmail.com)  
or: The Editor, Retired Fellows Society Newsletter, Royal Society of Medicine,  
1 Wimpole Street, London W1G OAE



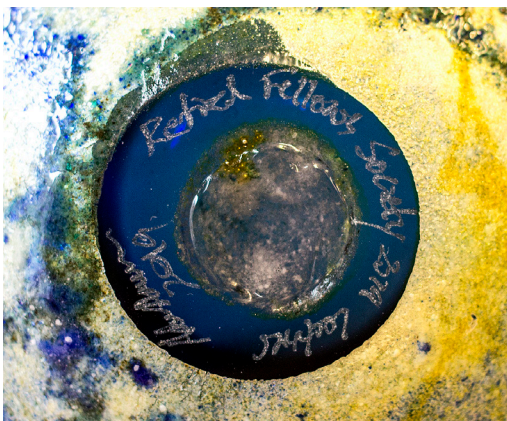
# Editorial:

Catherine Sarraf

Some of you might be wondering what is actually in those mysterious wrappings that we offer to our speakers when they have made us their expert presentations on Thursday mornings! To each lecturer we give a bespoke, specifically designed and made, original, glass vase – all identical, in as much as individually made items can be termed identical (see photo and Retired Fellows Society inscription, below). The RSM frowns on paying honoraria to speakers, yet we feel that we need to make our gratitude felt in a lasting way. The vases come from the 'Adam Aaronson Glass Studio', where Adam specialises in free-blown glass.

Adam has been at the heart of British studio glass for nearly 40 years, first running galleries dedicated to glass art and subsequently as a glass artist in his own right, learning how to create glass art later in his career and developing self-taught methods. Adam is a skilled maker and a truly diverse and talented glass artist. He works, himself, at glass blowing and is constantly experimenting with techniques and exploring new ideas.

Adam's work has been exhibited all over the world and can be found in numerous private collections from royalty to rock stars. Over the years, he has been commissioned to make work for the Royal Academy of Arts in London, Italy's venerable Salviati glass studio, the Museum of Art and Design in New York, the UK's National Art Collections Fund and The British Museum,



*Retired Fellows Society, signed by Adam Aaronson*



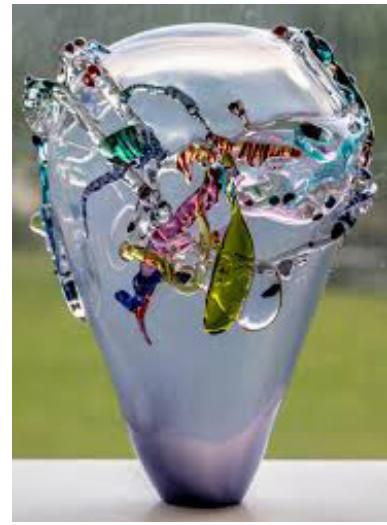
among others. His work has been shown at Sotheby's Contemporary Decorative Arts exhibition in London, and the Cooper Hewitt, Smithsonian Design Museum, in New York City.

In 2012, when Adam found out that property developers had decided to knock down the building that had been his London studio for so long, he moved to Surrey.

Adam is a Fellow of The Royal Society of Arts (FRSA). He is a Fellow of the Society of Designer Craftsmen (FSDC), and chairman of their Selection Committee. Adam is also a member of many glass related societies and organisations, including the Contemporary Glass Society, the Glass Association, and the Glass Circle. Adam is also an active member of the Surrey Sculpture Society and the Surrey Guild of Craftsmen, as well as the Oxford Sculptors Group. Adam has exhibited and demonstrated at Art in Action, the annual arts and crafts event at Waterperry Gardens in Oxfordshire.

Adam Aaronson Glass Studio, Email: adam@adamaaronson.com

Foxbury Barn, Epsom Road, West Horsley KT24 6AR Tel: 01483 375035



# The Christmas Carol Concert at The ROYAL SOCIETY of MEDICINE

Enjoy a wonderful evening of carols, followed by a **four course Black tie dinner** to enjoy great food and wine with your fellow guests.

Book your place for £110 today at  
[www.rsm.ac.uk/carols](http://www.rsm.ac.uk/carols)

 **Thu 19 Dec 2019**  
Doors open at 6pm

 **Royal Society of Medicine,**  
1 Wimpole Street, London





# FORTHCOMING MEETINGS

## **Intramural Meetings 2019/20**

*Registration for intramural meetings will open on the day at 10.45 am*

### **Thursday 5 December 2019**

2019 Recent advances in medicine and surgery

### **Thursday 20 February 2020**

The V1 'flying bomb' of World War Two: Lecture by Dr Anthony C Davies

### **Thursday 19 March 2020**

Worth a thousand words: The botanical art collection at the RHS Lindley Library:  
Lecture by Mrs Charlotte Brooks

### **Thursday 16 April 2020**

Equality and human rights issues: Lecture by Ms Rebecca Hilsenrath

### **Thursday 21 May 2020**

Hindu mythology: Lecture by Dr Michael O'Brien

### **Thursday 18 June 2020**

Leadership in professional practice: Lecture by Right Honourable Sir Ernest Ryder

## **Walks with Sue Weir**

### **Wednesday 22 April 2020**

Fitzrovia

### **Tuesday 12 May 2020**

In and Around Regent's Park

### **Tuesday 23 June 2020**

Explore More Eastern Reaches of the River

### **Wednesday 1 July 2020**

Around Chelsea



# Camera Club Programme

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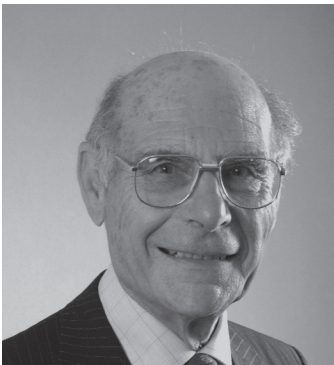
2020

<b>Thursday 23rd January</b>	<i>Members' Meeting</i>
<b>Friday 28th February</b>	<i>Presentation Meeting</i>
<b>Monday 30th March</b>	<i>Emad Sadr Macro photography and much, much more</i>
<b>Friday 24th April</b>	<i>Members' Meeting</i>
<b>Wednesday 20th May</b>	<i>Presentation Meeting</i>
<b>Thursday 25th June</b>	<i>Kevin Elsby Antarctica - the wildlife at the end of the world</i>
<b>Tuesday 15th September</b>	<i>Members' Meeting</i>
<b>Monday 26th October</b>	<i>Presentation Meeting</i>
<b>Thursday 26th November</b>	<i>Louis Berk A Whitechapel Eye: photography from the East End's most famous district</i>

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## Announcements

### Rest in peace



#### **Ken Citron**

The sudden loss of Ken was a great shock. He was admitted to Kingston Hospital on July 3rd, where he was diagnosed with heart failure. Then in August he complained of fatigue & breathlessness and re-entered hospital on August 27th, where his condition deteriorated rapidly. He died at home on September 11th.

Ken was one of the Founder Members of the RSM Retired Fellows Society, as shown by the photograph we published in the August 2019 issue of the *RFS Newsletter* (page 18), and he also continued writing for us (*RFS Newsletter* December 2018, pages 14-16) up to recent times.

Obituaries to these two most distinguished and eminent members of the RSM, will follow in the April issue of this *RFS Newsletter*.



#### **Carice Ellison-Cliffe**

Carice Ellison-Cliffe who passed away this autumn, will be sorely missed by the RSM. She (Dr Carice Ellison) and her husband (Dr Percy Cliffe), from the 1980s, were fervent charitable contributors to the RSM, establishing and continuing to fund travel bursaries for young doctors as well as the annual Ellison-Cliffe lecture series, given on a subject connected to the contribution of science to the advancement of medicine. Their endowments to the Society were multiple, generous, and valuable, Carice continued with these charitable donations to us even after the passing of her husband.



# Biographies of Speakers 2019/20

## Intramural events

### **The breeding and training of guide dogs: Lectures by Tom Wright and Karen Brady**

Thursday 17th October 2019

#### *Biography*

The Chief Executive, Tom Wright, took us through the Guide Dog journey, from conception to qualification as a working dog. To learn about the world-class breeding programme operated by Guide Dogs, and how they use pioneering training techniques to turn these adorable puppies into life-changers.

