Our member for this issue is Dr Eiman Abdel Meguid who is a Senior Lecturer at Queen's University Belfast (QUB). Eiman is also a Senior Fellow of HEA, and a BACA ambassador for Northen Ireland. She has multiple publications in high impact journals and was an international visiting Scholar/Guest Speaker for Weill Cornell Medicine, NY. She is a reviewer for several journals and a member of the Editorial Board of Ulster Medical Journal. These are just a few of her roles and

activities. To get to know her a bit better, we fired few questions at her...

MEMBER If you won the SPOTLIGHT

How long have you been a member of BACA?

I have joined BACA in the 2000s but then resigned at some stage as I wasn't able to attend the meetings but have re-joined in 2014 and since then, I regularly attend most of the meetings.

What do you love the most about BACA?

I love BACA scholarships that aid research into clinical anatomy and anatomical education and that sponsors public engagement events that promotes dissemination of clinical anatomy and anatomical education research.

What's been your favourite or most memorable moment of BACA?

The virtual meetings especially the 1st BACA Beat. As a speaker from Northen Ireland, I enjoyed sharing lessons learnt about anatomy teaching during COVID-19 pandemic with a group of speakers from the other three UK regions. I was thrilled to talk about how I quickly adapted my inperson classes held during pre-Covid to remote teaching. I shared my experience in creating a vibrant learning environment by providing online teaching innovations that ensure high quality academic provision and student engagement.

What is something about you (fun fact) that not many people know?

When I travelled to Germany in 1992 to do my PhD thesis at Eberhard Karls Universität Tübingen, I haven't got a clue about the German Language and if I would be able to pass the Goethe-Zertifikat C2 at Goethe-Institut in only 4 months. This was the duration allowed by Deutscher Akademischer Austauschdienst (DAAD) in order not to lose the Scholarship. This Zertifkat entitles foreign students to study at German Universities. After hard work and lot of dedication, I passed this exam and successfully ended my thesis.

lottery, what is the first thing you would do? I would give financial

support to the Anatomy Wing at CBMSE, QUB and to the Faculty of Medicine, Alexandria University where I have studied. A little of this money will go to my sons as well.

Dr Eiman Abdel Meguid

If you can go back in time and meet a historial character, who would it be and why?

Sir Magdi Yacoub, a famous retired cardiothoracic surgeon at Imperial College London. Kighted for services to medicine and surgery in 1991, Prof Yacoub pioneered several novel operations to correct complex congenital heart anomalies. He also established the largest heart and lung transplantation programme in the world. Following retirement from the NHS, he continued to operate on children in developing countries through his charity, the Chain of Hope.

A piece of advice to your younger/older self?

- Add clinical context to demonstrate the application of anatomical concepts. Design clinical scenarios that link anatomy with clinical presentations, explaining causeand-effect relationships. This would increase understanding and improve diagnostic ability.
- Carefully plan the display of radiological anatomy imaging as this can help to nurture future good clinical practice.
- Promote three-dimensional visualisation as students' aptitude for understanding three-dimensional structure and positions of objects is a vital skill for many clinical practical skills, such as inserting central

venous catheters and intercostal chest drains where internal structures are not directly visible.

Embrace modern technology and innovative teaching methods in class.

Where do you find the most inspiration?

My grandmother, Mrs Esmat Kamel lost her dad at the age of ten, who died while treating patients in an epidemic. Despite being an orphan, she was able to have a very successful career. In 1929, overseas education opportunities for women were very



Mrs Esmat Kamal (my grandmother) at her office

slim. As a young woman in her early 20s, she travelled from Egypt to London to join the Royal Drawing Society of Great Britain and Ireland with the aim of learning how to teach drawing for educational purposes. Few years later, she obtained the Bronze Star on her work at the Royal Drawing society's exhibition. The degree enabled her to promote the teaching of drawing and to enhance the great role of a teacher in schools. Along the years, she had a tremendous impact on the education system. I was very inspired by her great achievements especially that female leadership positions were very few at that time. She was a teacher that made a world of difference in students' lives by her devotion to her job and strong classroom presence. She highlighted that patience is one of the most important skills to practice, whether managing classroom behaviour, working with colleagues with different views, or communicating student issues. Her work has inspired my interest in teaching and continues to have a great influence on me despite her death in 1993.



A picture taken in 1950 for my grandmother (the lady in the white dress) standing next to His Majesty King Farouk 1, the ruler of Egypt and Sudan at that time.

What is your favourite part of your job?

Full cadaver dissection is the favourite part of my job as I believe it is essential for the modern undergraduate training. Sadly, the limitations on curricular time, trained anatomy faculty and resources, have led many medical schools to abandon costly and time-consuming dissectionbased instruction in favour of alternative methods including prosection, medical imaging, and multimedia resources.

What is the one thing that you cannot live without?

Enjoying teaching my students as I really love my job. I am always delighted to see the impact of my teaching on their career progression.



Dr Eiman Abdel Meguid during a teaching session

If you were to write a book about yourself, what would you name it?

As we are mentioning books, I am excited to mention the book chapter that I have written with colleagues, its title is "Exploring visualisation for Embryology Education: A 21st Century Perspective". This chapter belongs to the Biomedical Visualisation book series. It has been accepted for publication in the Advances in Experimental Medicine and Biology, part of Springer Nature Switzerland AG publishing group.

What are your hopes for the anatomy world?

