

A guide to graduate career options in Exercise Science, Exercise Physiology and Sports Science

Table of Contents

Introduction
Exercise and sports science 3
Career pathways 5
Which university course is right for me?9
Frequently asked questions 10
Career opportunities
Tips to secure your first job
Progressing your career14
Career Profiles
Exercise science profiles
Exercise physiology profiles
Sports science profiles
List of useful websites



Empowering our members by providing strategic leadership in exercise and sports science through advocacy, support of professional networks and the promotion of excellence in education, research and professional practice

Introduction

Founded in 1991, Exercise & Sports Science Australia (ESSA) is a professional organisation which is committed to establishing, promoting and defending the career paths of university-trained exercise and sports science practitioners. ESSA's vision is to achieve member excellence in exercise and sports science that will enrich the health and performance of every Australian.

ESSA has worked in partnership with key stakeholders, including many Australian universities that offer an exercise and sports science degree, to develop this careers guide. This guide aims to provide information about:

- the various exercise and sports science courses available within Australia
- ESSA's accreditation and compliance procedures for university courses and prospective members
- a comprehensive list of career pathways that people can pursue after completing an exercise and sports science degree
- advice to help you secure a job and manage your career long term

This guide can be used by prospective and current students to direct their university studies and also by qualified exercise and sports science professionals looking to diversify or enter an alternative field of employment. The career profiles provide readers an insight into the various occupations that people undertake after they complete an exercise and sports science degree. Furthermore, we hope the detailed section on university courses and ESSA's accreditation requirements will guide and assist graduates in pursuing their chosen profession.

Exercise and sports science

Exercise and sports science is a field of study that explores human movement and how it applies to physical activity pursuits, including: general fitness regimes, exercise for people with specific diseases and elite athlete performance.

The popularity of exercise and sports science and the need for skilled professionals in this area is increasing because:

- the Australian population is ageing and targeted physical activity can assist people to age well
- the incidence of chronic disease (e.g. heart disease, diabetes) in Australia is increasing¹ and clinical exercise interventions can help to prevent and manage many chronic diseases²
- physical activity provides multidimensional benefits to individuals and the community (e.g. physical, mental and social well-being)
- sports are increasingly relying on skilled professionals to help develop athletes and provide them with a competitive edge



¹Goss J. 2008. Projection of Australian health care expenditure by disease, 2003 to 2033. Cat. no. HWE 43.Canberra: Australian Institute of Health and Welfare.

²Pedersen BK, Saltin B. 2006. Evidence for prescribing exercise as therapy in chronic disease. Scand J Med Sci Sports. 16 Suppl 1:3-63.

Considering a course in exercise and sports science?

Before undertaking studies in the area of exercise and sports science you should first ask yourself where you want your studies to take you. Taking some time to consider your future options will help you to choose the best course for you.

- Is there a particular job you have in mind when you finish your studies?
- If so, what kind of job is it and what qualifications will you require?
- Are you considering this course because you enjoy sport?
- Do you want to work with elite athletes and sporting teams?
- Are you interested in working in health care, helping people recover from illness and better manage their health?

University course offerings have changed considerably in the past 10 years. In the past, courses were mainly a three-year degree known as a Bachelor of Human Movement. These courses covered the theory of exercise science and the skills required to assess groups such as athletes and to develop training programs for general and special populations. Such courses are still available today and are broad in content and relate to a range of exercise science jobs; they also provide a basis for postgraduate studies in health related fields (see the following pages on the scope of practice for an exercise scientist).

The incidence of chronic disease, in particular heart disease and diabetes, has prompted a need for prevention and treatment programs to reduce health care costs. Traditionally these programs were delivered by health and allied health professionals such as doctors, nurses, physiotherapists and osteopaths. Today, exercise therapy or treatment delivered in a clinical setting is an evidence-based practice recognised by Medicare under the banner of an accredited exercise physiologist (AEP). Accredited courses that are specifically designed to qualify you as an AEP are available throughout Australia (see <u>AEP scope of practice</u>).

When selecting the most appropriate university course, a primary consideration should be the pathway you would like to pursue on graduation. The three main pathways for those completing an exercise and sports science degree are:

- exercise scientist
- exercise physiologist
- sports scientist



Exercise scientist

Exercise scientists hold an undergraduate degree in the field of exercise and sports science. They specialise in the design, implementation and evaluation of exercise and physical activity for healthy people. They provide programs for improving general health, the prevention of chronic diseases, health promotion and enhanced sports performance.

