



Where can studying
SCIENCE
take you?

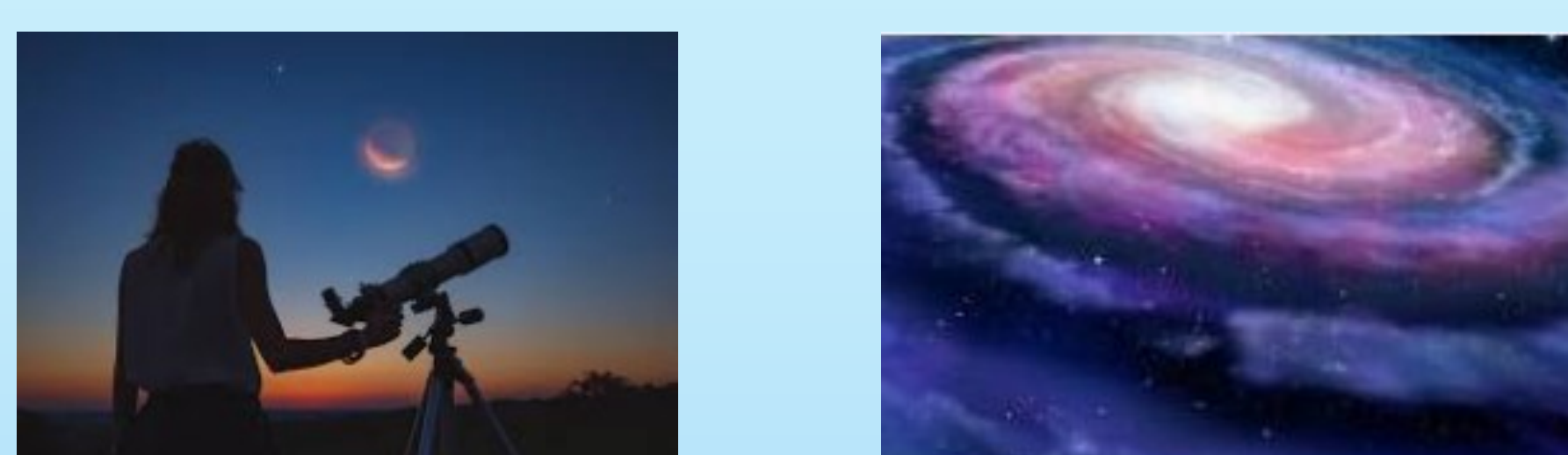


Biochemist



A Biochemist studies the chemical and physical principles of living things and of biological processes, such as cell development, growth, and hereditary. Biochemists who do applied research develop products and processes that improve our lives. For example, in medicine, Biochemists develop tests used to detect diseases, genetic disorders, and other illnesses. Biochemists typically plan and conduct complex projects in basic and applied research, manage laboratory teams and monitor the quality of their work. The research the effects of drugs, hormones, and food on tissues on biological processes. They also prepare technical reports, research papers, and recommendations based on research.

