

The Caduceus

The NULS Pre-Med Society Newsletter



Edition 2, June 2021

A warm welcome to our second edition of the Pre-Med newsletter. This is a regular publication to bring you interesting articles that we hope would offer you a step ahead in your journey towards your dream career. We welcome submissions for material that we can include in subsequent issues.

Physicians vs Surgeons: What's the difference?

Physicians and surgeons both diagnose illnesses and provide treatment for people suffering from injury or disease, however, there are crucial differences that lie between both domains. Many people are unaware of these differences, therefore we felt this was an appropriate topic to address in this issue of 'The Caduceus.' We won't simply be outlining the roles of physicians and surgeons but also how this information relates to you on a personal level and how you can use it to influence your future decisions.

It is very important to understand the fundamental difference between physicians and surgeons.

Physicians may either be specialists (as outlined below in the table) or practice primary care (such as general practitioners). Primary care physicians give their patients advice on how to make healthy choices as well as treating their illnesses. Specialists tend to focus on a particular type of disease or on a specific part of the body. Both primary care physicians and specialists treat illnesses using medicines and physical therapy. While physicians use techniques that help the body to heal itself, surgeons treat injury and disease through surgical procedures. It is also very common for surgeons to specialise in a particular area and some different specialties are listed below. One thing to note is that despite the alternative ways of treating a certain disease, all doctors must act in the patient's best interest and treat them to the best of their ability. If it is in the patient's best interest in terms of their chance of survival, to have surgery, the medical team will ensure the patient has the option of going ahead with the surgery.

Examples of different types of Medical and Surgical specialties:

Medical Specialties		
Cardiology	Dermatology	Endocrinology
Gastroenterology	Haematology	Neurology
Oncology	Nephrology	Paediatrics
Rheumatology	Pathology	Radiology

Quick quiz: Where is the heart's 'natural' pacemaker located?

Surgical Specialties		
Cardiothoracic Surgery	General Surgery	Neurosurgery
Oral and Maxillofacial Surgery	Otolaryngology (ENT)	Paediatric Surgery
Plastic Surgery	Trauma and Orthopaedic Surgery	Urology
Vascular Surgery	Gynaecologist	Colo-rectal Surgery

Differences in training pathways:

Anyone who wants to pursue a career in medicine must undertake the following:

1. Undergraduate medical training - this will usually take four to six years of study and will allow students to progress on to postgraduate training.

2. The Foundation Programme - all medical graduates must complete a two year training programme known as the Foundation Programme. This consists of Foundation Year 1 (FY1) and Foundation Year 2 (FY2). This programme aims to improve the practical skills of junior doctors and acts as a bridge between undergraduate training and Speciality/General Practice training.

3. Speciality and General Practice training - doctors must train in a specialist area of medicine or in General Practice. The training programmes differ in length and structure according to the speciality.

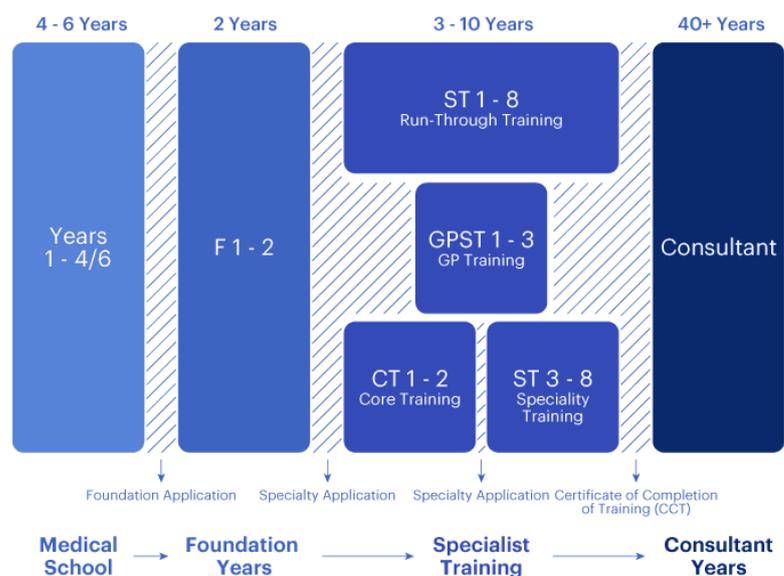
- General Practice - 3 years
- Other specialties - 5 to 8 years