Exercise physiologist

Exercise physiologists hold a four-year equivalent university degree and are allied health professionals who specialise in the delivery of exercise, lifestyle and behaviour modification programs for the prevention and management of chronic diseases and injuries. Exercise physiologists provide support for physical activity programs and behaviour change for clients with conditions such as cardiovascular disease, diabetes, osteoporosis, mental health problems, cancer, arthritis, chronic obstructive pulmonary disease and many more.

ESSA provides the national accreditation program for exercise physiologists. Accredited exercise physiologists (AEPs) are recognised as allied health professionals and are eligible to register with Medicare Australia, the Department of Veterans' Affairs and WorkCover and are recognised by most private health insurers.

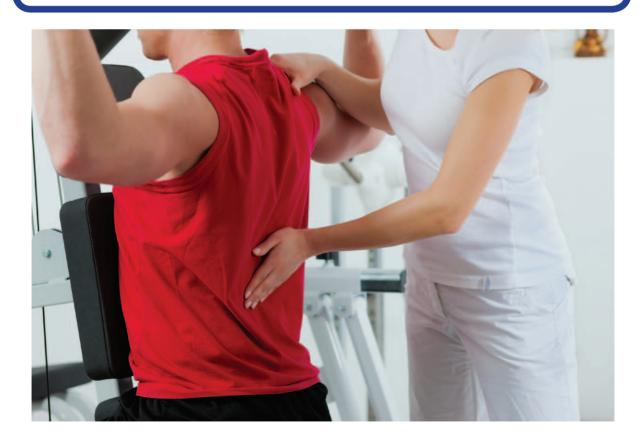
Sports scientist

Sports scientists hold, at minimum, an undergraduate honours degree in the field of exercise and sports science. They specialise in helping individual athletes or teams to improve their sporting performance through the use of scientific knowledge, methods and applications in the areas of physiology, biomechanics, psychology, and motor control and motor development. They evaluate research, assess and advise on the technical and practical aspects of training, injury prevention, technique analysis, nutrition, optimisation of performance and recovery practices in all areas and at all levels of sport. ESSA provides national accreditation for sports scientists (ASp).

Within each of these professions there are numerous career paths that a person may pursue. These are explored within the Careers Profile section of this guide. Prospective and current students must ensure that the course they are undertaking will allow them to pursue their chosen profession. Applying for student membership of ESSA while you are studying is a simple and effective way to stay abreast of changes in the industry. You will receive direct and up-to-date industry information from the peak body representing sport and exercise professionals.

Things to consider

- Go to <u>seek.com.au</u> and search for jobs in exercise science, exercise physiology and sports science to gauge where graduates are employed
- Go to <u>essa.org.au</u> and use the 'Search for an AEP' function to see the work locations and specialisations of AEPs
- The national award (pay and work conditions) covering exercise and sports science graduates is the Health professionals and support services award
- Find an AEP, an ASp or an exercise science professional and speak to them about their job – you could even spend some time with them observing their work
- Speak to universities in your area about available courses



Content of an exercise and sports science degree

Degrees in exercise and sports science include core units of study covering: structural and functional anatomy, physiology, psychology, research methods, exercise physiology, biomechanics, exercise psychology, motor control, motor learning and skill acquisition, human growth, development and ageing, exercise, health and disease, health, fitness and performance assessment, exercise programming and prescription, health and nutrition and body composition.

To apply to ESSA to be recognised as an exercise scientist you must complete a degree covering specific criteria relating to the subject areas above as well as undertake a minimum of 140 hours of supervised placement related to the field of exercise and sports science.

Content of a clinical exercise physiology degree

Courses in clinical exercise physiology cover all the subject areas described above for exercise and sports science PLUS additional units of study to develop in-depth knowledge of and skills in the prescription of exercise for clients who have a range of diseases or chronic conditions known as the AEP target pathologies.

These conditions include - but are not limited to - heart disease, obesity, diabetes, musculoskeletal conditions (such as soft tissue injuries and surgeries for hip and knee replacements), Parkinson's disease, multiple sclerosis, stroke, mental illness and cancer.



I want to be an...

Exercise scientist (ES)

To be eligible for exercise science membership with ESSA:

- 1. Complete an undergraduate degree in the field of exercise and sports science that meets the core requirements OR
- 2. Graduate from an accredited exercise science course

Accredited exercise physiologist (AEP)

Direct pathway:

From 1 January 2014, you must graduate from a course accredited at the exercise physiology level (see next page)

- 1. Complete a four-year equivalent exercise physiology degree
- 2. Gain exercise science membership with ESSA
- 3. Meet the exercise physiology criteria listed on the application *Alternative pathway:*
- 1. Complete an undergraduate degree in exercise science, then complete an accredited postgraduate degree that addresses the knowledge requirements for clinical exercise physiology, then proceed with 2 and 3 above.