Astronomer



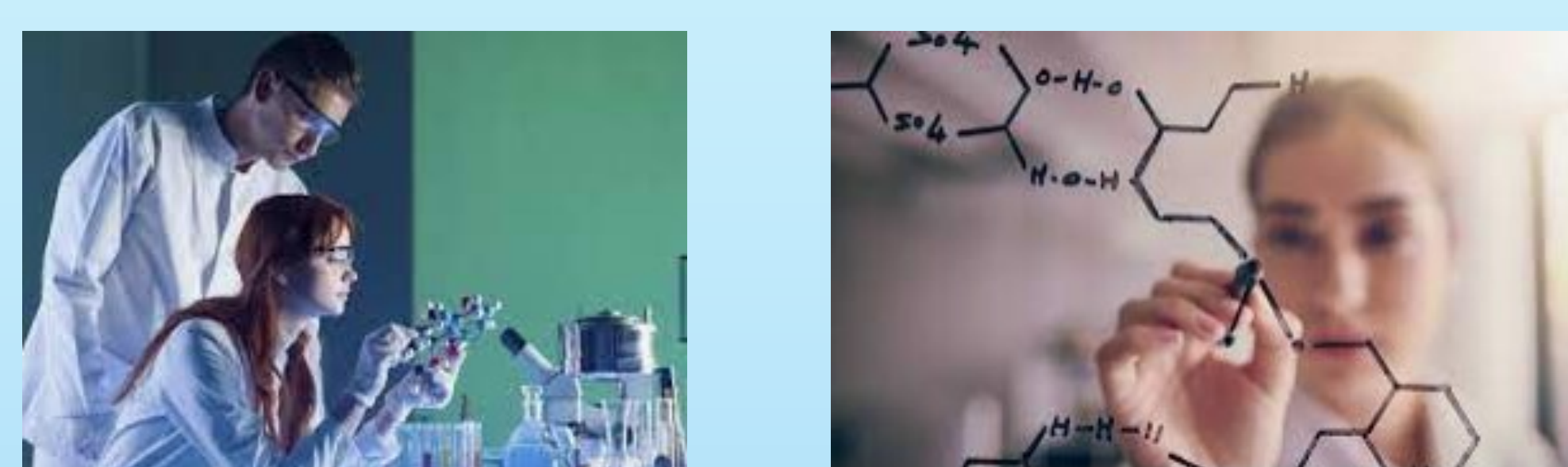
An Astronomer is a scientist who focuses primarily on the study of space, which includes the stars, the planets and the galaxies above us. An Astronomer will spend his or her time analysing data, writing research papers, or creating computer programs that allow a more effective search for the data collected. The bulk of an Astronomer's job is heavily based on research, as the focus is on understanding how the universe works, and on trying to discover things about the universe that would be considered scientific breakthroughs. Astronomers use telescopes, cameras, spacecrafts and computers along with applying a lot of physics and mathematics.

Botanist



A Botanist is scientist who studies plants, including flowering plants, and plant-like things such as moss and seaweed. Botany is a scientific study of plants along with their growth, structure, evolution and uses. Botanists may specialise in certain areas of botany, some important areas of study include:
Plant taxonomy, plant ecology, chemical biology, photosynthesis and apoptosis.
Botanists identify, classify, record and monitor plant species and biodiversity. They conduct fieldwork to collect, test and record findings. They also take part in ecological consultancy work, including environmental impact assessments

Chemical Engineer



Chemical Engineers help with the design, manufacture and operation of processes that turn raw materials into domestic and industrial products, for example in food manufacturing, gas production and refining of minerals. The role involves researching and developing new or improved products. On a day-to-day basis, Chemical Engineers design processes and equipment for manufacturing, plan and test production methods, and establish rigorous health and safety procedures for people working with dangerous substances. The bulk of a Chemical Engineer's time is spent in an office or a laboratory environment.

Forensic Scientist



Forensic Scientists collect trace evidence from scenes of crime or accidents and report findings. They analyse samples such as hair, body fluids, glass, paint and drugs in the laboratory, applying various techniques as appropriate; e.g. DNA profiling, mass spectrometry and chromatography. Job activities depend on the area of forensics in which you work. The main areas are Chemistry—connected to crimes against property, such as burglary and arson. Biology—connected to crimes against people. Drugs and Toxicology—testing for restricted drugs and poison detection.

Laboratory Technician



A Laboratory Technician is responsible for conducting various technical projects and experiments within a lab. Typical areas of expertise include healthcare, cosmetics, environmental and pharmaceutical. Day-to-day tasks may include preparing experiments, supervision of experiments as they run, taking precise and accurate notes of experiments and their results. Sample preparation and testing, cleaning of lab equipment, routine maintenance and calibration of laboratory equipment. Writing reports on lab-based activities and supervision of junior laboratory staff.

Microbiologist



A Microbiologist is someone who studies the growth, development, and characteristics of microscopic organisms such as bacteria, algae and fungi. Microbiologists work in laboratories and offices, where they conduct scientific experiments and analyse the results. The work of Microbiologists is relevant in a range of fields, including pharmaceuticals, biotechnology and agriculture. Microbiologists use computers and a wide variety of sophisticated laboratory instruments. They use advanced computer software to analyse the growth of microorganisms found in samples.