#### *Abstract*

The Guide Dogs story started in 1931 with two amazing British pioneers, Muriel Crooke and Rosamund Bond. These remarkable women organised the training of the first four British guide dogs from a humble lock-up garage in Wallasey, Merseyside. The organisation has come a very long way since those early days. Today, Guide Dogs is the world's largest breeder and trainer of working dogs, and thanks to our dedicated staff and volunteers, we've helped over 29,000 people to achieve life-changing independence.



### **Who owns antiquities? The Parthenon sculptures and other causes célèbres: Lecture by Dr Dominic Selwood**

Thursday 21 November 2019

#### *Biography*

Dr Dominic Selwood, FRS, FRHistS, is a historian, barrister, author, and journalist. He writes on history, for *the Telegraph*, *Independent*, *Spectator*, and other publications. He received his DPhil in history from New College, Oxford, and also studied at the Sorbonne, Poitiers, Wales, and London. He has lectured at universities around the world, and regularly discusses history on television and radio. He has spoken on antiquities and museums, numerous times at the British Museum. He works as a barrister.

#### *Abstract*

Museums and galleries are facing increasing calls to return 'looted' or foreign antiquities and art. These demands raise complex issues of culture, history, law, and morality, and challenge notions of what should be exhibited in world-class collections. This lecture examines an increasingly complex and fraught dilemma with reference to numerous causes célèbres, especially Lord Elgin and the Parthenon sculptures. The conclusion is that the answer does not lie in emptying out the great museums, but in rethinking the assumptions we make about history and museums themselves.



### **2019 Annual one day meeting: Recent advances in medicine and surgery**

Thursday 5 December 2019

Join us as we cover diverse subjects of clinical interest with a particular focus on recent advances in pathogenesis, investigation, and treatment. The objective is for participants to gain an insight into:

- Acute inflammation in relation to cardiac disease
- The potential complications of GORD (gastro-oesophageal reflux disease) and the success of surgical operations in preventing them
- New management techniques in controlling the scourge of sepsis



- Diagnosis and treatment of common causes of deafness and tinnitus
- The causes, medical treatment and potential role of the neurosurgeon in the management of patients with epilepsy

The final session concentrates on safety in medicine including the role of the GMC in dealing with the complex issues of unexpected medical death. We cover diverse subjects of clinical interest with a particular focus on recent advances in pathogenesis, investigation, and treatment.

### **The V1 ‘flying bomb’ of World War Two: Lecture by Dr Anthony C Davies**

Thursday 20 February 2020

#### *Biography*

Born in Rainham, Kent in 1936, Tony Davies has a 1st Class Honours B.Sc(Eng) in Electrical Engineering from Southampton University, MPhil from University of London and PhD from City University London. He did military service in REME, becoming a Leading Artisan Sergeant, and worked for the General Electric Co. (Telecommunications) in Coventry, becoming a Lecturer, Reader in Electronic Engineering then Professor and Director of the Centre for Information Engineering at City University London. He then moved to the Department of Electronic Engineering, King’s College London. He was awarded the title ‘Emeritus Professor’ at King’s College London on retirement in 1999 and has since been Visiting Professor at Kingston University in Surrey. He has held visiting appointments at the University of British Columbia (1968-9); Purdue University (1973-4), and a Royal Society Fellowship, British Aerospace (1987-8).

Technical interests include Circuit Theory, Signal Processing, Digital and Software Systems, Non-linear Dynamics. He is a Chartered Engineer, IET Fellow, BCS Member and IEEE Life Fellow. He was IEEE Region 8 Director and a member of the IEEE Board of Directors for 2003 and 2004. Currently he is IEEE Region 8 History Activities Coordinator.

#### *Abstract*

The talk will describe the German V1 ‘flying bomb’ of WW2, illustrated with many photos and diagrams to explain its method of operation, its guidance and control, its purpose and effect. It was a small pilotless jet aircraft which could be characterised in modern terminology as a cruise missile, since its role was to fly to a specified location in enemy territory and explode. It was not for use against specific targets, but to cause general destruction, and, particularly, intended to create fear in the civilian population (it could also be classified as a ‘terrorist weapon’, these days).

The V1 was one of three novel weapons which Adolf Hitler believed would finally achieve victory against the Allies following the evident failure of the German Air, Sea and Land warfare to achieve this. Because of Hitler’s peculiar ‘racist’ views he believed that these weapons would be successful against the British but not against the Slavonic people, so he never proposed using them against the Russians.



### **Worth a thousand words: the botanical art collection at the RHS Lindley Library: Lecture by Mrs Charlotte Brooks**

Thursday 19 March 2020

#### *Biography*

Charlotte Brooks is the Art Curator at the RHS Lindley Library in London. She has worked with the Society’s botanical artworks for over 15 years; caring for, documenting, researching and developing this world renowned collection. As the Secretary to the RHS Botanical Art Judging Panel, she supports a lively international community of practising artists to exhibit their work and to be judged for medal awards at RHS Shows. Her recent book is *RHS Botanical Illustration*.





The Gold Medal Winners published in June 2019, highlight the work of 60 contemporary RHS Gold medal winning artists and their work, held in the Lindley Collections.

A contributor to *Occasional Papers of the Lindley Library*, she has written various short articles on aspects of the Lindley Collections and maintains a special research interest in nineteenth century Anglo-Chinese botanical paintings. She is a Trustee of the newly formed Association of British Botanical Artists (ABBA) and Honorary President of the Chelsea Physic Garden Florilegium Society.

#### *Abstract*

The contemporary botanical art collection at the RHS Lindley Library includes work by some of the finest artists from across the world. Located alongside the wealth of historical treasures that make up the wider library collection, it continues to grow every year. Comprising over 30,000 paintings of plants, the collection ranges in date from the 1630s to the present day. In this talk, Charlotte Brooks will explore the history of the RHS botanical art collection, its significance to the early work of the 'Horticultural Society of London', and continued development today.

The first paintings of flowers to be awarded an RHS Gold medal were displayed at the Society's flower shows in 1930. As Charlotte will reveal, from this point on, exhibits of botanical art at the RHS shows have become increasingly popular, paving the way for the exceptional standard of artwork we see today.

### **Equality and human rights issues: Lecture by Ms Rebecca Hilsenrath**

Thursday 16 April 2020

#### *Biography*

Rebecca Hilsenrath was appointed Chief Executive Officer to the Equality and Human Rights Commission in October 2015, before which she held the role of Chief Legal Officer. After graduating from Cambridge, Rebecca trained and practiced law at Linklaters before leaving to have a family. Following the career break, she worked in the Government Legal Service, where she held a number of roles in the then Department for Education and Skills, and in the Attorney General's Office. Rebecca was then appointed CEO of LawWorks (the Solicitors Pro Bono Group), a national charity facilitating free legal advice to community groups and individuals in need, where she worked for five years before moving to the EHRC in 2014. Rebecca has also established two schools, set up the National Pro Bono Centre in Chancery Lane and has sat on the boards of a number of charities and advice agencies, including the Bar Pro Bono Unit and the Mary Ward Legal Centre. In 2012, she was listed by *the Times* as being among the 100 most influential lawyers in the country and in December 2018, she was elected Chair of the Association of Chief Executives. She has four sons and a foster daughter, and her hobbies include renovating a listed cottage in Snowdonia and writing e-novels.



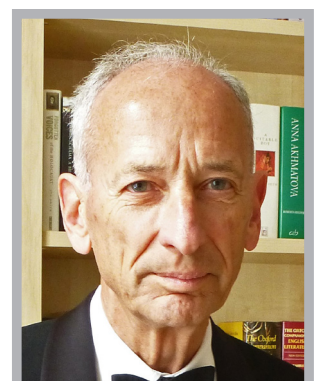
### **Hindu mythology: Lecture by Dr Michael O'Brien**

Thursday 21 May 2020

#### *Biography*

Physician Emeritus, Department of Neurology, Guy's and St. Thomas' Hospital, London. Advisor in Neurology to the Civil Aviation Authority. Previously:

- Consultant Neurologist at Guy's and St. Thomas' Hospital
- Hon. Senior Lecturer in Neurology, Kings College London
- Hon. Consultant Neurologist, National Hospital for Neurology and Neurosurgery



- Hon. Consultant Neurologist, Kings College Hospital

Undergraduate training at Guy's Hospital Medical School. Training in neurology at Guy's Hospital, National Hospital for Neurology and Neurosurgery and in Newcastle-upon-Tyne. MRC research positions at Guy's Hospital, in Newcastle and at the University of Minnesota, USA. Special interests: cerebrovascular haemodynamics, mononeuropathies, women with epilepsy, and aviation neurology.