Accredited sports scientist (ASp)

To be eligible for accreditation as a sports scientist:

- 1. Complete, at a minimum, an exercise and sports science degree with honours or a graduate diploma in the field of exercise and sports science
- 2. Gain exercise science membership with ESSA
- 3. Meet the sports science criteria listed in the application form

Please view the <u>application guide book</u> to obtain more information on each of these options.



Which university course is right for me?

ESSA, through its <u>National University Course Accreditation Program</u> (NUCAP), is responsible for the accreditation of exercise and sports science courses and clinical exercise physiology courses in Australia. Universities must apply to ESSA to be accredited at either the level of exercise science or clinical exercise physiology. Accreditation requires university courses to meet specific knowledge and skills criteria to ensure the quality of the graduates entering the workforce.

There are so many courses - which one do I choose?

Do you want to become an exercise scientist?

YES: Choose an undergraduate degree in exercise and sports science and complete a minimum of 140 hours of supervised practicum. You can choose to do a NUCAP accredited or non NUCAP accredited course to become an exercise scientist provided you meet the eligibility requirements.

Note: If you later decide you would like to become an AEP you can undertake postgraduate studies in a NUCAP accredited course at the exercise physiology level.

Do you want to become an AEP?

YES: Choose a four-year NUCAP accredited exercise physiology course that includes the completion of a minimum of 500 hours of supervised practicum, which is required for accreditation.

Note: To become an AEP from 1 January 2014, you must have completed a NUCAP accredited exercise physiology course.

More than 30 Australian universities provide undergraduate courses in exercise and sports science. These courses are offered across Australia in capital cities and in a number of large regional centres, from Townsville in north Queensland to Launceston in Tasmania, to Perth in Western Australia and Darwin in the Northern Territory. These university programs vary in their discipline expertise, industry orientation and teaching and learning facilities. Prospective students are strongly encouraged to determine the ESSA NUCAP accreditation status of each course and to research the program structure and strengths to identify courses that meet their particular career goals.

Please refer to http://www.essa.org.au/for-universities/nucap/ for a list of universities and courses that are accredited by ESSA.

Frequently asked questions

What is the difference between an exercise physiologist and a physiotherapist?

Exercise physiology and physiotherapy are both recognised allied health professions. Exercise physiologists primarily treat patients using clinical exercise interventions as their main modality. There is also a strong focus on behavioural change and self-management concepts. Physiotherapists are health care professionals who assess, diagnose, treat and manage acute injury, disability and pain through physical techniques such as manipulation, massage and exercise.

I want to work with elite athletes; do I need a university degree?
As sports become more professional so too do the expectations of employers. ESSA is the peak body that accredits sports scientists.
Accredited sports scientists (and all members of ESSA) must comply with a code of conduct and ethical practice and must work within their scope of practice. These requirements provide protection for athletes while organisations can be assured that the staff they hire are competent.

How many jobs are out there?

The number of jobs in exercise physiology is growing. The evidence supporting exercise as a valid intervention in the treatment and management of many chronic diseases, combined with the recognition of AEPs as allied health providers, has resulted in increased employment opportunities. The introduction of Medicare rebates for the services of AEPs in 2006 and the recognition of exercise physiology as an allied health profession are presenting more job opportunities for AEPs, who are now employed in hospitals, community health centres and private companies. Within multidisciplinary teams they are working alongside medical practitioners, nurses and other allied health professionals. AEPs are also increasingly working in private practice.

The emergence of personal trainers as valued service provider for the general public, as well as the increased awareness by employers of the benefits of encouraging an active and healthy workforce, have provided many opportunities for exercise scientists.

The career opportunities for exercise and sports science graduates are continually expanding. Recognition of the skills and knowledge of accredited sports scientists has seen sporting organisations and elite-level sports increasingly employing these graduates in range of positions, from strength and conditioning coaches to high-performance managers.

However, while job prospects have increased, so too has the number of graduates; thus healthy competition for jobs does exist.

Career opportunities

What are the average pay rates for graduates?

The <u>Health professionals and support services</u> award covers exercise and sports science graduates; you can check this award for minimum pay rates and conditions. Data from the 2012 ESSA workforce survey suggested the average full time wage for an exercise and sports science professional was between \$60 000 and \$70 000.

Are there currently any courses that I can study by distance?
There is only one approved distance course in exercise and sports science.
ESSA has approved the Master of Clinical Exercise Physiology at Charles
Sturt University.

Can I study part-time?

Yes, some universities offer part-time study. Please check with your local university.

When I graduate, do I automatically become an exercise scientist, an AEP or an ASp?

