

Greetings and Acknowledgements

Hello, my name is Rick Hayes. I'm the Undergraduate Coordinator for the Bachelor of Health Science course at the School of Public Health (Bundoora), La Trobe University. I would like to share with you what being a health scientist means to me. In doing so, I hope that you can gain some idea of what this important field might mean for you. And, just as importantly, if you should join us, I want you to be able to tell your friends, parents and grandparents why you've decided to spend 3 or 4 years of your life studying in this discipline at this university.

May I offer a suggestion? Before reading this booklet closely, you might find it helpful to thumb through it. When you see something that interests you, spend a little time reading in that section. After you have scanned the booklet and if you are still interested in the health sciences, please read through the booklet more carefully. Contact us if you have any questions. By the way, scanning is an important skill for health scientists and, by reading this booklet, you will have gained important insights to prepare you to study with us.

There are many people who have helped in the development of this booklet. They include other members of the academic and administrative staff here at La Trobe University. Our students have also been instrumental in thinking about what should be talked about and how. A special thank you is offered to the *Public Health Students' Association* at the Bundoora campus of the School of Public Health. I appreciate the input of our former students (alumni) and our other colleagues in the field. Finally, I would like to thank the friends of the health science profession who have made their suggestions as well.

Introducing the Health Sciences

This booklet has been written to increase the profile of the health sciences at La Trobe University in the larger community. Yet, La Trobe is not the only university to teach in the area of the health sciences. Therefore, readers should understand that other universities might mean something somewhat different. Additionally, some of my colleagues here at La Trobe might mean something different by the term health sciences as well. That's fine. We have to begin somewhere. And, I would like to begin with what I know.

I would also like to begin with what you know too.

Everyone knows that you take examinations at university. Here is your first one. Let's begin by seeing if you are able to finish the following sentences (you may 'phone a friend'):

- If you drink and drive....
- Wipe of five and...
- Slip, Slop,, (.....)
- Five veggies and two...
- Life, be....
- Active for....
- Drowsy drivers...

While you might not have gotten all the endings, you probably remembered a few. Who came up with the slogans? That is the main question of this quiz. But there are other important questions such as: Why did they do this? How effective have they been? How do we know? You'll learn more about such things as a part of the Bachelor of Health Science course. For now, let's continue the exam.

Most mothers and many fathers remember that their children required a certain type of record to be able to enrol their children in primary school in Victoria. The reason is that certain people discovered that if most children went through a certain process when they were little, even those who did not would be protected. Just who are these people?

This morning you probably turned on a tap and found fresh water at your finger tips. When you were finished washing your hands or your dishes, that waste water was removed by a sophisticated system. If you ate over

the weekend, you probably did not get food poisoning. You also ate in a smoke free environment. Additionally, it is unlikely that you got or will get Legionnaires' disease. And, you probably did not get a needle prick. Who has been working behind the scenes to protect you?

In the mornings, more and more primary school children are walking to school again. They meet up with other children and are escorted to school as a group by older members of the community. This has lessened the traffic congestion around schools. It has increased the amount of exercise that older and younger people get each day during the week. Additionally, many people who were more isolated have become more involved in their communities; they feel that they belong. Who researched and designed this program for enhancing physical, emotional and social well-being? Who is responsible for developing, enhancing and supporting the partnerships that are required for this type of program to continue?

Any one who has been around a secondary college during the past decade is probably aware of a number of important programs and people. School nurses are easily identified and well-known. However, school focused youth service cluster coordinators have also become a feature of many schools as well. They help to create partnerships between schools and important services in the community. These partnerships help make it easier for students and families to access resources that improve their lives. Another program is the local learning and employment networks.

Who engaged in the research that supports these programs? Who creates the larger policy environment that ensures that these services and programs remained funded? Who has created and maintained the community partnerships that engage with the schools?

Finally, who helps general practitioners to work better with a wide variety of people in the community? Who helps people to avoid the risks of poor mental health in the community by enhancing social connectedness? Who enables women to gain access to the programs that help to maintain their health in the community and at work? Who designs and evaluates community-based programs to keep older people in their own homes and communities for as long as possible? Who works with employers to provide better environments for their workers? Who is helping the general public think positively about the health of men and boys?