Pathologist



A Pathologist is a physician in the medical field who studies the causes, nature, and effects of disease. The field of pathology is broad with concentrations on changes in cells, tissues, and organs that are the result of a disease. Pathologists typically work in one of three main areas of discipline: as teachers, investigators, or diagnosticians. A Pathologist could examine kidney tissues of a patient under a microscope to determine if the patient is in need of a transplant or look over the blood test of a pregnant woman to determine if the child she is carrying will be born in good health.

Research Scientist



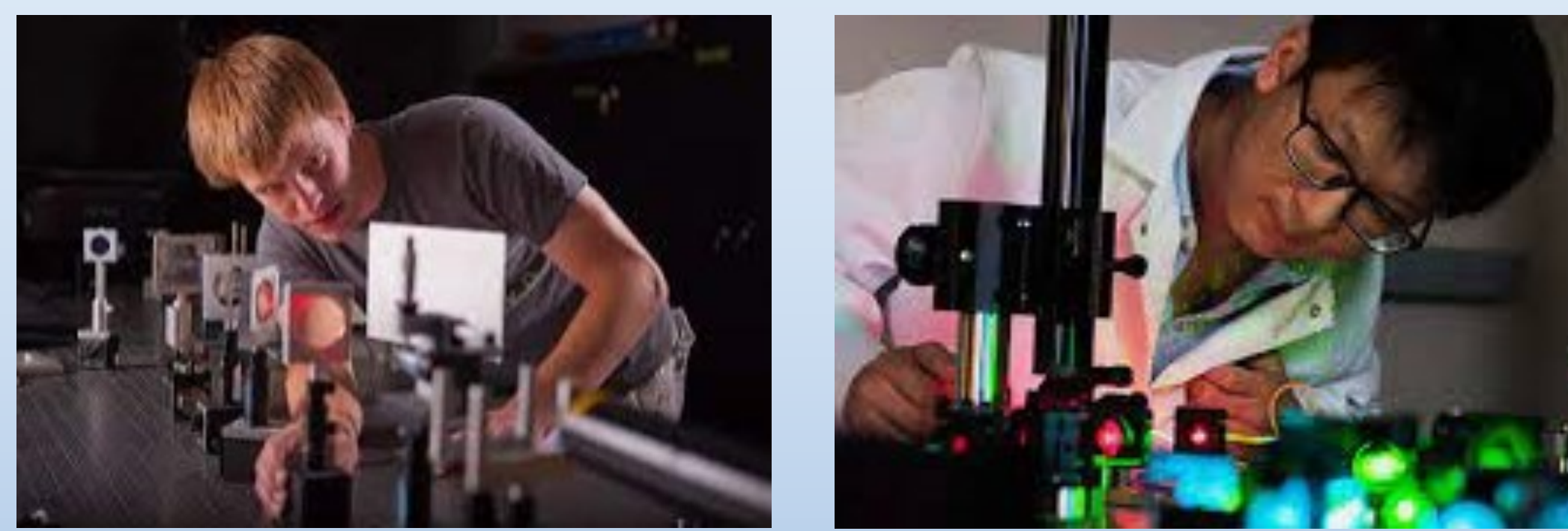
Research Scientists are responsible for designing, undertaking and analysing information from controlled laboratory-based investigations, experiments and trials. This could be working for government laboratories, environmental organisations, specialist research organisations or universities. A Research Scientist's work is almost entirely laboratory-based, with responsibilities that include carrying out fieldwork, planning and conducting experiments, writing research papers, reports and summaries.

