

Healthcare Science Career of the Week



Respiratory Physiologist

Area of HCS: Physiological Science

Pay scale: Band 4-7 £18k-£55k

AMAZING FACT

People who travel to altitude can stop breathing for up to 30 seconds while sleeping; a phenomenon called periodic breathing.

Working one on one with patients they use a range of tests during rest, exercise and even while patients sleep, to identify lung function problems.

Not only do they help find the main issues with the patients lungs, e.g. asthma or emphysema they also monitor patients to make sure treatment is working and, if it's not, decide what to do.

Some patients struggle with breathing at night and their airway can actually collapse while they sleep. So these scientists set up certain experiments to detect the problem and decide how to manage it, normally with long-term treatments.

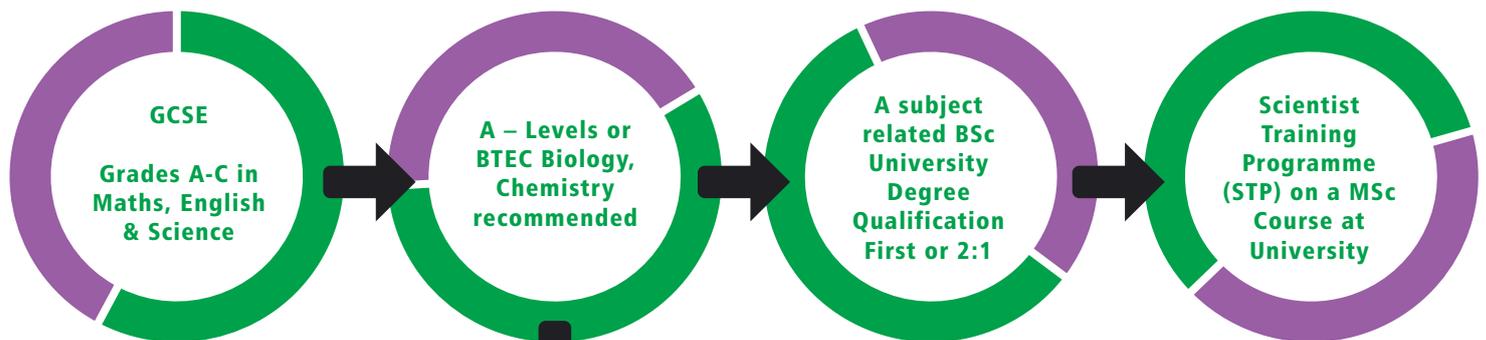


VIDEO

Tom had a series of respiratory tests over 4 weeks at Southampton General Hospital as part of a study in asthma. You can them all including a video of a bronchoscopy, where you get to see inside his lungs! Check out www.medicalmavericks.co.uk/book to see them all!



What to do to get into this career...



Top Tip

Check out the other Physiology careers including cardiology, neurophysiology and respiratory physiology.

Alternative courses to Consider at University:

Genetics
Biomedical Science
Immunology
Molecular Biology
Cell Biology
Physiology
Biological Science

Similar careers to look for in Life Sciences:

Biochemistry
Pathology
Haematology
Clinical Immunology
Toxicology
Virology



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Healthcare Science Career of the Week



Cardiac Scientist

Area of HCS: Physiological Science

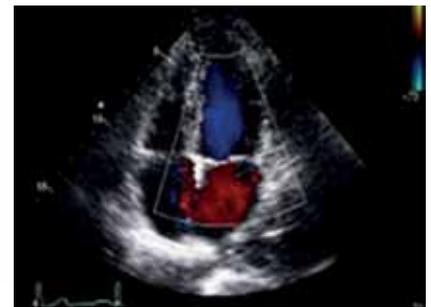
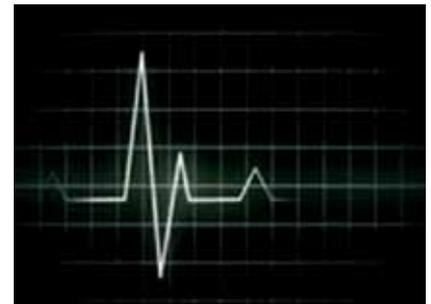
Pay scale: Band 5-8 (22k-£80k)

AMAZING FACT | A 12 lead ECG actually only has 10 cables. The 12 "lead" is due to the 12 different voltage traces you get.

These guys are at the heart of a hospital. They carry out tests daily on patient's that diagnose or monitor patients hearts from babies to the elderly.