Answer: *The health scientist.*

How did you do?

Let's move to the next section.

Defining the Health Sciences and Dispelling Misconceptions

During secondary college and at university, you spend a great deal of time learning definitions. They help us, as individuals and members of a group, to quickly grasp what is being talked about. Yet, it is important to get behind and beyond the definitions to have a deeper understanding.

So, we'll begin with a definition to get us started and we'll seek to clear up a few misconceptions in this section. Then, we'll outline some important student requirements; we'll consider important reasons for choosing to study at La Trobe University; and we'll make some points about careers in the health sciences. Finally, we'll offer examples of health promotion positions. These are the sorts of positions that both recent and more experienced Health Science graduates from La Trobe have been able to obtain.

There are two important and related aspects of the health sciences as a discipline. When jointed together, they provide us with a handy first definition of the health sciences. So, let's see what these two dimensions are.

In the first place, health science is the *systematic* investigation of the factors promoting or inhibiting the health of people as individuals, organisations, communities, societies or populations. Because of this, there is a strong critical dimension to the health science discipline. Like detectives, we research the reasons for why things are they way they are. Sometimes we want to know why certain people do very well in spite of everything. For instance, it is important to know why recent migrants often enjoy better health than the general population. Or, it can be important to know why one indigenous community is doing better than another.

At other times, we need to know why people are not doing as well as we might expect. For instance, why is it that men, as a whole, have a tendency to die at a younger age than the women of the same group? On the other hand, why do those women who live longer often have worse health during their lives? Why do some people respond to health related messages and others ignore them? Why is it the case that the 'worried well' are more likely to see a general practitioner than those who are at greater risk of ill-health?

The answers to these questions can often be quite surprising and not what we might have originally thought. That is why our investigations must consider more than we would typically think about in our everyday living. But, we have to do more than investigate the reasons for things being the way they are. We also work to make things different.

Thus, in the second place, health science is the *systematic* application of evidence-based processes for improving the health of such people through partnerships that cross professional and non-professional boundaries. I've used the term 'systematic' in both aspects of the definition. This is important for the discipline as a science. We must carefully analyse what is the case and we must carefully consider what, if anything, can or should be done about it. We have a duty of care to each person, and to the population as a whole, to ensure that we do not introduce more harm than good through our suggestions.

One of the ways of ensuring that this is the case is endeavour to provide decision-makers with the best evidence for why something may work in any particular case and in any specific context. We have to do our homework. And, we have to convince others about what we have learned. This means that we often run pilot projects or programs to see if things work under ideal conditions before we try to see if they work under more normal conditions.

We have to be accountable to the people that we work with and for to ensure that what we recommend is acceptable to everyone who might be influenced or affected by the activities suggested. One of the things that most people find unacceptable is paying too much for too little. On the other hand, most people find it unacceptable to do nothing about problems that trouble people unnecessarily. Finally, as health scientists, we aspire to guarantee that everyone has a fair go in terms of what is needed; we value equity.

You will notice that I have mentioned 'everyone' quite a bit. That's because we are all involved in generating and maintaining health. I'll have more to say about this later. However, now would be a good time to point out an important part of the definition that can be easily missed. Our work as health scientists includes engaging in partnerships with people from many walks of life such as doctors, nurses, social workers, politicians, teachers, business people, parents, students and so forth. In fact, much of our work involves understanding their perspectives and enhancing the partnerships that we already have and normally take for granted. At other times, we work to create new partnerships.

There are many misconceptions about the health sciences. I'll only seek to dispel a few of the most important ones for those considering a career in the discipline. A very important misconception is that health is primarily generated or maintained within the health care system.

Perhaps one of the reasons for this misconception is that we spend so much money on the health care system. However, with a little thought, we realise that it might be better to speak of this system as the 'ill-health care system'. While it is always important to ensure that we keep people as healthy as possible within this system, health is generated and maintained in our homes, schools, workplaces, recreation facilities and our communities at large.