No, you will need to apply to ESSA using the application form and provide evidence of your qualifications and practicum hours.

Industry snapshot from the 2012 ESSA membership workforce survey

- The majority (75%) of the exercise and sports science workforce are accredited exercise physiologists
- The exercise and sports science industry is a young profession; the majority (56%) of the workforce is between 21 and 30 years old
- A high proportion (42%) have been in the industry for 1-5 years
- The most common areas of work are:
 - Chronic disease management service provision (42%)
 - Rehabilitation service provider (40%)
 - Wellness / preventive health programs and workplace health / corporate health (21%)
- The most common way to secure work is through:
 - SEEK or other on-line recruitment website (29%)
 - Networking and word of mouth (25%)

Tips to secure your first job

Impress at first sight – When responding to an available position first contact must be an impressive one. Your application for the role should include a cover letter that briefly describes you and your interest in the role, your resume and your response to each of the selection criteria (most employers will request applicants to address a number of selection criteria). When responding to selection criteria use scenarios, examples and descriptions of work tasks and skills. If applications close by 5pm Friday you must have your application submitted on time. A phone call to request an extension, although useful, may not be viewed favourably.

Be professional – Professionalism is paramount. Consider your attire and what may be expected of the organisation's current employees, for example, personal communication style. If you are requested to attend an interview arrive slightly earlier than the stated time.

Know your employer – Nothing is more impressive to a prospective employer than interviewing an applicant who has researched their organisation and has some familiarity with the services offered. Your research will also help you identify how your employment goals align with the position offered and may provide you with some useful questions that you can ask at the interview.

You don't need to be the perfect match – It's important to match your knowledge and skills to the position requirements. This will help your future manager, mentors and co-workers to build your professional skills and provide support to develop knowledge and skills in areas of need. If the selection criterion asks you to comment on an area in which you have no expertise, don't just leave this section blank. Provide a response that reflects a previous similar experience or situation and highlight your readiness to be proactive and learn more in this area.

Network – Many exercise science graduates find employment through word of mouth. Joining interest groups and attending professional development and local networking events will help you to raise your profile as a potential employee. Just by asking the question you may find that job opportunities unveil themselves to you. Social media can be used as a networking tool.

Tips to secure your first job

Practicum is an opportunity – Practicum is recognised as a successful pathway to employment. Graduates who have excelled during practicum and who express their interest in gaining employment at their practicum site are never forgotten when a position becomes available. Many positions are often filled before being publicly advertised. If you have the opportunity to choose your practicum site, consider what type of experience you are hoping to gain to benefit your career goals, professional knowledge and skills. Alternatively, you may choose to undertake additional practicum or volunteer work in your area of interest.

Keep progressing towards your next job – While you are seeking employment, continue to keep your career goals in sight. Attend professional development courses and keep furthering your knowledge and skills. For example, once you complete your university studies you need to demonstrate that you have kept in touch with the industry, particularly if you are not seeking employment straight away. Try not to leave it too long to make contact with your career – keeping abreast of new research in the area is one way you can do this; another is to undertake professional development courses offered through ESSA.

Become a member of your peak body – Stay up to date with your profession. Joining ESSA will connect you with a network of like-minded professionals. You will receive ESSA's quarterly Activate magazine and a fortnightly email newsletter and will have access to an members-only section of the website that contains a variety of professional information (e.g. service information, jobs, ongoing education and online journals).

Useful links

The government's <u>employment and workplace website</u> provides comprehensive information about the Australian work environment.

The <u>ESSA website</u> is a great way to stay up to date with your chosen profession and, if you are a member or a student member, you will have access to the online job advertisements.

The <u>ESSA YouTube</u> channel contains a number of clips highlighting the work of members in the exercise and sports science industry.

Progressing your career



Securing your first position in the exercise and sports science industry is an exciting first step on your career path; as you work within the industry, you will increase your knowledge, skills and experience. At some point in the future you may decide it is time to expand your career horizons. Regardless of whether you have been in the exercise and sports science industry for one month or ten years, a question that frequently arises is: How do I progress my career? The following tips can help you move forward and make the most of your career.

Write a career plan – Just like knowing the destination when you start the engine in your car, the most important step in furthering your career is to establish the pathway you need to take to arrive at a specific career destination. Take time to write down where you would like to be in five years and ten years, and the milestones to achieve along the way. Identify the steps you need to take to get to each milestone. Revise your progress regularly.

Conduct a self-evaluation - To generate the best possible career options and work settings for your unique background and preferences, assessing your personality, interests, skills and values is invaluable. There are a variety of online tools you can use to conduct this self-evaluation.