Past President: of The Harveian Society, the Clinical Neurosciences Section of The Royal Society of Medicine, The South of England Neurosciences Association and The Medical Society of London.

Chairman of the Medical Artists Education Trust and their examining board. Director and Trustee of the D'Oyly Carte Charitable Trust. Member of the International Aerospace Neurology Consortium.

Previously: deputy editor of the Journal of Neurology, Neurosurgery and Psychiatry, editorial advisor to the British Medical Journal, editorial board of the American Heart Association journal *Stroke*, Quarterly Journal of Medicine and guarantor of *Brain*.

#### *Abstract*

I have had a long interest in early Hindu sculpture and architecture and I have made many visits to South and South East Asia, developing a particular interest in Khmer art and architecture. I have lectured to many societies on these topics, in the UK, France, the USA and two tours in Australia, including the South and South East Asian courses at the British Museum, the Victoria and Albert Museum, the School of Oriental and African Studies and the Royal Archaeological Institute.

### **Annual Oration: Leadership in professional practice: Lecture by Right Honourable Sir Ernest Ryder**

Thursday 18 June 2020

#### *Biography*

Sir Ernest Ryder is the Senior President of Tribunals in the United Kingdom and is a Lord Justice of Appeal in England and Wales. He is also the senior judicial member of the Board of Her Majesty's Courts and Tribunals Service and the Judicial Reform Board for England and Wales. He was formerly a judge of the Family Division of the High Court.



Until his appointment to the Court of Appeal, Sir Ernest was the Presiding Judge of the Northern Circuit where he sat in the criminal, civil and administrative courts as well as in family proceedings. As Judge in Charge of the Modernisation of Family Justice, he was responsible for the creation of the Family Court and the family justice modernisation programme in England and Wales. In addition to his appointment as the Senior President, he is the Head of Deployment Strategy for the Lord Chief Justice and the Course Director of the Leadership Programme at the Judicial College. He regularly lectures at the Judicial College, the Judicial Institute in Scotland and at Universities across the United Kingdom.

Sir Ernest started his professional life as a merchant banker and has also been a commissioned officer in the Army Reserves. He is the Chancellor Emeritus of the University of Bolton, an honorary Professor of Law at the Universities of Lancaster and Bolton, a Visiting Fellow of Nuffield College, University of Oxford, an Associate Writer of the Signet in Scotland, a Deputy Lieutenant of Greater Manchester, an Honorary Member of the Society of Legal Scholars and a Trustee of the Nuffield Foundation.



# Walks by Sue Weir 2020

## Fitzrovia

Wednesday 22 April

Fitzrovia's name was coined by William Hickey in the 1940s as a neighbourhood favoured by a new generation of bohemian Londoners. Today there is still a 'racy' edge to this village of restaurants, pubs, and the creative talents of those with artistic leanings – also the now reclaimed Middlesex hospital as luxury flats.

## In and around Regent's Park

Tuesday 12 May

The elegant Nash terraces and striking RCP are just some of the surprises we will encounter on this walk. A hidden garden will delight the eye, roses will perfume the air and vegetables will surprise us – with an abundance of wild life.

## Explore more eastern reaches of the river

Tuesday 23 June

Enjoy more exploration of the north bank of the river Thames from Wapping via Shadwell and Limehouse basins – finally reaching Canary Wharf, passing *en route* the Prospect of Whitby. A long but fascinating walk.

## Around Chelsea

Wednesday 1 July

Not only the grand streets of this glamorous borough but the small, intimate side roads with their picturesque cottages, the homes of writers and painters, with of course the Chelsea pensioners and a famous Physic Garden

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ESCORTED BY SUE WEIR

ABOARD *AmaLyra*

14<sup>TH</sup> - 21<sup>ST</sup> MAY 2020 - PARIS ROUNDTRIP

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- Gratuities
- Escorted by Sue Weir

**TECHNICAL DATA**

Built	2009
Built in	Netherlands
Length	360 ft.
Width	38 ft.
Crew	41
Staterooms	73
Registry	Switzerland
Passengers	144



*Pricing* (based on two sharing)

CAT E	£2790 <sup>PP</sup>
CAT D	£2950 <sup>PP</sup>
CAT C	SOLD OUT
CAT B	£3630 <sup>PP</sup>
CAT A	£3690 <sup>PP</sup>
SUITE	£4370 <sup>PP</sup>

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# MEETINGS REPORTS

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RFS Newsletter issue no.66



*From left to right: Tom Wright, Dolly, Dr Karen Brady, Lottie*

## Nature and nurture, life-changing dogs

On the 17th of October the Retired Fellows were treated, by Tom Wright (CBE, CEO of 'Guide Dogs' UK), Karen Brady (responsible for dogs' training and behaviour) and the rest of the team, to a stupendous morning of presentations. Most of the crew were of the two-legged variety, but Lottie (blonde, beautiful and experienced) and Dolly (the colour of a glistening coalface) were labradors. Ahead of the lectures, Lottie, led by Dr Brady, charmed us all with her display of learning and obedience. Dolly is a younger dog and due to her flawless genetic spectrum, her roll will be to be the perfect mum and grand-mum to new generations of guide dogs, to follow. With the dog at the helm, the Society provides a range of services - to help thousands of people with different needs - lead confident, independent and fulfilling lives.

Mr Wright informed us that at the moment, the Society is responsible for around 8,000 dogs, frequently labradors but also contributions from golden retrievers (and crosses between these two), german shepherds, and occasionally such as labradoodles and cockapoos – for handlers who report some kinds of fur allergy. Besides mature working dogs there are also studs, puppy-mums, broods of new puppies themselves and dogs in-training (throughout this account, the word 'dog' relates equally, whether they are dogs or bitches).





*Retired guide dog Lottie is now employed on demonstrations. Richard Lansdown*

## THE SCIENCE BEHIND GUIDE DOGS

### **Breeding – the start of the journey**

The Society has a rigorous and comprehensive selection process for its breeding stock, and only the very best dogs are added to the programme. Data on their genotype (obtained from cheek swabs) and phenotype are sought, close to birth, to exclude animals bearing genes that code for diseases (such as progressive retinal atrophy, degenerative myelopathy, primary seborrhoea) where known, and where tests are available. Regarding phenotype, the parents are selected already, but there remain questions related to combinations of the environmental makeup and how this might be influenced by a specific genotype, for example, complex diseases and behaviour.

### **Estimated Breeding Values**

Estimated Breeding Values (EBVs), are a well-established way of estimating a dog's genetic risk of developing a specific condition or of its potential severity. These inform choices for parental mating ensuring both quality and welfare of the dogs. EBVs permit calculation of genetic risk by looking at trait scores that are available for each dog and its relatives. By statistically analysing the results of related dogs, this incorporates consideration of possible environmental factors. At present, current EBVs used at Guide Dogs help appraise against such conditions as cruciate ligament disease, elbow dysplasia, hip dysplasia, patellar luxation, atopy and some kinds of seizure.

### **Breeding and the future**

Genomics is an emerging field being successfully explored in both human medicine and agricultural breeding, and a genomics based approach will lead to better breeding decisions, improving the suitability of dogs to their handlers, and will continue to support dog welfare. The Society's project will involve gathering genome data for thousands of their dogs and will combine information with data on dogs' health and behaviour, leading to discovery of complex relationships between many genes and diseases or behaviours. The ultimate aim is to create the first ever canine genomic breeding values.





*Guide dog Lottie demonstrating putting on her own harness and handle, which is designed to assist and reduce reliance on humans and owners*

## GIVING PUPPIES THE BEST START IN LIFE

Clearly, the basis of this is to provide puppies with all the skills to cope with new experiences in a positive way as they grow and mature into adult dogs. Socialisation – a life-long journey - is the process by which the dog learns to recognise and interact with the species with which it cohabits (humans) and habituation is the progression in which the animal becomes accustomed to non-threatening environmental stimuli, and learns to ignore them. These start when the puppy is born. The initial (neonatal) stage lasts up to the second week, during which the puppy initiates its sensory acuity; although up to 90% of the time it's asleep, it is a critical time for sensory development. A transition phase follows, over the third and fourth weeks when the puppy undergoes rapid behavioural and physical development, learning how to explore, by sight, lapping and walking as well as advancing into social learning. Over ages five and six weeks socialisation continues into independence featuring the puppy's natural curiosity and willingness to approach people and new things, while starting to explore the wider world.