A related misconception is that the clinical professions are the only ones engaged in fostering or maintaining health. Don't get me wrong. If I break a leg, take me to the nearest doctor and do so quickly. If I'm confused about how I might handle the loss of my mobility when I am in hospital waiting for surgery on that leg, call a well qualified nurse or a clinically trained counsellor to help me. However, if I were an older person, I might just avoid breaking my leg or hip because of the work of health scientists.

Recognising that there is often a pattern to older people falling and breaking bones, health scientists have worked collaboratively with doctors, nurses, nutritionists, physical therapists, social workers, occupational therapists and counsellors to create a number of programs to help older people strengthen their muscles and enhance their balance in their homes and community centres. They might have worked with doctors to consider other ways of treating various conditions that reduced the interference of medications on balance and

coordination. And, they might have worked with local and state governments to ensure that the environments within and outside the home are safe for older people to negotiate and live in.

This ability to integrate the activities of many disciplines is one of our main functions as health scientists. This means that we must learn a great deal about the human body in terms of its structure and functioning. We must also learn about health psychology and health sociology, as well as epidemiology (or, the patterning of illness and wellbeing in a larger population of people). Also, it can be important to study ergonomics and rehabilitation process and techniques.

As health scientists, we will have studied research methods and ways of presenting our findings verbally and in writing so as to convince professionals and non-professionals of the importance of engaging issues in particular ways as individuals and members of groups. We will also have learned how people function in organisations and how they fulfil their roles in the local community and in the larger society. This enables us to work with larger numbers of people to improve or maintain health.

There is a final misconception that I would like to mention here. Remember that there are many more, but these have been the ones that seem to make it difficult for people to consider a career in the health sciences. What is this last misconception?

Many people think that a career has to be all set out from the very beginning. In other words, they think that the most desirable way for a person to move through their career is to have their pathways predetermined. Now, there are advantages to this. When we know *exactly* where we are going at each step of the way, we are often less anxious about our future. However, when everything is already determined by someone else all of the time, our own interests and concerns may be overlooked.

This may be alright for a time. However, the time does come when we become bored with this. There are many pathways through a career in the health sciences. Therefore, each pathway is less well trodden and a little more difficult to make out at first. However, after a time and with the support of your peers, you will gain the skills for uncovering unique and interesting ways of moving forward. You also discover that these ways have always been and always will be linked to the pathways of your peers.

Misconceptions...

- That health is primarily generated or maintained within the health care system
- That only the clinical professions are engaged in fostering or maintaining health
- That a predetermined pathway is the only or the most desirable way of moving forward in one's career

Some final thoughts before examining positions in the field:

- Specifying What's Required of Students
 - The desire to grow and develop in one's ability to work cooperatively with others
 - The capacity to develop both critical and creative thinking for problem setting and solving, decision-making, negotiation and conflict resolution
 - A tolerance for working with diversity and in circumstances that are not always predetermined
 - A dynamic balance of reliability and flexibility
 - A willingness to be proactive
- Discovering Why You Should Study at LTU
 - Commitment to engaging students in practice-based learning (real world)
 - Explicit preparation for workplace readiness through all aspects of study (reverse engineering)
 - Enhancement of student capacity to work collaboratively with peers and senior colleagues to achieve both personal and common aims
 - Support for student learning through a variety of resources and processes
 - Deliberate intention to cultivate a new generation of leaders for the Health Sciences

- Identifying Career Opportunities in the Health Sciences
 - The Health Sciences are a relatively new field with many opportunities
 - The field is in the process of consolidating and new possibilities are emerging for higher level entry after graduation (e.g., coordinators)
 - There are opportunities to work at the policy, program and project levels
 - There are prospects for working at the international, national, state, municipal and sub-municipal levels

Examples of positions from the field (for both experienced and first time job seekers—enthusiastic and dynamic)

Regional Health Promotion Officer (VPS Grade 5) \$66-80,000. The Regional Health Promotion Officer supports health promotion planning and action in the region. This includes providing leadership for a coordinated approach to health promotion, working with the sector to build capacity to implement and evaluate quality health promotion and supporting networks and partnerships to achieve improved health outcomes. The position also supports regional Department of Human Services areas.

Health Promotion Worker and Researcher (women's health service). This service is seeking to appoint a Researcher/Health promotion worker with skills and attributes to complement our team, and to progress our vision, mission and values. This position is responsible for research and planning, implementation, and evaluation of health promotion interventions.