Continue your education – You may have heard the saying, 'Even experts never stop learning.' This is a fact. Not only is participation in professional development a requirement for you to maintain accreditation with ESSA, but it is also pivotal in ensuring your knowledge and skills remain up-to-date with the latest research and practices. Consider enrolling in postgraduate study, or short-term / day courses offered face-to-face or online. You could also seek a professional mentor.



Progressing your career

Network – Stay connected with your peers. Maximise your networking opportunities by joining special interest groups or literature review groups. Networking can provide you with an invaluable learning opportunity and promote creative ideas and inspiration.

Keep your resume up to date – You never know when the next opportunity to progress may arise, sometimes at short notice.

Undertake practicum – If you think your days of being 'on prac' are finished, you need to revise this thought. Peer-to-peer learning - such as spending a day in a colleague's clinic as an observer - can be extremely useful in developing your own knowledge and skills. If you are considering changing the field of exercise and sports science in which you work (e.g. from a hospital setting to occupational rehabilitation), working in the position before you commit to the change might be a worthwhile experience. This approach might also be useful when considering offering new services at your current workplace.

Use social media for career progression – If you are looking for an answer to a problem or for an opportunity, why not post a message on social media? Social media can provide a valuable platform for initiating communication with peers. The ESSA national office maintains a Facebook group, as do the State chapters. Posts include client cases studies, education and employment opportunities and discussions about issues affecting the profession.

Understand that sometimes, careers do stall – Taking a leave of absence from your career will almost certainly provide some disruption to your career progress. This is okay. The important things to remember in this instance are to set goals and create a strategy for your return to work. This exercise will help you to identify the next steps to take for career growth and progression.





Jennifer Smallridge

- Bachelor of Exercise and Sport Science
- Qualified Sports Trainer (SMA)
- Certificate III in Fitness

As an allied health assistant (AHA), every day is diverse. My major duties are to deliver both gym-based and chair-based exercise classes as part of the physical activity programs offered at the community health service. The physiotherapists and other clinicians make referrals to us – some clients may need to be seen in a one-to-one exercise setting before participating in classes. I receive clinical supervision from the AEP in the service and from the team leader who is a physiotherapist. We also have fortnightly team case reviews. Additionally, I provide support to various groups that are facilitatied by the clinicians, particularly parents and children, and clients for hydrotherapy.

Requirements

This role relies on my knowledge of exercise prescription and safety, as well as the ability to understand a physical activity assessment performed by a physiotherapist or an exercise physiologist. I have also seen the importance of communication in a range of cultural contexts, from working with interpreters to explaining new exercises for an elderly person. Good time management, writing clear, accurate clinical notes, establishing rapport with clients and collaborating with a variety of health professionals are also essential in providing high-quality care for clients.

Career Opportunities & Pay

AHAs are employed to work with allied health professionals in a range of public and private hospitals, community health services and private settings. Some employers stipulate that an exercise science degree is desirable which is great for students entering the work force. Most organisations have 'job alert' emails – this is how I was notified of the role at Caulfield, but I also see jobs advertised on career search engines. AHAs employed in the Victorian public health service are remunerated under the Victorian Public Health Sector Multiple Enterprise Agreement. The full time salary under this award is approximately \$47 000.

Accruing my clinical placement hours to gain my Exercise Science membership with ESSA was a big turning point. I selected an organisation at which I wanted to complete my placement, was successful in obtaining placement with PACE Exercise Physiology - where I had a fantastic experience - and was fortunate enough to work part-time there in my final year of university. This exposed me to exercise physiology as a discipline in the private sector, and was a great way to integrate the theory and practical components of my university studies.

I took advantage of external networking opportunities with Deakin University Sport Studies Club and spoke to as many people as I could about their time spent in the industry. I volunteered - and still do - with Arthritis Victoria in their Warm Water Exercise program, and with Eastern Recreational Leisure Services – highly rewarding and lots of fun!

I am now studying for my Master of Clinical Exercise Physiology, inspired by working as an allied health assistant in such a great interdisciplinary setting. I feel that the experiences I have gained will assist in future employment when I become an accredited exercise physiologist.

"Take on as many experiences as you can, creating as many contacts as you can, to value-add to your university studies. Think about how your experiences have given you skills – in communication, problem solving, taking the initiative – and be prepared to draw on these in a job interview! Get involved at a community level, at a university level, and always have an element of 'fearlessness'!"

Further Information

Browse the website to find out more about the work of the Caufield Community Health Service

Information on the role of an allied health assistant can be found on the <u>SARRAH</u> and <u>South Australian government</u> websites.