For specialty training, there are two possible pathways that can be taken:

- Run-through training - for some specialties the training is via a run-through programme where you apply only once at the beginning and then you are recruited during the full duration of the specialty training
- Core and Higher Specialty training - other specialties consist of core training and then competitive entry into higher specialty training

The main variation in the training pathway between a physician and a surgeon is the specialty training. To become a surgeon, you must complete core surgical training and then choose to specialise in a certain surgical specialty. To become a physician, you have the option of going ahead with run-through training or undertaking core and higher specialty training in a field of interest.

On successful completion of the run-through or higher specialty training programme, doctors are awarded a Certificate of Completion of Training (CCT).



Which one would suit you best?

After a great deal of research and communication with a number of doctors, there seems to be a difference in the traits that belong to either a physician or a surgeon.

If you display any of the following characteristics, surgery may be the way forward for you:

1. You are great at working with your hands - to be a successful surgeon, fine-motor skills and manual dexterity are absolutely essential.
2. You have good physical stamina - surgery can be very unpredictable with some cases lasting far longer than you anticipated. This could lead to you being on your feet for longer than initially planned. It is therefore important to make sure that you are in good physical health and can withstand the long hours of an operation.
3. You have emotional resilience - medicine can be a highly draining career. Constantly dealing with stress, long hours and traumatic scenes can take a toll on your mental health. It is therefore important to be emotionally resilient and partake in activities that help you relax.
4. You are able to lead effectively - surgery often involves a very large team including surgeons, anaesthetists, nurses, theatre support workers etc. As a surgeon, you'll be the leader in the operating room and in order for the operation to run as smoothly as possible, effective leading is paramount. It will ensure communication is well maintained and the procedure is executed successfully.

If you display any of the following characteristics, becoming a physician may be the right career path for you:

1. You have good communication skills - being a good listener is critical to being a good physician as doctors need to understand their patient's concerns, but they also need to be able to voice their opinions to ensure patients are content with the treatment.
2. You are comfortable with working in a team - as a physician, you will need to work as part of a wider team of multidisciplinary professionals. Your ability to work well with others is important to ensure that patients receive the best standard of care and treatment as possible.
3. You are able to empathise effectively - having the ability to understand what others are feeling is one of the most critical skills for a physician. In many cases, you will be engaging with patients at a key moment in their lives, so it is crucial to be able to show the appropriate level of understanding, sensitivity and compassion.

It is important to note that all the skills listed above are needed whether you want to be a physician or a surgeon; certain skills are just required to a slightly greater extent in one area than the other.

Working together as a team

Collaboration in healthcare is what has made our NHS the success it is today. If all healthcare professionals didn't work together in order to form the multidisciplinary team, the healthcare system would be far less efficient. One must not forget that doctors, whether they are physicians or surgeons, work together and collaborate in order to provide the best quality care for the patient.

Gurjeevan Gahir L6AD & Anisha Saravanappa L6AD

References:

1. BMA 8th September 2020, accessed 2nd May 2021, <<https://www.bma.org.uk/advice-and-support/international-doctors/life-and-work-in-the-uk/toolkit-for-doctors-new-to-the-uk/doctors-titles-explained>>
2. Fred Decker 16th March 2018, accessed 2nd May 2021, <<https://work.chron.com/difference-between-physician-surgeon-7526.html>>
3. Royal College of Surgeons, accessed 2nd May 2021, <<https://www.rcseng.ac.uk/careers-in-surgery/trainees/foundation-and-core-trainees/surgical-specialties/>>
4. BMA 2nd December 2020, accessed 2nd May 2021, <https://www.bma.org.uk/advice-and-support/studying-medicine/becoming-a-doctor/medical-training-pathway>
5. NHS, accessed 2nd May 2021, <<https://www.healthcareers.nhs.uk/explore-roles/doctors/training-doctor/medical-specialty-training>>