Project Officer. The project officer will implement education programs for general practitioners and practice staff across Victoria. Responsibilities include developing resources and organising workshops and education events, and implementing a cervical screening clinical audit in conjunction with PapScreen Victoria.

Health Promotion Officer. In this regional hospital, the Health Promotion Department has an established role within the community of providing quality health promotion interventions in an environment of consultation and partnership. Our current health priority areas include nutrition, physical activity, mental health and sexual health. This position will focus on the needs of our young people and experience in working with youth would be an advantage. Skills in engagement of young people, group facilitation, an ability to plan, implement and evaluate programs that address identified needs and an understanding of adolescent issues would be desirable. There are five full-time health promotion officers and two part-time community health nurses in this team.

Health Promotion/Project Officer. This position is jointly funded by Diabetes Australia-ACT and Cancer Council ACT to develop, implement and evaluate population based initiatives leading to the prevention, early diagnosis and ongoing support to those affected by diabetes and cancers in the ACT region. A focus of the position will be on healthy nutrition and physical activity. The successfully applicant will possess highly developed skills in developing, implementing and evaluating health promoting initiatives to various population groups.

Project Officer (Youth Anti-tobacco). This regional health service is looking to employ a project officer to undertake the region's Youth Anti-Tobacco Project. In line with the organisation's commitment to primary health care principles, the project officer is actively involved in the planning, implementation and evaluation of the project. Key responsibilities of the project officer will include the formation/maintenance of community partnerships, an increase in the local confidence and capacity to resist and/or quit smoking and the development of sustainable youth anti-tobacco strategies with the goal of reducing smoking rates amongst youth in the region.

Health Promotion Officer. The Health Promotion Division at Dental Health Services Victoria (DHSV) has an exciting opportunity for a health promotion professional. We are seeking an enthusiastic and dynamic person to work as part of our team. The Health Promotion Officer will assist in planning, developing, implementing and evaluating a range of health promotion programs with a variety of internal and external partners.

Health Promotion & Youth Services Team Leader (Full Time). We are seeking a dynamic leader who has experience and qualifications in health promotion and staff management, who is familiar with human services delivery. This multidimensional position involves coordinating the programs, finances and people in

delivering health promotion and youth services. A primary focus in the short term will be the preparation of the Health Promotion Plan, ensuring it is completed and embedded throughout the organisation. An attractive salary package will be negotiated.

Health Promotion Officer. This District Health Service is seeking a highly motivated health promotion officer to join our Health Promotion Unit to assist with a range of health promotion and health education activities, including program planning, implementation and evaluation. Current health promotion areas include community health, women's health, youth health and family planning.

Health Promotion Officer (Full Time). This metropolitan area is offering an exciting opportunity for an enthusiastic and capable HPO to work at the Inner East Melbourne Division to provide support to program officers. Duties will be varied with an opportunity to work across a number of program areas. Divisions of General Practice provide professional and business support to their GP members and their practices within geographical catchments, linking general practice to other elements of the health service system.

Health Promotion Officer. Family Planning Victoria (FPV) is a not for profit organisation providing sexual and reproductive health services targeted to disadvantaged, at risk and marginalised population groups. FPV's core business is underpinned by the social model of health. We are seeking a person who has relevant tertiary qualification in health promotion, public health or community development.

Indigenous Health Promotion Position. The Queensland Association for Health Communities (QAHC) is a community based health promotion organisation providing HIV and Hepatitis C prevention and sexual health promotion to Indigenous communities, gay and other men who have sex with men and which also promotes the health of lesbian, gay, bisexual and transgender Queenslanders. You will develop, implement and evaluate a program of HIV and Hepatitis C prevention and sexual health promotion for Indigenous communities in Queensland, including Indigenous gay men and 'sistergirls' and people living with HIV. Manage a small team of four health promotion officers based in Brisbane and Cairns in the delivery of the program. Undertake health promotion activity in the Central Queensland area. Lead on the development of relevant policies within the organisation and contribute to the policy and strategy development on a state-wide and national level. Contribute to the management of the organisation through membership of the Leadership Team.