## PUPPY RAISING FOR EXCELLENT PARTNERSHIPS

The 'Puppy nest study', is a first programme to socialise newborn puppies, and is scientifically proven to have a long-term, positive impact on the dog's behaviour. This provides highly effective socialisation experiences, which are completed within a short timeframe, utilising only low cost materials. Development of the study depends on extensive scientific literature reviews of nest stimulation theories, neonate behavioural emergence and completion of puppy physiological developmental stages.

Puppy raising for excellent partnerships (PREP) is Guide Dogs bespoke programme for raising pups, based on their own experience and research, using the latest scientific methods. These are standardised approaches and are achievable over their current 2,700 puppy-raising households (pups have their own 'real homes' right from the beginning). The system incorporates 'Life Skills for Puppies', from the puppy's point of view, which are ten in number:

- |  |                              |
|--|------------------------------|
| I have confidence                                | I know the rules             |
| I like surprises                                 | I can listen                 |
| I like to be touched                             | I have good manners          |
| I have self control and can tolerate frustration | I can make the right choices |
| I can be calm                                    | I am allowed to be a dog     |



These were initially developed at the University of Lincoln by Helen Zulch and Daniel Mills and are currently the most advanced approach, based on scientific and clinical understanding of how domestic canine behaviours develop, and how dogs learn. It maximises the welfare of puppies through the series of the ten key concepts and skills that puppies need to learn for society today. Approaching puppy education from the puppy's perspective, this programme provides the key skills our puppy needs to cope with life, and assists volunteer handlers in developing a fulfilling relationship with their puppy. The skills and behaviors are: choice and control, resilience, every puppy treated as an individual, behavioural needs respected and the relationship between puppy and handler being sacrosanct.

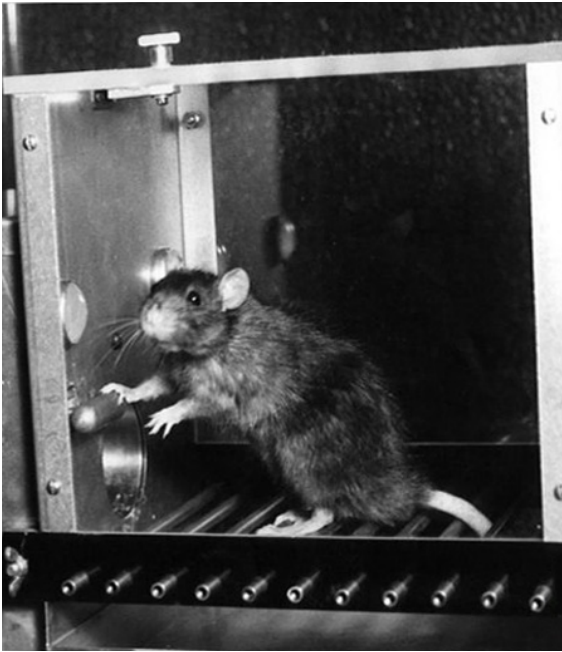
In sum, Tom Wright stressed Nature – using evidence-based breeding programmes and the animals' genetics to ensure birth of the very most reliable dogs, and Nurture – for puppy nest socialisation and puppies raised in excellent partnership with their human handlers. Guide Dogs UK raise happy, healthy puppies with the skills to excel through their training programmes and form excellent partnerships with their humans.

The second portion of the lecture was given by Dr Karen Brady and concentrated on training and behaviour of guide dogs. She started by emphasising that training guide dogs is not rocket science (although maybe it seemed to have the touch of magic about it!). She is an expert in affective neuroscience and uses her skills to train the dogs kindly, to the standard she had demonstrated.

Karen's system is the Standardised Training for Excellent Partnerships (STEP), and has been designed by systemised consultations at the highest expert levels of best practice, and annealing these together. There are thirty-six accepted behaviours to 'make a guide dog', but first the considerations are that breeding creates dogs that are suited to the work expected from them, and puppy training raises appropriate dogs into almost adults, to achieve success. Dr Brady described that learning theory stresses positive reinforcement – that is that by adding a positive item one increases the desired behaviour (whereas negative reinforcement refers to removing a much desired item, with the aim of returning it to congratulate the dog on learning a new behaviour). Karen does not REWARD the dogs, she REINFORCES desired behaviours. A prime example of a reward versus reinforcement is the use of food, the system being primary reinforcer, secondary reinforcers, tertiary and beyond – food and praise reinforcing correct work.



*Guide dog Lottie leads her blindfolded handler towards objects, in this case, a seat*



*A rat with its front paw on a lever in a skinner box, and Pavlov with one of the dogs used for his famous experiment.*

The aim is to overcome any initial use of food, as the Society does not want dogs being housed with clients who have to use food repetitively all day, thus the reinforcement schedule reduces use of food, instead the dogs relish verbal praise, while actually strengthening the desired behaviours. Reinforcement schedules may be continuous, conjugate and/or variable. Through classical and operant conditioning, she turns the work into the reward itself.

Learning itself is widely defined as a relatively permanent change in behaviour and formation of neurological connections; activities the dogs perform are based on the consequences of those behaviours. Through training using food as a reinforcer Karen engages the dogs in a SEEKING system (Jaak Panksepp, *Affective Neuroscience* see below) which taps into goal orientated behaviour, and pathways related to dopamine and serotonin release. Thus, behaviours with good consequences are strengthened and behaviours with bad consequences are weakened; affective neuroscience explains how one can optimise this using food to tap into the dog's brain and get it working appropriately. Jaak Panksepp wrote his seminal book *Affective Neuroscience* in the 1990s. This closely relates physiological studies and results, to kindly condition the dogs' brains to be in tune with the desired training methods.

Goal-directed behaviours are used, motivation of the the animal to be interested in exploring their world, coordinating appropriate behavioural responses, aiding survival instincts of the dog with such necessities of shelter and food, and behaviour resulting in gaining food in general. These (and more) policies result in strengthening training in relation to desired behaviours and adapting behaviours as new information is received and/or the animal's needs are met.

Guide Dogs in general, and Karen Brady in particular are most sensitive to needs and feedback from their clients. Some of the tips returned to them are as follows:

- Teaching dogs the command 'under' being invaluable for seating on bus and train journeys
- That dogs really enjoy working on all extra commands such as 'place' and 'chin rest'
- Use of food as a reward throughout the day may not be obstructive - as we graze all day why can't the dog?
- Dogs being frequently complimented on their good behaviour
- Getting to 'know' the dog intensifies the human/dog relationship

The two-part lecture was followed by many interesting questions, from whose replies we learnt even more. For example, puppies are allowed to stay with their mothers, for as long as the mother is still interested in nursing them. All dogs have a human home, when they are being



trained they live with their trainer/walker. When fully trained, they are homed to their permanent client. When dogs have reached the end of their ability to work further, they go to volunteer homes for the rest of their lives. Frequently this 'volunteer' is the client that the dog has been with for perhaps the last ten years – a new younger dog being supplied to take on the work of guiding.

The audience was charmed and enthralled by the dogs, the demonstrations and the lecture and at the end we were allowed to pat and fondle the subjects of the mornings efforts.

Tom Wright (CBE, CEO of Guide Dogs), Dr. Karen Brady PhD Animal Behaviour, Cognition & Welfare (Working Dogs), MSc Clinical Animal Behaviour (Affective Neuroscience) and BSc Animal Behaviour & Welfare (Problem Behaviour)

### Catherine Sarraf

*If you'd like to know more about Guide Dogs, or see how you can help, please visit [www.guidedogs.org.uk](http://www.guidedogs.org.uk)*



## *Dog Phobia*

### **Letter to the Editor**

Dear Editor

17th of October's excellent demonstration and talk on guide dogs reminded me of children, years ago, referred to me with dog phobia. One little girl was so frightened that whenever she saw a dog she had to take evasive action, even if this meant jumping into the road.

I used the simple desensitisation approach that was, at least in my day, the treatment of choice for monosymptomatic phobias. The patient would stand at one end of a long corridor and a guide dog, with owner, would wait at the other end. Slowly the dog walked towards the patient who was told to say 'stop!' whenever the dog got too close. Because the dog had been so well trained we all knew that it would obey. After two or three sessions the child would invariably be confident enough to let the dog come close enough to touch it.

The next stage was to introduce rather more frisky dogs and use the same technique. I am happy to say that we never failed.

Yours sincerely

Richard Lansdown

# Architectural photography: origins and history

The Royal Institute of British Architecture (RIBA) has the largest collection of architectural photographs in the world; its oldest object, fairly recently acquired, is a photograph by Fox Talbot taken in 1843.