Katie Williams

- Bachelor of Applied Science Human Movement Studies (Exercise Science) (Hons)
- AEP, ESSAM

As a cardiac scientist, I am involved in testing and creating reports for patients in the Cardiology unit at the Royal Brisbane and Women's Hospital (RBWH). My tasks include performing and interpreting 12-lead electrocardiograms, stress testing (exercise, nuclear, echocardiogram) and 24-hour ambulatory monitoring (Holter and blood pressure monitor application and analysis). Specifically, I am involved in preparing the patient for the test, live electrocardiogram and haemodynamic analysis and interpretation, and report generation for supervising medical staff. I am also rostered in the cardiac catheterisation laboratory which involves working with a multidisciplinary team of doctors, radiographers and nurses. Generally, this involves treating patients who present with acute coronary syndromes (myocardial infarction) or who are suspected of having coronary artery disease.

Requirements

As a cardiac scientist, effective communication, team work and interpersonal skills are important to ensure successful participation in a multidisciplinary team of clinicians and allied health professionals, and to optimise patient care. Additionally, the ability to demonstrate professionalism and empathy with patients is important in this health care setting. Technical skills such as electrocardiogram interpretation are also imperative to successfully perform in this role. I am very grateful to be part of the cardiac investigations unit team at the RBWH as it is a supportive learning environment and staff are encouraged to pursue ongoing professional development.

Career Opportunities & Pay

Cardiac scientists are typically employed by public and private hospitals and health care clinics.

The pay level depends on your experience and further qualifications, but the base salary for a full time cardiac scientist is typically between \$62 434 and \$142 155 and is based on experience and the level of responsibility.

In order to transition from exercise physiologist to cardiac scientist I completed a subject (ECG Analysis and Interpretation) at university which was not part of my undergraduate degree. I also volunteered for 10 weeks at the RBWH Cardiac Investigations Unit. During this time, I further developed the knowledge and skills necessary to work in this area. After completing this placement I was offered a job as a locum casual scientist, and then subsequently gained a position as a permanent, full-time cardiac scientist in this unit.

I am currently being trained as a sonographer in echocardiography and will commence a Master of Cardiac Ultrasound in 2014. This role involves performing cardiac ultrasound on patients with a wide variety of cardiac structural and electrophysiological complications and issues.

I have found working as a cardiac scientist extremely rewarding and fulfilling, and I enjoy going to work every day. I have found a passion for gaining the knowledge important for my progression within this field.

"I thoroughly enjoy working in the health care industry. I aspire to become a fully qualified cardiac sonographer and also aim to maintain my exercise physiology skills. I am also interested in management and business and would like to use these skills in a health care setting."

Further Information

The <u>MyFuture</u> website provides comprehensive information on the duties and skills required of a cardiac technologist as well as links to employer organisations in all states and territories.



Joanna Nicholas

- BSc Health and Exercise Science (UWA)
- Certificate IV in Training & Assessment (TAE)
- Certificate IV in Fitness (Personal Training)
- Certificate III in Fitness (Group Exercise)
- Certificate III in Fitness (Gym Instruction)

My role as a master coach involves delivering curricula and assessing students for the certificate III and IV in Fitness qualifications and the recently developed Diploma of Fitness. I also contribute to curriculum review and the development and dissemination of information to regional coaches. Additionally, I provide mentoring, support and supervision for new coaches and conduct skills assessments for recognition of prior learning (RPL) and credit transfer.

Requirements

Working as a master coach requires well-developed skills in presentation and leadership. You require strong skills in written and verbal communication and the ability to manage a classroom environment. I would advise those wishing to work in this role to register with ESSA as an exercise scientist as soon as you can and, if possible, to also register with Fitness Australia. To maintain registration you will be required to accrue continuing education points; however this helps to keep your knowledge and skills up to date.

Career Opportunities & Pay

Work in this field is available with registered training organisations (RTOs) that offer certificates III and IV in Fitness. I am very happy in my current role; however, the next step up the ladder would be national master coach (overseeing curriculum at a national level).

Pay level depends on regional location and level of expertise but starts in the range of \$50 000 to \$60 000.

Working in the fitness industry for several years and completing a Certificate IV in Training and Assessment assisted my becoming a fitness coach with the Australian Institute of Fitness. I was appointed to the master coach position because of my aptitude for curriculum development. I continue to increase my knowledge of the industry and my skill set by attending conferences such as the FILEX Fitness Industry Convention and by completing ongoing professional development courses (CECS/CDPs).

"On graduating from university don't be a "know it all", a university degree is simply the starting step in a career. Open your eyes to what is out there in the fitness industry and launch yourself into as many professional development courses as possible."

Further Information

The <u>scope of practice for an exercise scientist</u> is outlined in the Introduction section of this guide, as are the <u>units of study</u>.