Although they work alongside a range of healthcare professionals, they often interact with the patients using a range of different medical test from electrocardiograms (See Right Top) and echocardiograms (See Right Bottom) to pacemaker implantation and exercise stress tests.

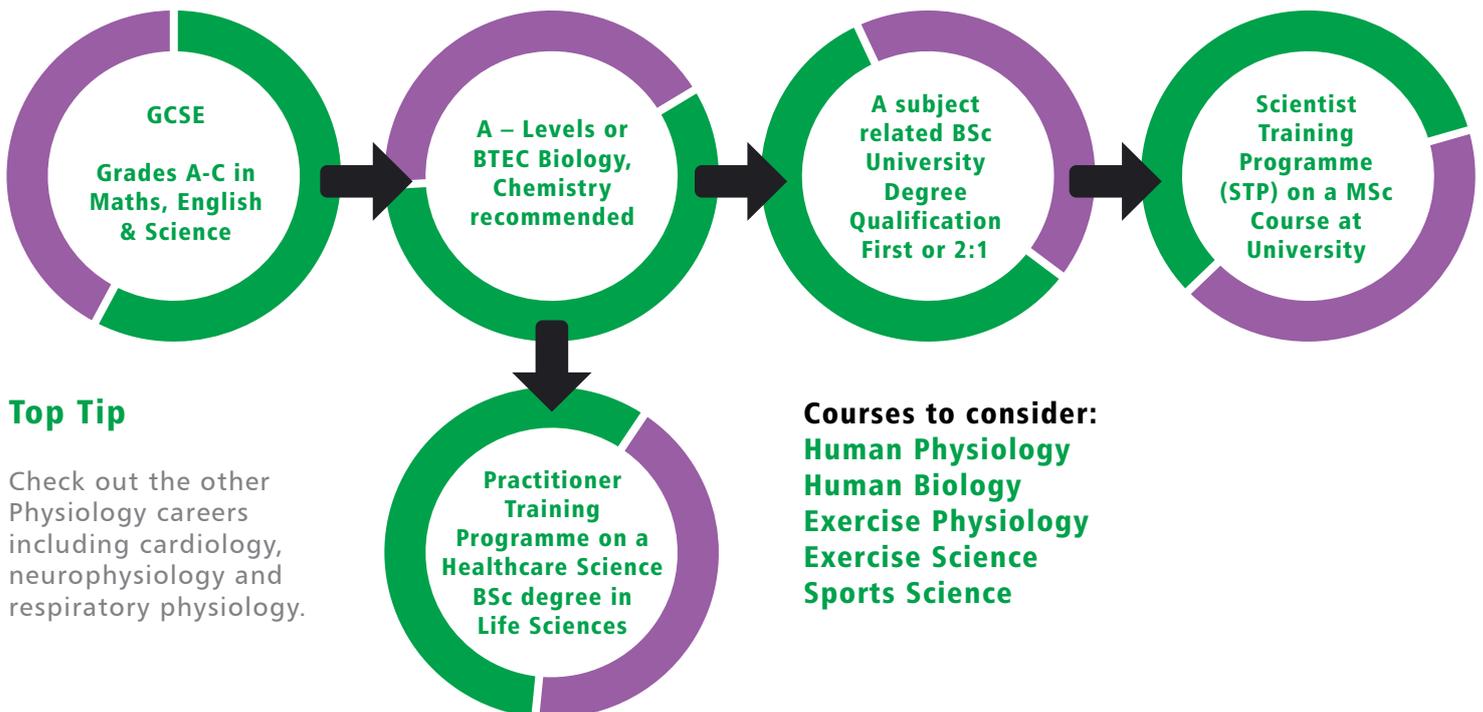
As with every area of medicine there is often chance to work within research which enables the patients to receive top quality healthcare.



SEARCH

You can find out more about how the heart works and actually see a video of Tom's heart beating on the screen by going to www.medicalmavericks.co.uk/book There are a couple of video's as well as a PDF download of the cardiac cycle.

What to do to get into this career...



Top Tip

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Courses to consider:

Human Physiology
Human Biology
Exercise Physiology
Exercise Science
Sports Science



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Healthcare Science Career of the Week



Neurophysiologist

Area of HCS: Physiological Science

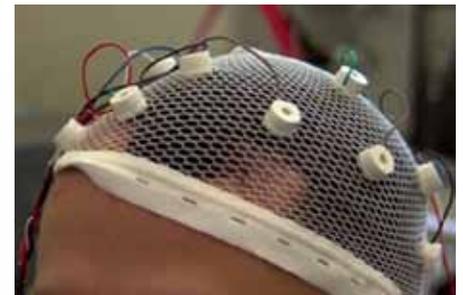
Pay scale: Band 4-7 £18k-£55k

AMAZING FACT

A Human Brain has 86 Billion neurons, building blocks of the nervous system, our closest rival are Elephants with 23 Billion.