Must Reads:

Medical Ethics: A Very Short Introduction (Tony Hope)

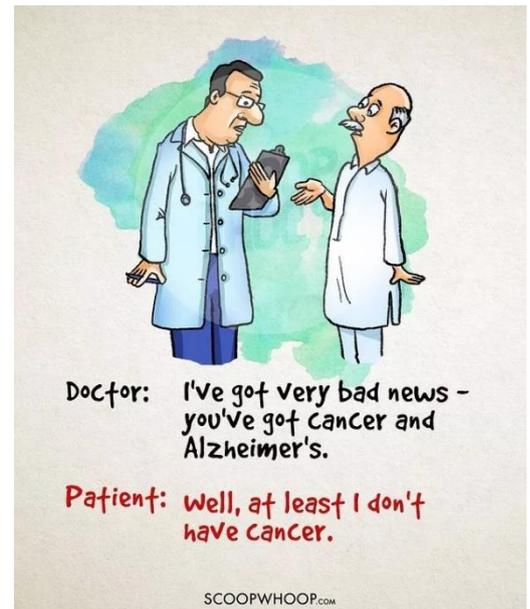
When Breath Becomes Air (Paul Kalanithi)

What They Didn't Teach You At Medical School (Alan V. Parbhoo)

This Is Going To Hurt (Adam Kay)