Physicist



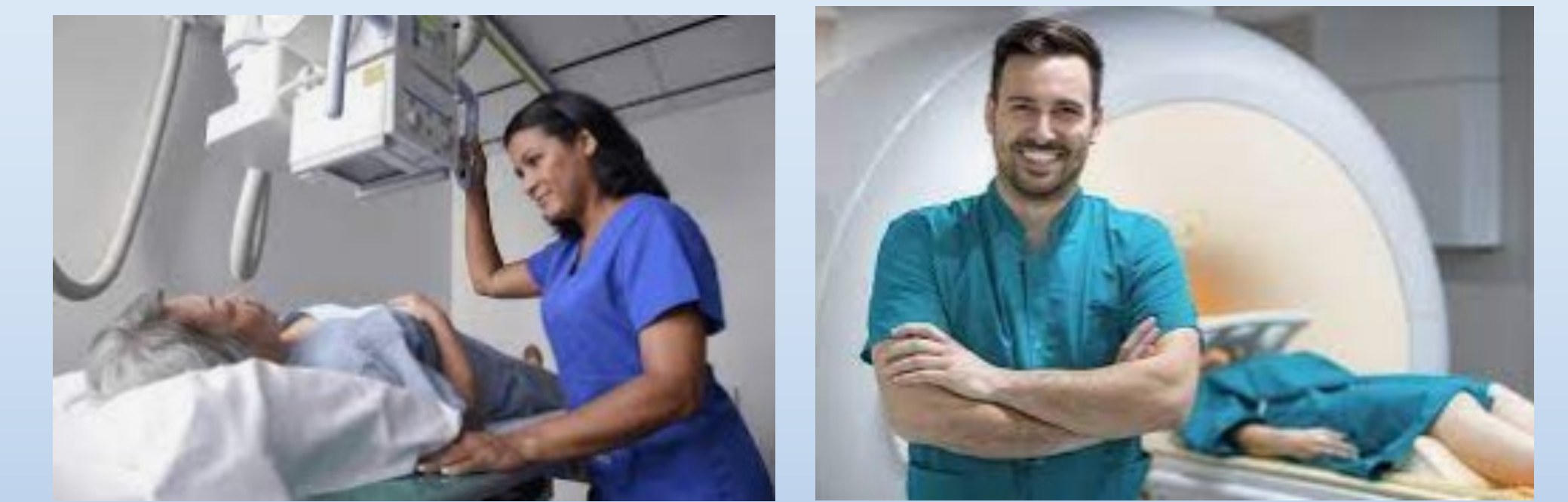
Physicists study the universe and everything in it, from the very small (quantum) to the very large (cosmology). A Physicist explores and identifies the basic principles that govern the structure and behaviour of matter, and the generation of transfer of energy. Physicists. Physicists typically specialise in one of many subfields including: Astrophysics, Biological Physics, Chemical Physics, Computational Physics, Fluid Dynamics, Laser Science, Nuclear Physics, Particles and Fields or Polymer Physics.

Optical Engineer



Optical Engineers research, design, and test devices that use cameras, lasers, microscopes, and refractometers. They use light properties and other materials to produce, control, and manipulate light for use in high-tech devices. They can work in agriculture, aerospace, lighting, textiles, and design and test object devices used in scientific instruments or optomechanical equipment.

Radiographer



A Diagnostic Radiographer produces and interprets high quality images of the body to identify and diagnose injury and disease. They screen for abnormalities and also take part in surgical procedures such as biopsies (examining tissues to find the cause of the disease). A Therapeutic Radiographer plans and give treatment using x-rays and other radioactive sources. They work closely with medical specialists to plan treatment of malignant tumours or tissue defects.

Pharmacologist



Pharmacologists study the effects of drugs and other chemicals on animals, humans and plants. They seek to understand how chemical substances interact with the body. Their aim is to gain a better understanding of diseases, develop new drugs and treat them and promote the safe use of existing drugs. Other substances such as poisons and toxins are also studied by pharmacologists to try to understand how those substances can harm the body. Typical employers are pharmaceutical companies, universities, the NHS, The Medical Research Council and other Government research organisations

Marine Biologist



A Marine Biologist is someone who is interested in learning and studying marine organisms and what their lives are like in their natural habitats. There are a vast array of career choices to choose from—from studying large ocean animals and what they eat, to investigating environmental conditions that affect them. Everything from whales to microscopic organisms, and everything else in between, can become a specialisation. Research projects are at the heart of what most Marine Biologists do, whether it be actually collecting specimens in the field, compiling research data, or classroom teaching

Pharmacist



A Pharmacist is someone who traditionally works in a chemist and is in charge of dispensing the prescription medicines. A Pharmacist has expert knowledge of medications and can advise members of the public in this matter and will also give advice on over-the-counter remedies that can be purchased for minor ailments or non-serious illnesses such as a cold. There are also specific specialty pharmacists, some of them being veterinary, oncology, clinical, nuclear, consultant and industrial. Others may work in research relating to the pharmaceutical industry, researching new drugs and other health and nutrition issues.