Using innovative technology to enhance cadaveric dissection rather than replace it. Students seem to appreciate the ability to visualise and learn across a variety of media. My hope is to retain the best of the past but also to incorporate the innovative interactive technology. In this technological age, institutions may more readily turn to digital applications, which, although invaluable, should be seen as an adjunct to the cadaveric fundamentals - not a replacement.

ANATOMICAL HISTORY CORNER Marcello Malpighi (1628 –1694): anatomist and a founder of histology Dr Peter Dangerfield

Marcello Malpighi (Fig. 1) was born on 1628 at Crevalcore near Bologna and entered the University of Bologna at the age of 17 (Fig. 2). Today, he is recognised as an anatomist and the father of histology and pathology.



Figure 1: Marcello Malpighi

Figure 2: Marcello Malpighi in the town of his birth Crevalcore

In 1653 he was granted doctorates in both medicine and philosophy. Becoming a teacher, he then undertook studies in anatomy and medicine. He was invited to join the Royal Society in 1667 and became a fellow in 1668. Malpighi, together with Hooke, Grew and van Leeuwenhoek, was able to develop the microscope, a previously untried instrument, to further their investigations.

His research was based on experimental methods, controversial at the time, mainly due to widespread lack of understanding. He made major discoveries including the pulmonary and peripheral capillary networks connecting small arteries with small veins, the alveoli of the lungs, and structure of the spleen and testes. The publication of De pulmonibus, in 1661, described his findings relating to the anatomy of the lungs, and completing the work of William Harvey on blood circulation, but led to opposition to his discoveries from the vocal supporters of the Galenic principles.

In the years 1663-1667, Malpighi worked at the University of Messina, focusing research on the human nervous system where he identified nerve endings, the structure of the brain, and the optic nerve. This work was published in 3 separate works titled De Lingua about taste and the tongue, De Cerebro about the brain and De Externo Tactus Organo about feeling/touch sensation. His examination of chick embryos formed the groundwork for much of modern embryology.

In 1691, Malpighi moved to Rome as papal physician to Pope Innocent XII and became professor of medicine at the Papal Medical School. He remained in Rome until his death.



Figure 3: Tomb Malpighi Church of Santi Gregorio e Siroto, Bologna



Malpighi employed dissection for his anatomical studies but, for his major investigations, used the microscope, hence is recognised as a father of histology. Several microscopic anatomical structures are named after him, including the Malpighi layer of the skin and two different Malpighian corpuscles in the kidneys and the spleen. With the moves today to discourage the use of eponyms, sadly a number of these well-established terms may well become historical curiosities.

Anyone visiting Bologna might wish to visit the church of the Santi Gregorio e Siroto and view the the Latin inscription on Malpighi's marble monument "SUMMUM INGENIUM / INTEGERRIMAM VITAM / FORTEM STRENUAMQUE MENTEM / AUDACE (great genius, honest life, strong and tough mind, daring love for the medical art) (Fig. 3).

Furthermore, his name lives on the Malpighi Traditional Balsamic Vinegar of Modena where one can visit the producers and taste the products, including indulging in 100 year old balsamic vinegar! (Fig. 4).



Figure 4: Malpighi Balsamic vinegar

References

- Motta PM Marcello Malpighi and the foundations of functional microanatomy. The Anatomical Record 1998. 253 (1): 10–12
- Pearce JMS. Malpighi and the discovery of capillaries Eur Neurol 2007: 58: 253-255
- Reveron, RR. Marcello Malpighi (1628-1694), Founder of Microanatomy Int. J. Morphol. 2011 29 (2): 399–402



One of BACA's aims is to encourage future generations of clinical anatomists through scholarship, prizes and sponsorship. Below is a list of different awards and prizes you can apply for. More information and application forms can be found on the BACA website.

BACA Scholarships

Awards of up to £1000 will be made available twice yearly to aid research into clinical anatomy and anatomical education.

BACA sponsorship

BACA will sponsor other events that it deems suitable for promoting the dissemination of clinical anatomy & anatomical education research.

Public engagement award

Awards of £50 will be made available to those who wish to carry out public engagement events related to human anatomy.

Members prizes

Two Conrad Lewin prizes are awarded to BACA members who are either students or members within five years of their final undergraduate graduation.

Open Prizes

A discretionary prize is awarded to those who present outstanding research at a BACA conference in the fields of clinical anatomy & education.

BACA Annual National Student Essay Competition

An annual competition inviting students from the UK and Ireland to submit an essay discussing a specific topic.

BACA Anatomical Art Competition An annual competition inviting BACA members to submit an original drawing,

painting, sketch or digitally created artwork.

BA British Association of Clinical Anatomists

FOURTH BACA BEAT

BACA Scientific meeting

September 8th 2021, 14:00 GMT

Abstract submission is **now open** until 17.00 BST, Monday 2nd Aug 2021. We welcome abstracts on themes related to anatomy education and clinical anatomy.



UPCOMING FROM BACA

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British Association of A Clinical Anatomists

BACA Anatomical Art Competition

Submit an original drawing, painting, sketch or digitally created artwork that depicts anatomy. Entries can be representational, figurative or

Theme: Beneath skin Deadline: Nov 1st 2021

Full details and guidelines can be found on <u>BACA website</u>. Alternatively scan the QR code.



If you have any comments or concerns, please contact us on: Email: Baca.communication@gmail.com Twitter account: @BACA Anatomy Website: https://www.baca-anatomy.co.uk/

We also welcome contributions to the newsletter. This newsletter has been designed using resources from Freepik.com, icons8.com and Unsplash.com.