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On Thursday 24th October Valeria Carullo, the Photographs Curator at RIBA, gave a talk to the Retired Fellows Society Camera Club on *Building with Light: an introduction to the history of architectural photography*. She has a Master's degree in architecture and has published widely; the full house thoroughly enjoyed her presentation.



*The temple of Nefertari by Maxime du Camp RIBA Collections RIBA81443*

Her theme was the way in which photographing buildings has progressed hand in hand with technical development of cameras, film and, latterly digital techniques.

The earliest image she showed us was taken in 1850 in Egypt, the temple of Nefertari by Maxime du Camp. In those days, shots of architecture were popular for two reasons: one was that they gave people who could not travel abroad (that is, most people), a chance to see highly accurate images of faraway buildings; the other was popularity among photographers - exposure times were long and buildings do not move. Architects have always found them useful, and they remain historically important

(for example, by depicting the wooden scaffolding used during the extension to the Louvre in 1854, or parts of Central Park in New York as it was being laid out in 1860, or showing important buildings before they were redeveloped). It is interesting that the French took record shots, while the British incorporated picturesque elements, often ruins.

The so called 'New Photography' developed in the 1920s, its principle proponents, such as Laszlo Moholy-Nagy working mainly in Europe. By this time photography had developed both technically and artistically, with unusual viewpoints, prominent diagonals, abstracted details –

mature enough to become playful as well as trying to express ideas and emotions. New objectivism appeared predominantly in Germany in the 1930s with sharp, tonal contrast, exaggerated perspectives, close up detail.



*Brighton Pavilion by Laszlo Moholy-Nagy RIBA Collections RIBA48196*

Not all photos on show at the event were from RIBA, we saw a beautiful and intriguing image by Werner Mantz from the Tate, of a detail of the Kakerfeld Settlement (1928) – geometric symmetry and pattern, but still a recognisable building, and Erich Mendelsohn introduced some element of reportage as he photographed the massive new building style in the Americas.

Also in the 1930s, increasing speed of films and development of neon and other artificial lights allowed night photography to flourish, and people to appear in buildings more regularly. At the same time light and shadow became more prominent in photographs, combined with patterns and abstraction but preservation of detail, for example John Havinden's 1934 Penguin Pool.

Dell and Wainwright, official photographers to The Architectural Review (whose extensive archive is also now in the RIBA collection) took these techniques further but, using

large format cameras, they imparted multidimensional components with increased contrast, stressing the geometric elements tending on the abstract. They also incorporated elements of newly developing technology, such as aeroplanes, next to buildings whose lines were echoed.



*The Penguin Pool by John Havonden RIBA Collections RIB2427-3*

Following WWII developments quickened, with bright patterns, and an emphasis on lifestyle - 'selling the house' with props and other evidence of habitation. Julius Shulman, opening up the house, and making it inviting, placing it in its environment, is one of the most famous among architectural photographers. But few of us had heard of him, though some of his pictures are instantly recognisable, many of them from his homeland of California (Richard Neutra House, Palm Springs for example).

Though some of the names mentioned as the history progressed might have been familiar to an occasional older member, their oeuvre was represented by memorable if unfamiliar shots.

Tony Ray-Jones used buildings almost as frames

for his epic street photos; Edwin Smith and John Donat could be mistaken for documentary or urban photographers. Others, such as Richard Bryant, may be unfamiliar, though his memorable photographs seem instantly recognisable, even if you have never seen them before. Helene Bizet has documented all the Hawksmoor churches in London, as John Maltby did with a range of buildings in London.



*Waterlow Court, Hampstead Garden Suburb by John Maltby RIBA Collections RIB4733*

Many of the more well-known contemporary photographers work in South America. One such, the Brazilian Ronald Ansbach, is like so many contemporaries, truly international – but he catches the essence of London in just a few superb shots, details making the unfamiliar familiar, and the familiar new.

As expected, technically these photographs are all wonderful in their own right, showing off magnificent buildings. But the human element, the documentary angle, has not gone away. One of the last photographers discussed was Alejandro Cegarra who made his name with a photo-essay *The other side of the Tower* documenting the lives

of hundreds of families who live in the unfinished remains of an abandoned skyscraper in his home town of Caracas: architecture as decay.

Many of the most famous photographers started out as architects – but their photographic skill allowed all of us to share their love of these buildings.

Robert Elwall, the previous Curator, who greatly enlarged RIBA's collections, published *Building with Light: an International History of Architectural Photography*. The title of Valeria's presentation was attributed to him. She shared her love of photography with us and stimulated us to appreciate her love of architecture.

The RIBA library is free and open to all, though an appointment has to be made to see the photographs which are usually stored under carefully controlled conditions. The collection is rapidly being digitised and over 80,000 images can now be accessed on [www.ribapix.com](http://www.ribapix.com).

**Memo Spathis and Richard Lansdown**



# EXTRAMURAL REPORTS

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*River view of the city of Lyon*

## Treasures of Burgundy and Provence; and cruising the Rhône

In the last week of September, enduring the endless walk at Lyon haphazard airport we eventually met up with our RSM Retired Fellows group of 19 stalwarts, three of whom had needed wheelchairs to get this far. We were still marooned some 400 metres from our coach but Sue Weir, our trusty leader, was on hand so the chaos disappeared and we were all transported to the Amadeus Provence. The next seven days were taken up with a level of activity that only a robust bunch could contemplate, although some opted just to watch the river run by.

We moved upriver on the Saone to explore (and taste) the wine growing regions of Burgundy, the Beaujolais and Macon areas, passing through some spectacular limestone escarpments. At the wine museum our only serious crisis occurred... a hearing aid was lost. The coach was taken apart without success and all was gloom and doom until Sue (that women again) found the missing item hidden in our colleagues own ear hidden under the earpiece of the Quiet Vox! An afternoon trip took in the enormous site of Cluny Abbey, a mediaeval monastery which was the biggest Christian church in the world until St Peters was built in Rome in the sixteenth century.

Going northward overnight we moored at Chalon-sur-Saone and took a coach to Beaune, the wine capital of Burgundy. The Hotel Dieu, founded as a hospice in 1443, has been beautifully restored from its colourful and elaborate roof, large courtyard and huge hall. The great polyptych 'The Last Judgement' by Roger van der Weyden is exceptionally well presented; after touring the hospice we had the mandatory tasting of local produce. Beaune as a city is beautiful and well worthy of a longer visit – but try Eurostar rather than Lyon airport!

Heading south we returned to Lyon, the third city of France and a UNESCO World Heritage City. A morning tour took us to the Basilica of Notre Dame de Fourviere, a long cruise downstream

found us in Provence and we landed at Avignon. We admired Le Pont, then toured the Papal Palaces, built in the 14th century when for close on a hundred years Avignon was the centre of Christendom. The view from the very top gave us a panoramic sight of the area. An afternoon trip started in Uzes, where a very attractive 'All Blacks' rugby store enthralled both Bronwen (the one Kiwi of our group) and me. We went on to visit the Pont du Gard, of the 50 kilometre aqueduct built by the Romans in the first century, to carry water to Nimes. With a fall of only 12 metres overall, and having a stack of three arches it must be one of the engineering wonders of the world and was in use for some five centuries.

Our next stop was Arles, a lively city with well-preserved Roman remains – the arena and the amphitheatre. It is another World Heritage site and also was the home of Vincent van Gogh from 1888-1889. The hospital where he was a patient now displays many artefacts of his time. We liked Arles and felt it was not an over-manicured museum as were some others we visited.

Arles was the most southerly part of the Rhone that we reached, but we coached down to the Mediterranean through the Camargue National Park, seeing Camargue bulls used in non-fatal bull fights in Arles; successful bulls have a strong fan club we were told! We also saw the white horses and pink flamingos before roaming a market and sampling local produce at Saintes-Maries-de-la-Mer.

Travelling north we had a rest at Chateau Neuf du Rhône and drove into the Ardeche, stopping on the way for some retail therapy at one of the many lavender farms. The Ardeche Gorge is sometimes referred to as the Grand Canyon of Europe; spectacular limestone cliffs rise 1000 feet above the river and hide many caves. The Pont d'Arc, at 192 feet high is the largest natural bridge in Europe. We took our pictures including of the goats who have learned to pet the tourists.

Once back on our boat it was non-stop to Lyon with final-night packing and plans for the morrow. The weather had been great (the only rain came at night) the boat was well appointed, the staff and the food – and of course the wine – everything we wished for. Next day saw us braving Lyon airport again (after having admired the phenomena of Roman design we wondered if they could have done it better) and so a happy troupe went their separate ways to meet up next year on the Seine.