The human brain is more powerful than any computer (at the moment anyway). These guys explore how the brain and nerves work and what happens when things go wrong. The patients they work with could have serious conditions such as dementia, multiple sclerosis and strokes or less serious, but still very painful and disabling nerve entrapments or carpal tunnel syndrome.

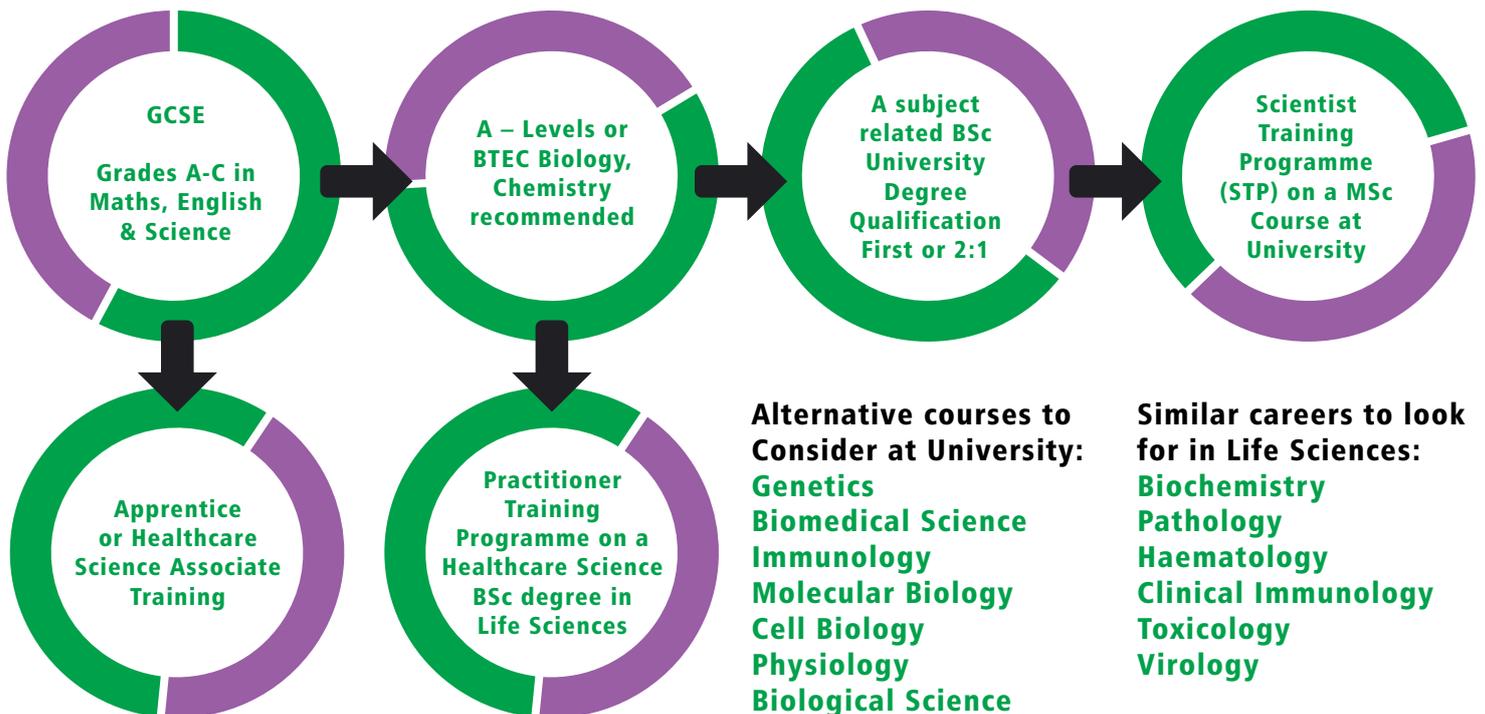
Using sophisticated equipment they carry out test to try and pinpoint the disease. They conduct electromyography (EMG), electroencephalogram (EEG) or evoked potentials - which is where they stimulate a nerve with a tiny electric shock.



VIDEO

We actually met two trainee neurophysiologists from Liverpool and filmed an interview with them along side footage of some of the tests they do. You can see how they can make your hand move with a tiny electric shock to a nerve in your arm and how they read brain wave scans! Check it out by going to www.medicalmavericks.co.uk/book

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