Essential skills in bioscience: careers in bioscience



Dietitian:

Part A:

A dietitian is a profession that involves expertise of the regulation of diet and science of nutrition. This profession contributes to the promotion of health as well as the prevention and treatment of diet-related illnesses such as obesity and type II diabetes. It involves the use of scientific methods and principles in relation to nutrition to improve health via food related behaviour (Marcusson, W, 2019).

Part B:

The qualifications needed for this position include a degree in either Science, Health Science or Biomedical Science along with a Master of Dietetics (Dietitians Association of Australia, 2019). Once education is complete the most common form of employment is found working in hospitals both private and public however other alternatives include working in aged care facilities as well as health practitioner offices. Another potential career path is opening an independent facility however this can be quite difficult as found when opening any small business as it takes quite a few years before the business can be fully dependent and may not provide a sufficient income within the early years (Truity, 2017). Opening an individual clinic can also be difficult as although the demand for dietitians is increasing, the costs of a private practice dietitian may be expensive which can cause the amount of potential clients to increase as some may not be able to afford it. Other difficulties surrounding this position is that as this career path is heavily client based, the experience with each client will be different especially regarding progress as well as the ability for clients to follow the recommendations of their dietitian as many may not be consistent in following directions and therefore their health may not improve as although the dietitian can provide recommendations, they have no control in enforcing them (Dietitians Association of Australia, 2019). I believe I would be suited to this career because I am passionate about encouraging others to improve their health and I believe it would be a very rewarding career for me as I would enjoy working everyday helping other to improve their health.

Part C:

To pursue this career, the skills required include effective communication skills as most of the career is client based work. Skills in problem solving as well as an effective ability to educate and inform others from various levels of education is also needed. Due to the client base coming from diverse backgrounds and past experiences, an effective ability to understand the needs of each client and the capacity to be patient is also required. Dietitian are also expected to have adequate speaking and literacy skills to be able to thoroughly explain their recommendations to improve an individuals health behaviour. If working with youth groups a working with children's check is also required (Truity, 2017).

DNA Profiler:

Part A:

A DNA Profiler is a profession that follows the technique used to examine and differentiate DNA evidence found in crime scenes which can then be used to

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determine potential suspects for their involvement in the crime as well as other factors relating to the crime. DNA profilers then use the evidence gathered and analyse samples within a laboratory, these samples can include hair, blood and other bodily fluids. The information found can then be used to assist in determining the details surrounding the crime as well as those likely to have been involved (Study . com, 2019).

Part B:

The qualifications needed for this position include a bachelors degree in either molecular biology, forensic science or a genetics based course. Most DNA profilers work for some type of law enforcement related profession (usually the police) however some can also find employment for private agencies although these careers are not very common. On a typical day, DNA profilers collect and analyse DNA collected from crime scenes (CrimeScenesInvestigatorEDU, 2019). The evidence collected can often be sensitive and therefore the procedure of collecting and investigating the information has to be meticulous and precise when following the necessary process. Each sample collected has to be of a certain level of quality otherwise it is useless as it may be contaminated or inaccurate in providing the needed details. However, most of the the time DNA profilers do not personally gather the evidence from the crime scene but instead receive it from professionals who particularly work in crime scene analysis. The results found are often then used as evidence for criminal cases in court, which emphasises the need for DNA profilers to be exact in their findings. DNA profilers are often also required to attend court to verify their discoveries as expert witnesses (Forensics Colleges, 2019). Challenges surrounding this https://assignbuster.com/essential-skills-in-bioscience-careers-in-bioscience/

career path include that all results that the DNA profiler provides must be of the highest accuracy or are otherwise invalid, this also requires quality laboratory checks to be completed constantly. Another difficulty is that surrounds this career is that although many people want to follow this career path, the availability of jobs is lower than the amount of people available to work in these positions which can cause it to become quite difficult to find employment in this area (Study . com, 2019). I believe I would be suited to this career because I have a keen interest in problem solving and I believe I would be capable in being efficient and precise in finding results.

Part C:

To pursue this career, the skills required include the ability to provide accurate quality results whilst also being able to complete work efficiently and within a designated timeframe. A strong potential for problem-solving and attention to detail is also very important for this role as it is a key part in being able to complete the job correctly. Strong skills in literacy are also required as reports will need to be written for each discovery, it is also essential to have the potential to work as part of a team as although the work is mostly completed in a lab, it is still required that all work needs to be developed with other experts to ensure there are no errors and effectively verify the conclusions found (Forensics Colleges, 2019).

Resources:

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