**John Robinson, Banbridge**



*A selection of photographs from the trip. John Robinson (Banbridge)*





*Place St Pierre, Mâcon, and Place du Forum, Arles. Watercolours by Neil Weir*

and.....

## **Cruising the Rhône**

To see all the sights, Sue Weir took us cruising on the Rhone and its tributary, the Saone. From Lyon, at the confluence of the two rivers, we travelled north into Burgundy on the Saone and then returned via Lyon to follow the Rhone south into Provence. By the time we returned to Lyon we had covered over 500 miles. Our ship, the Amadeus Provence, was very comfortable and we had warm sunny weather in the daytime.

During the first night we sailed north to Macon and in the morning drove through the vineyards of the Maconnais and Beaujolais to the wine Museum Georges Dubouef. There we saw many artefacts from the wine production process, one of the most impressive being a massive eighteenth century wooden wine press, and then enjoyed tasting the wine. That afternoon we visited the remains of Cluny Abbey. The Benedictine monastery at Cluny was founded in 910 by William the Pious, Duke of Aquitaine, and became the mother house to over 1100 abbeys across Europe. In medieval times the huge Romanesque abbey church was the largest in Europe, but during the French Revolution it was sacked and subsequently used as a stone quarry, only part of the south transept remains intact. We visited the massive tower of this transept (which is nearly 100 feet in height), and a small side chapel, and saw some of the original sculptures.

Overnight we sailed north to Chalon sur Saone and drove through the vineyards to Beaune. We visited the Hotel Dieu, founded in the mid fifteenth century by Nicolas Rolin, Chancellor of Burgundy under Philip the Good, which functioned as a hospital until the early 1970s. The buildings surround a central courtyard and have a distinctive polychrome tiled roof. In the Great Hall of the Poor the patients' wooden beds on either side are enclosed by red curtains. Only the nuns who cared for the patients had access to the chapel at the far end of the hall, beyond a screen. The original altarpiece, a magnificent Last Judgement by Rogier van der Weyden, has now been moved from this space to a separate room. The outer wings show the kneeling donors, Rolin and his wife, who flank central images of saints and the Annunciation, and the Last Judgement is on the inner panels. Van der Weyden's mastery of this dramatic scene, his use of colour and realistic depiction of texture all support his reputation as one of the leading Flemish artists of the period. The hospital complex also contains an old pharmacy and displays of old medical instruments and equipment. Before leaving Beaune, we went to a tasting of Burgundy wine and cassis.

That afternoon we visited the early seventeenth century Chateau de Cormatin, where the main rooms were decorated with elaborate wall paintings of mythical and biblical scenes. There is a moat around the chateau and part of the garden is laid out in the formal French Renaissance style. We then drove to the small medieval village of Brancion on a hill top above the Burgundy countryside where there was a castle and an old wood-beamed market hall. In the Romanesque church of St Peter some of the medieval wall paintings were still visible.

We re-joined the ship at Tournus and overnight sailed south to Lyon, the third largest city in France. We drove up the hill to the west of the Saone to the huge cathedral of Notre Dame de Fourviere, built after the Franco-Prussian War, from which there was a wonderful view over Lyon. We descended to visit the old city and walked along the narrow streets lined by apartment buildings which were once the centre of the silk trade. We were led through some of the 'traboules', narrow passages through these buildings which connect adjacent streets. These were used by the French Resistance during the Second World War to provide cover and as escape routes. As we sailed south we saw the huge modern Musee des Confluences which sits at the junction of the Rhone and the Saone.

The plan had been that we would sail south overnight to Avignon. This stretch of the Rhone contains eleven locks and, because of heavy river traffic, we had not reached Avignon by the following morning. Fortunately, there was a fall-back plan and we left the ship to travel by bus to Avignon in time for our morning tour of the city.

Our first stop was by the Pont d'Avignon, renowned from the folk song. Only four arches of the medieval bridge named after St Benezet remain and the bridge has not been used since the seventeenth century. The main focus of our visit was the huge Papal Palace. In the early fourteenth century the Pope left Rome because of civil unrest and a newly elected French Pope, Clement V, settled in Avignon. Over the next hundred years a series of French Popes led the church from the palace they built in Avignon. The Great Dining Hall adjacent to the cloister was



*Cluny Abbey, a former Benedictine monastery*



*Hotel Dieu courtyard, Beaune*





*The Pont d'Arc, a large natural bridge.  
Judith Webb*



*The Pont du Gard, ancient Roman aqueduct built in the first century AD. Judith Webb*

not only used for banquets but also during the papal conclaves which were held in an adjacent oratory. The Papal Tower houses the papal apartments which still retain many of the original wall paintings. In the papal bedchamber, vine branches holding birds and squirrels form a network on the blue background, and the walls of the Deer Room are decorated with scenes of deer hunting, fishing and fruit gathering. From the roof of the palace we could see the adjacent bell tower and cathedral as well as much of the west part of the city.

That afternoon we visited the small medieval town of Uzes, which has multiple defensive towers, and then travelled to the Pont du Gard, which forms part of the 30 mile long aqueduct built

by the Romans in the first century to transport water from Uzes to Nimes. The Pont du Gard is a massive three tiered bridge made from huge blocks of stone. It is 900 feet across and 160 feet high and carries the aqueduct across the river Gardon. Models in the museum showed how this huge bridge was constructed using wooden scaffolding.

Overnight we sailed south to Arles, which was founded by Julius Caesar and had a population of 30,000 in Roman times. The huge Roman amphitheatre was used for gladiatorial fighting, and is now used for bull fighting. There is also a semi-circular Roman theatre and the remains of Roman columns can be seen embedded in some of the walls of the Place du Forum.

The Romanesque cathedral of St. Trophime has a huge carved portal depicting the Last Judgement and the columns of the adjacent cloister are topped by a series of Romanesque and Gothic carved capitals. More recently, Arles achieved fame because of van Gogh's stay there. The yellow house near the river where he lived has been pulled down but the famous yellow Café de la Nuit on the Place du Forum, which



*Church of St. Trophime, former cathedral located in the city of Arles. Judith Webb*





*Picturesque Arles, with the Roman amphitheatre on the left*

he both frequented and painted, remains. We also visited the hospital where van Gogh was admitted for his injured ear, and saw the garden in the courtyard which he painted. On the Place du Forum there is a charming statue of the nineteenth century Provençal poet Frederic Mistral, who won the Nobel prize for literature.

In the afternoon we drove south to the Camargue, the marshy plain which lies between the larger eastern and smaller western branches of the Rhône, with the Mediterranean forming its southern border. It is sparsely populated and is crossed by canals. We saw herds of the black Camargue bulls, which are smaller than Spanish bulls and have vertical horns. They are used for bull fighting in the amphitheatre at Arles, but the aim of the 'fight' is to remove ribbons tied to the bull's horns, not to kill it. We also saw many white Camargue horses and flamingoes which were wading in the lagoon. Our southernmost point was at the town of Saintes-Maries-de-la-Mer on the sea.

By the following day we were sailing north towards Lyon and we left the ship at Chateauneuf du Rhône to visit the Ardeche region to the west of the Rhône. The lavender fields through which we drove had already been harvested. The winding road took us up to a height of 1000 feet and then along the gorge where the Ardeche river passes between limestone cliffs. At the Pont d'Arc there is a dramatic natural stone bridge over 100 feet high crossing the river. South of this there is a viewpoint overlooking an oxbow bend in the river where we saw white wild goats by the roadside. We re-joined the ship at Le Pouzin and continued north overnight to reach Lyon for our journey home.

**Judith Webb**



# ARTICLES

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*US troops outfitted with gas masks in preparation of toxic exposure. Gulf War, 1991*

## War Syndromes

**William Coker**

The inevitable result of failing to learn from history is that we repeat our mistakes; such is the case with the repeated emergence of war syndromes. During 1991 and the Gulf War, the BBC showed images of Gulf War chemical weapons found in the huge Iraqi arsenal of nerve agents such as sarin and mustard gas. Air-Commodore Dr Coker had been appointed to the UN Chemical Weapons Destruction team for six months in 1991 where he provided medical support and regulated the working practices in high temperatures, while wearing personal protective equipment. This arduous work was only allowed for 10-15 minutes per contact, before a 45 min break for rest and rehydration.