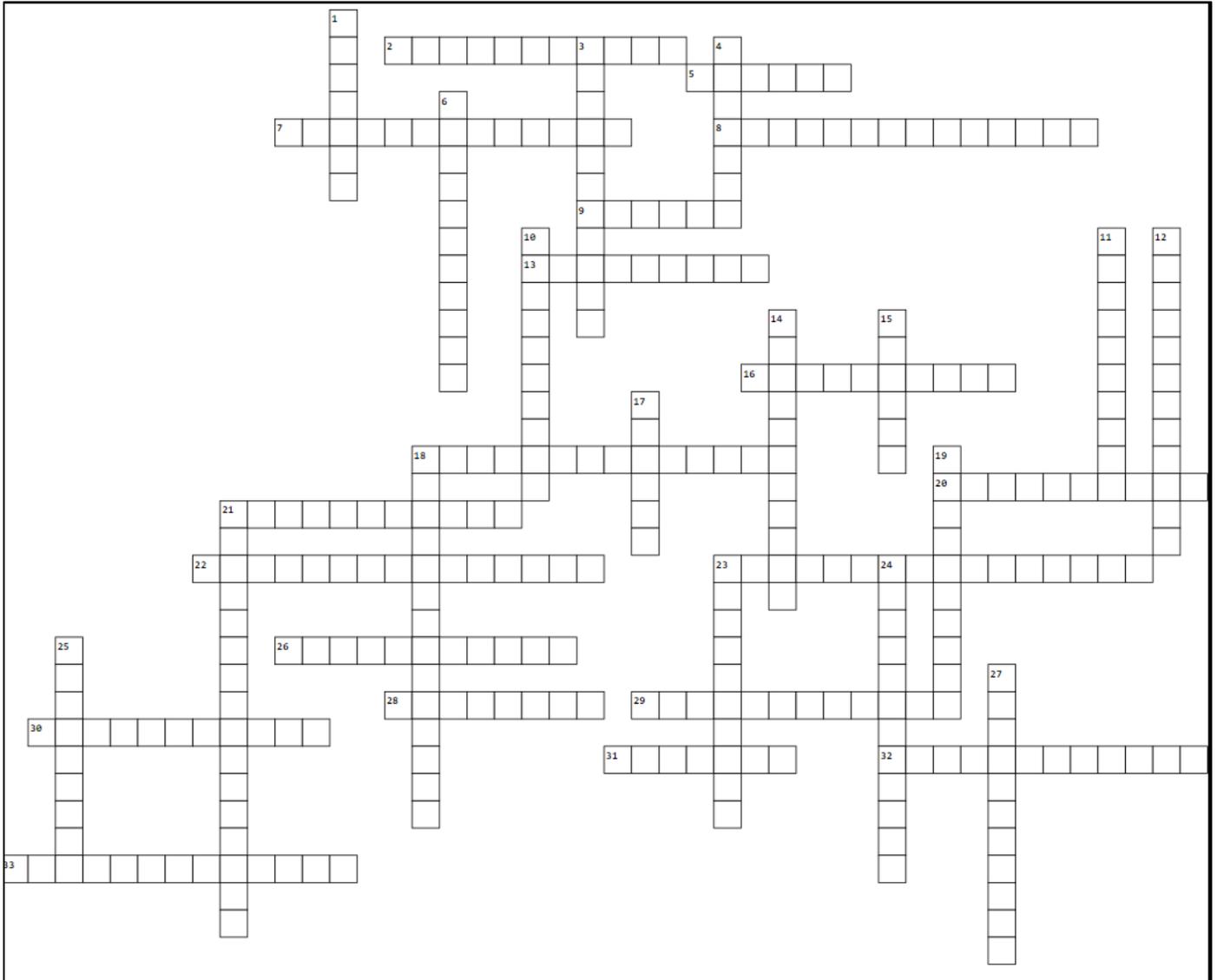
Funny Bones

1. More than half of your bones are located in the hands, wrists, feet, and ankles.
2. Around half of all teenagers are sleep deprived.
3. Your heartbeat changes and mimics the music you listen to. Music slows you down or revs you up depending on the tempo.
4. Like fingerprints, every person has a unique tongue-print.
5. During the first six weeks of life, there is no difference between the male and female embryo.



Riddle: A mother gave birth to twin boys, but they were born in different years and on different days. And no, they are not part of two sets. How is this possible?

Can you complete this 'general medical terminology' crossword?



Across

2. Removal of a kidney
5. Normal breathing
7. A radiological picture of the trachea and bronchi
8. Removal of pancreas
9. Condition in which red blood cells do not transport enough oxygen to the cells
13. A ductless gland
16. Muscular layer of the heart
18. Pertaining to the heart and vascular system
20. Movable flap of cartilage that covers the opening the larynx
21. An inflammatory condition that can affect lung function
22. Surgical puncture of the chest cavity
23. Agent that raises blood glucose
26. Breaking of stones
28. Mitral valve
29. Listening to sounds within the body through a stethoscope
30. Incomplete expansion of the lung or part of a lung
31. Substance secreted by glands
32. Lack of hydrochloric acid in the stomach
33. Puncture into the amnion to draw fluid