For a list of RTOs who provide fitness industry training you can search the <u>training.gov.au</u> website. To view the range of qualifications available in the Sport, Fitness and Recreation training package visit the <u>Service Skills Australia</u> website.

The <u>Fitness Australia</u> website contains useful information about registration and positions available in the fitness industry.





Samuel Shewring

Bachelor of Science (Sport and Exercise Science)

In my day-to-day work, I prescribe exercise to assist clients at the University of the Sunshine Coast (USC) gymnasium to achieve their health and fitness goals. This task involves developing individualised programs and demonstrating correct use of the exercise equipment and correct technique for each exercise. I monitor clients as they work through their programs and assess their progress, making adjustments where necessary. My work also involves collaboration with exercise physiologists to deliver programs to their clients once their conditions stabilise.

I also manage the gym facilities, which involves keeping the equipment and the exercise space clean and free of health hazards, answering enquiries and working at the front desk.

Requirements

Correctly applying current research and practice modalities is vital when prescribing an individualised exercise program. You also need to be able to communicate with clients in a friendly and approachable manner and to understand their motivations for exercising and any barriers to their exercising to best help them reach their goals.

Career Opportunities & Pay

Employment opportunities exist in gymnasiums, within sporting organisations and increasingly within businesses to keep their staff active and healthy (e.g. in the mining industry). Opportunities for self-employment also exist by establishing a business as a personal trainer.

Gym instructors are generally paid at an hourly rate usually between \$25 and \$35 per hour, depending on experience level. The hours worked vary to cater for the different times that people like to exercise, and may often include weekend work.

Working at the USC gymnasium enables students to gain the experience and practical hours required to complement their studies. Therefore, you must have completed or be completing a relevant degree with USC to gain employment.

Networking is a very important factor in securing future employment. During my undergraduate degree, I sought out opportunities to participate as a research assistant or research subject in available projects to increase my contacts and develop my skills. In the future I would like to pursue a career in academia and teaching.

"Relevant work experience is always helpful in securing employment. If you don't have any and want to get involved there are always opportunities to volunteer for programs and research projects."

Further Information

Health and fitness centres are increasingly employing university-qualified staff to provide specialist client services. Visit the <u>Fitness Australia</u> website to view employment opportunities and to obtain useful information about working in the fitness industry.



Clinical AEP Private practice



Beth Sheehan

 Bachelor of Applied Science in Human Movement (Exercise Science) (Hons)

AEP, ESSAM

I contract to a variety of private practices that provide services in clinical exercise physiology. My experience and expertise are predominantly in the area of musculoskeletal conditions. Therefore, I primarily treat clients with conditions such as chronic back pain, osteoarthritis and work-related or overuse injuries. A thorough understanding of musculoskeletal anatomy and the implications of injury for movement is imperative when dealing with these populations.

Requirements

You must have a (four-year equivalent) undergraduate degree in exercise and sports science with a particular focus on exercise prescription and understanding of injury. After completing your degree you must apply for your accreditation as an exercise physiologist with ESSA, which then allows you to obtain a provider number for Medicare, Department of Veterans' Affairs and private health funds. I found having my sports trainer accreditation also allowed me to work with sporting teams. Obtaining my clinical Pilates qualifications has also made me more employable.

Career Opportunities & Pay

Opportunities exist in sports medicine clinics, physiotherapy practices and multidisciplinary clinics (e.g. chronic pain clinics).

If you are employed by an allied health organisation you will start on the minimum standard wage for AEPs.

If, however, you are contracting or self-employed you can determine your fees for service. Most AEPs will earn over \$50 000 per year.

Please refer to the <u>Health professionals and support services</u> award for minimum rates and conditions.

I am often required to work in conjunction with other allied health professionals (e.g. physiotherapists and dietitians). Therefore, you must understand their scopes of practice and also have a detailed understanding of the outcome measures you need to assist clients in achieving their goals, as well as the goals of the other treating professionals.

You need to be passionate about what you do and have an ability to think and create alternative exercise programs on the spot to allow you to best assist every individual that crosses your clinical path.

"I enjoyed studying anatomy and have also worked with a variety of sporting teams which gave me an interest in musculoskeletal injuries. Working with teams and in a clinical environment allowed me to target my desired clinical population."

Further Information

Exercise physiologists are allied health professionals who work in a variety of clinical areas and use exercise as their treatment modality.

More information on the <u>study pathway to become an AEP</u> and the <u>role of an AEP</u> is available in the Introduction section of this guide.