Concerning Gulf War illness there is a long list of symptoms frequently reported, such as fatigue, shortness of breath, headache, muscle and joint pain, palpitations and chest pain, sweating, diarrhoea, sleep disturbance and loss of concentration, similar to many other medically unexplained conditions seen in any NHS physician's clinic. In a war-time situation, the myriad purported causes of such symptoms have included exposure to depleted uranium, multiple vaccinations, pollution from oil well fires, low dose chemical agent exposure, pesticides and insect repellants, pyridostigmine bromide, further undetermined biological agents or the interaction of any or all of the above. Gulf War illness, probably like many other war syndromes, is simply the result of going to war. Wessley at Kings College London performed epidemiological studies on Gulf War illness sufferers and concluded that, like chronic fatigue syndrome, the main problems were psychological.



*WW1 soldiers afflicted with Da Costa's syndrome as well as shell shock; later termed post-traumatic stress disorder (PTSD)*

Characteristics of war syndromes are multiple, with few or no consistent clinical signs, yet can affect a large number of combatants more or less simultaneously. None of this is new. The American Civil War gave rise to Da Costa's syndrome which included an 'irritable' heart - the causes of which were postulated at the time as being possible overexertion, fatigue, and tight uniforms. The British Army changed the design of uniforms as a result of Da Costa's work, but still had problems in India with the 'syndrome'. In WW1 60,000 soldiers were discharged with Da Costa syndrome. The cardiologist Lewis thought there was an acid base balance disturbance as a result of some kind of 'effort syndrome' but found no explanation.

Other historical examples included nostalgia, described by Hofer a 16th century Swiss physician. He stated no medication, threat nor punishment nor promise could help the affected soldier; the victim simply surrendered to death. On the retreat from Moscow (1813), Larré diagnosed many cases, often (with good cause) complaining of depression, fatigue and palpitations.

Homer himself wrote about war affecting psychology. Achilles' bizarre argumentative behaviour, sulking in his tent, showing excessive grief at the loss of Patroclus, his loss of control, depression and belief in his imminent death are all characteristic of a war syndrome. Odysseus on his return home shows the problems of readaptation seen in post-traumatic distress disorder (PTSD) exhibited by so many ex Far East POWs from WW2, who suffered from insomnia, nightmares, guilt at survival and depression. Families too agonised greatly, as Shakespeare illustrated. He knew about PTSD; Hotspur's wife notes his poor appetite, startle reflex, depression, sleep disturbance, loss of libido, facial tics and breathlessness.

In which direction should modern medicine go? Empathy with affected military is certainly in order, but with so many examples from history and literature it is to be hoped that lessons have been and will continue to be learned.

*Originally presented to the Hunterian Society of London, 20th March 2017*



# A History of Chemical Warfare

**William Coker**

Following the recent Salisbury Russian poisoning incident, we are all once more observant that the effects of chemical agents are ever with us.

## **Ancient Agents**

In ancient times, the Spartans were described as using toxic fumes to flush enemies out. Later, 'Greek Fire' introduced by the Byzantines was almost certainly petroleum based. In 673 when the Greek navy attacked Constantinople this sticky liquid was used and was not extinguished by water. To this day, its exact composition is unknown.

## **The Development of G Agents**

This began in 1936, when a German biochemist, Gerhard Schrader, discovered a substance that caused 100% mortality to any insect exposed to it, and exposure to which resulted in serious effects to himself. He had fallen upon Tabun, which he reported to the Nazi party and was soon working, developing other chemical agents. One of the organophosphates they subsequently elucidated was Sarin – similar to Tabun but absorbed through the skin. In 1945 when Silesia was liberated by the Russians, the whole factory was transported (including some of the personnel) back to Russia. Many of the chemicals involved had been tested in concentration camps and the Allies were completely unaware of their development.

In WWI chlorine gas was used for the first time on 22/04/1915. It made a hole four miles long in a front that had remained static for 6 months. However high command on both sides were surprised by its effect, with the German high command concluding that its use wasn't 'the done thing'. Chlorine led to Phosgene thence to mustard gas. It was the latter, developed by the Allies, that caused the most of these casualties during that War. It was deemed by the powers that be of that time, as a 'good weapon' as it did not kill but rather maimed. Many thousands of mustard gas tanks in Iraq during the 1990s first Gulf War were found and made safe. Hundreds of missiles were also found with active Sarin.

Returning to WWII one wonders 'if the Germans had these nerve agents before WWII, why did they not use them?' Possibly the Germans may have thought that the UK had also discovered and developed organophosphate compounds, or perhaps that Hitler, non-fatally poisoned by a gas attack towards the end of WWI, might have had a natural loathing for their use. A paper proposing the use of gas had indeed been presented in 1940 but was not acted upon as it might have turned the views of the United States against the UK.

## **Post WWII Agents**

Since WWII, VX was discovered in 1950, the V agents even being far more toxic than G agents. In 1991 the Novichok series of nerve agents was developed in Russia. Comparing relative toxicities of various agents compared to hydrogen cyanide - as agents have developed, their toxicity has exponentially increased (hydrogen cyanide needs a dose of 3,500 U to be fatal, whereas Novichok only needs 1 U to have a similar effect).

## **Treatments**

Contemporary treatment for nerve agent poisoning, includes terminating exposure, decontamination, life support, atropine, oxime (that can reverse nerve agent – anticholinesterase binding), anti-convulsants, management of cardiac arrhythmias and adequate oxygenation – all entirely dependent on efficient team working.

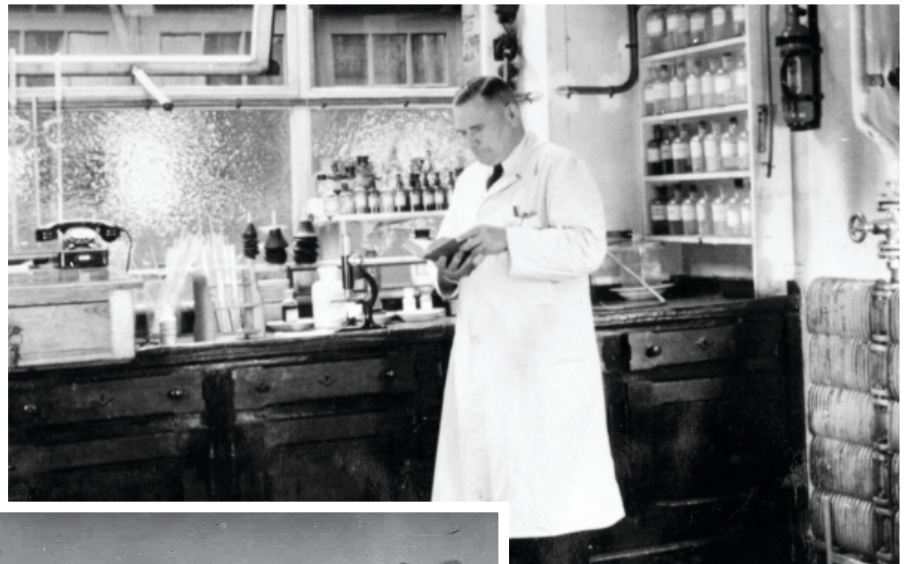
Unfortunately, there are no certain effective treatments for nerve agent poisoning. Nerve agents work as acetylcholinesterase blockers meaning that cholinergic nerves are blocked 'open' leading to convulsions, hypersecretions and more. Oximes may help for a time but the message is clear - that chemical weapons and their use is rare, but devastating.

*Originally presented to the Hunterian Society of London, 16th April 2018*





A Byzantine ship uses Greek fire against a ship of the rebel, Thomas the Slav, 821. 12th century illustration from the Madrid Skylitzes



Gerhard Schrader, the German chemist originally specializing in insecticides, had hoped to make progress in the fight against world hunger



"When we got to the French lines the trenches were empty but in a half mile the bodies of French soldiers were everywhere. It was unbelievable... You could see where men had clawed at their faces, and throats, trying to get breath. The horses... cows, chickens, everything, all were dead. Everything, even the insects were dead."

By Willi Siebert, German soldier who witnessed the first chlorine gas attack.

Facility in Shikhan (Russia) which led the efforts to develop Soviet chemical weapons, including Novichok-class nerve agents





# BOOK REVIEWS

## *Rural Ramblings, More Poems*

by Arthur Baskerville

Review by Gillian Tindall

Personally, I always warm to someone writing poetry today who does at least know that for many centuries, immediately before our own time, there was a general agreement that poetry should be in lines that scan and, more often than not, rhyme, and tries to emulate this discipline. Too many would-be poets today seem to think that it is sufficient to break up what is essentially prose into meaningful-sounding segments – and unfortunate school children are led into this illusion by their well-meaning teachers. Arthur Baskerville has one composition in this new collection that he produced, called *What is Poetry?* in which he tries to get to grips with the slippery, fey, modern version of a very old tradition, and successfully sends the modern up.