Down

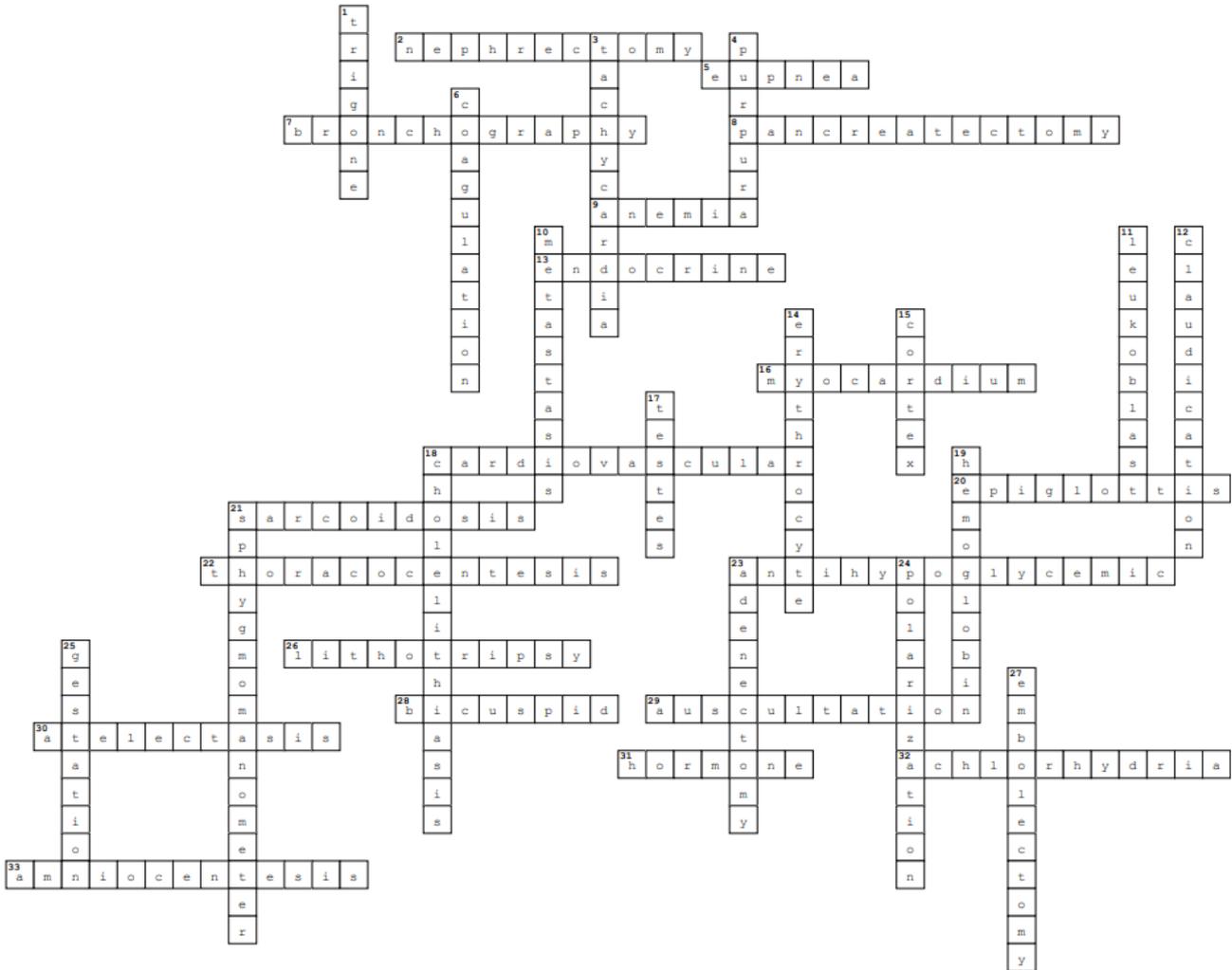
1. Triangular area at base of bladder
3. Heart rate greater than 100 beats per minute
4. Multiple tiny hemorrhages under the skin
6. Changing of liquid into a semi-solid
10. Spread of cancer
11. Immature white blood cell
12. Limping caused by inadequate blood supply
14. Red blood cell
15. Outer protective portion of the kidney
17. Produce spermatozoa
18. Gallstones
19. Protein in red blood cells that transports oxygen
21. An instrument used to measure blood pressure
23. Removal of any gland
24. Resting state
25. 40 weeks of baby's development
27. Surgical removal of a thrombus

This crossword is taken from the Medical Gift Guide website. Check it out for more medical related activities!

Send your funny bones, quick quiz questions, articles, ideas & must reads to caduceus@nuls.org.uk or speak to Mark El-Nimr.

'General medical terminology' crossword answers:

Medical Terms



Quick quiz answer: The right atrium
Riddle answer: One was born on Dec. 31 at
11:59pm and the other was born on Jan. 1st at
12:00am