He is in fact rather good at squeezing layers of meaning into a few brief, stream-of-consciousness lines: I particularly liked *Country Church* ('Stands in headstone-lined meadow, aloof from its hamlet... Sadly, sense dawns this church become a religious museum. Tiny local population...'), and *Was That Me?* looking back on the lost energy of his prime ('Now scarcely credible when peering into cavernous memory file...'). But I do feel he is at his best when he actually achieves a traditional rhyme-scheme, as in *Cathedral Café*:

*'Leaving cloisters, silent, chilly, whose stone memorials gaze on quad,  
entering café's hurly-burly, abrupt the shift from death to God.  
Clattering crockery, hissing boiler, can't suppress the din of chatter,  
for here cathedral's busy army raise points episcopal that matter...  
...While from above, through sloped-glass ceiling, Norman spire surveys the scenes,  
recalls tradition down the ages, keeps constant watch on all their schemes.'*

*Albert's Ashes* too, displays a splendidly competent four-by-four rhyme-pattern over eighteen verses. Such poems aren't great poetry and don't aspire to be, but this one is a fine contribution to a well-established English tradition of comic verse: think, Edward Lear and Hillaire Belloc. Similarly taut is *Worried? Well...*

*'A group that makes GP's life hell,  
The Geriatric Worried Well.  
They overfill the waiting room,  
exude an air of earnest gloom.  
Seem hale and heart, fit and yet  
pose many a diagnostic threat...'*

Baskerville is not a GP, but he practised for years as a country vet, later branching out into pathology, research and academia, but no doubt the parallels are close between those anxious about their own health and those worrying about their beloved animals. The most remarkable event in his life, which is mentioned more than once in this collection and has one entire poem devoted to it, was when his wife's car was blown up, apparently by a targeted amateur device (she survived intact). She is clearly an important person in her own right (her collection of an OBE at Buckingham Palace is the subject of another composition) but I do not actually think that such out-of-the-ordinary experiences make for successful poetry, particularly as this writer's special talent is for a rueful irony. In *The Sentimentalists*, a

packed shorthand riff on the physical contents of a life spent pointlessly amassing treasured memorabilia, 'Dolls' house, Teddies, Brownie uniform, wedding dress', he concludes:

*'Entrenched personality trait, seeds already planted in youth,  
nurtured, intensified with age.  
Untreatable condition, and no desire for a cure.'*

And I warm particularly myself to a poem about going on a cruise and being shepherded everywhere, significantly titled Cruise Control. It ends:

*'And there's the cruise conundrum; benefits, drawbacks.  
Independence, initiative sacrificed, easy convenience comes with control.  
Outrageous cost, early booking not accounting for circumstance, health changes.  
But an interesting and enjoyable experience to have done. Once.'*

## Victory Over Disease

by Michael Hinton

Review by Michael Hinton

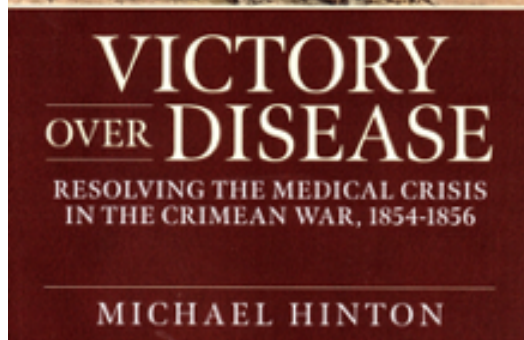
Detailed analyses of primary documents associated with the medical aspects of the Crimean campaign indicate that the catastrophic collapse in the health of the British Army during the winter of 1854/55 was followed by a gradual improvement starting early in the New Year. This was not the result any major advances in medical science. Mainly, this was due to the progressive enhancement in the living standards of the troops – by the provision of adequate food, clothing, fuel and shelter. Those improvements, coupled with development of the facilities for health care in the camps and general hospitals in the Crimea, were combined with more satisfactory arrangements for the evacuation of invalids from the Crimea to Turkey and beyond. The principal problems that beset the Army were at the front, and not in Turkey – and it was



there that matters were rectified. Specifically, the improvements in survival of patients at Scutari can be largely explained by an improved prognosis for the men selected for evacuation. There is very little tangible evidence that Florence Nightingale and the Sanitary Commissioners, (who were sent out by the government to investigate matters on the spot) significantly influenced the improvement in the health of the main Army in the Crimea. Their commendable efforts, though worthwhile and effectively carried out, were little more than subsidiary. Rather, it represented the involvement of many people in many walks of life who worked, possibly unwittingly, for a common purpose, and with such gratifying results.

The lithograph on the cover is of the 93rd Highlanders encamped on the Western Heights, Dover shortly after their return from the Crimea. It is by William Burgess, a well-known local artist, and the neat and tidy look of the camp, and the fit appearance of the men, provides convincing proof of the 'Victory over Disease'.

351 pages; 11 chapters; 47 tables, 53 figures, and 2 maps.  
Price (from author): £18 (£20.50 incl. P&P)  
mike.hinton\_tn1@blueyonder.co.uk





# 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.

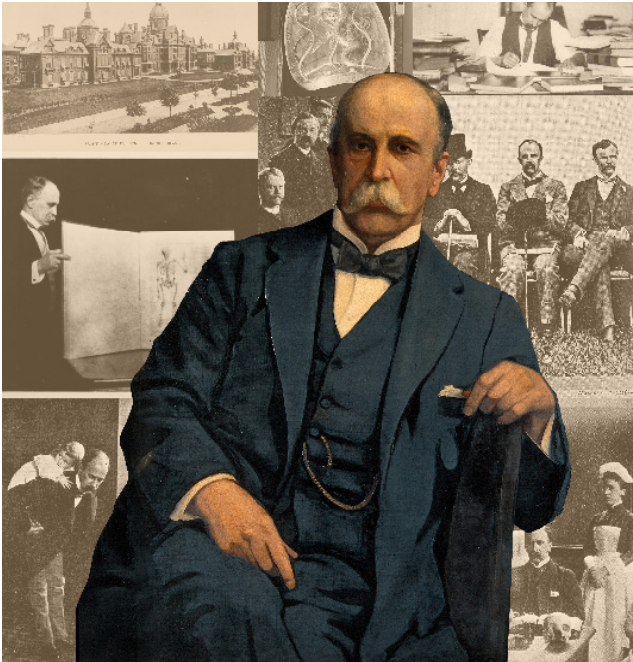
Reports of Retired Fellows Society tours – 1,000 to 2,000 words, the author invited by the leader of the tour.

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 meet the specifications of 300 DPI and minimum size of 297 x 210 mm (A4 paper size).




The Royal Society of Medicine

## So joyous and gentle a life

An exhibition in memory of Sir William Osler, 1849 - 1919

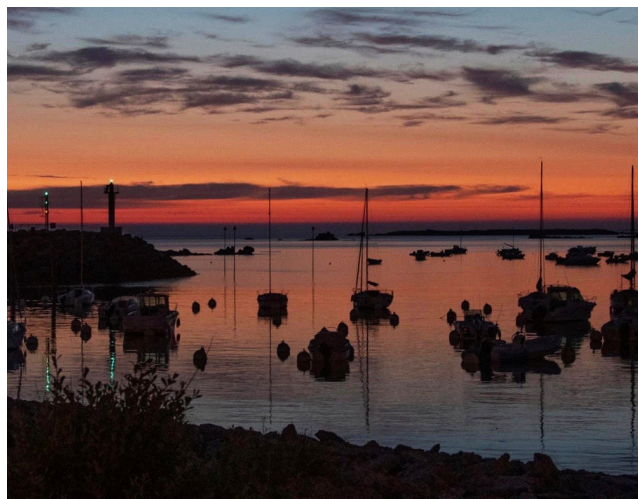
**Free admission**  
4 November 2019 - 1 February 2020

The Library, first floor,  
Royal Society of Medicine,  
1 Wimpole Street, London



The RSM Library is running an exhibition on the founder of the History of Medicine Society, Sir William Osler. Be sure to pay a visit to the Library the next time you're at the RSM.

On display until 1st February 2020.



Trébeurden, Brittany: John Skipper

## Leaving a message

The Vice Chancellor phones a colleague:

"Is Professor Rubenstein there?"

"No, sorry, it's Yom Kippur."

"Hello Yom, can I leave a message?"