You could also visit the websites of:

Exercise & Sports Science Australia

Allied Health Professions Australia

Lecturer RMIT University



Dr Brett Gordon

- PhD (Exercise Physiology)
- MAppSc (Exercise Rehabilitation)
- BAppSci (Human Movement)
- AEP, ESSAM

As a university lecturer, I usually spend between 8 and 15 hours a week teaching undergraduate exercise and sports science students in the areas of exercise prescription, injury prevention and rehabilitation. I also spend between 10 and 15 hours per week preparing for my teaching and contributing to supervision of postgraduate student research. I conduct my own research, which involves applying for funding, completing research studies and writing journal articles. Other duties of my current position include student administration, developing and running the student clinic, and overseeing all professional placements within the exercise and sports science degree.

Requirements

There are many skills required to successfully fulfil my role; importantly, you need to be well organised and have good time-management skills to ensure that all tasks are completed. You also need to be personable and be able to pass on knowledge. High level research skills are also required, which include planning and executing studies; writing research papers, grant proposals and other scientific documents and analysing data.

Career Opportunities & Pay

Universities or research institutes employ people in this role. The base salary of a lecturer ranges from \$75 000 to \$100 000 per year. Lecturers can progress to senior lecturers or research fellows, who can earn between \$100 000 and \$120 000 per year.

A PhD is usually required to be appointed to a lecturer position. My ESSA accreditation as an exercise physiologist was a significant factor in securing this position, along with tmany years of varied professional practice and experiences in the field. Having delivered some voluntary guest lectures within the university setting was also helpful and I had completed many professional presentations. A teaching qualification is also very valuable in securing employment; at the very least you need to have some teaching experience. I see this position taking me further into the university and research sectors. Experience in this area would also be helpful in setting up a clinical practice in the future.

"This can be a very rewarding career with flexibility and opportunities for travel; however, it can be stressful. If you are contemplating a lecturing career I encourage you to find a good supervisor in your area of interest, complete your research training and build your professional networks."

Further Information

Information on postgraduate and postdoctoral research positions are available through individual university websites.

The Australian government website <u>MyUniversity</u> offers an overview of postgraduate research and examples of graduate career pathways.





Martin Schultz

- PhD
- Master of Exercise Rehabilitation
- Graduate Diploma (Exercise Rehabilitation)
- Bachelor of Applied Science (Human Movement)
- AEP, ESSAM

Postdoctoral research is still considered a training phase in a research career, although there are more responsibilities and freedom than in PhD studies. Braodly speaking, my current role involves research activity that contributes to the goals of the blood pressure research group. On a daily basis this may include; research study conception and design; active participation in data collection within clinical environments; data analysis and management; dissemination of research findings through the writing of scientific publications and giving presentations; interactions with participants and participation in institutional academic meetings. These tasks may involve the critical review, presentation and appraisal of other's (and my own) work, student mentoring and supervision, scientific writing, reading and continued learning.

Requirements

You require the ability to work in a multidisciplinary team that consists of students, academics, clinicians and the general public; high level communication skills (written and verbal); specific knowledge in your research area and a broader understanding of the scientific literature; good understanding of statistics and related software applications; and organisational skills, patience, dedication and attention to detail – research is very rewarding but requires a lot of self-drive and motivation.

Career Opportunities & Pay

Opportunities exist with universities, medical research institutes, sport or science institutes and industries with a research focus. Pay rates vary depending on how the position is funded, the specific research, teaching duties and the institute. Junior positions are generally fixed term and begin at academic level A (upwards of \$68 000 p.a.). Opportunities to progress your career exist and individuals are eligible to apply for health-related research and personal fellowship schemes supported by the National Health and Medical Research Council and non-government organisations such as the National Heart Foundation; however, there is strong competition for these.

Having just completed my PhD studies at the institute I was able to surround myself with support from other academic researchers and clinicians, which gave me an excellent introduction to postdoctoral work. However, I believe it is the combination of my highly specific and broad skill set that I developed through participation in many different undergraduate and PhD learning experiences that has made me highly employable. I have also maintained my accreditation as an exercise physiologist for the past 5 years, while active participation in clinical work informs my research (and vice-versa) adding another facet to my employability.

"Don't be afraid to step out of your comfort zone and take on many different learning experiences - this is how you develop specific skills and networks that build a research career. It is also important to surround yourself with the support of more senior researchers, academics and clinicians - a driven and successful supervisor makes for a driven and successful researcher."

Further Information

"This postdoctoral research position allows me to further develop independent and highly specific research skills. I hope this will enable me to continue in a research career with a clinical focus in cardiovascular exercise physiology."

Information on postgraduate and postdoctoral research positions is available through individual university websites.

The Australian government website <u>MyUniversity</u> offers an overview of postgraduate research and examples of graduate career pathways.



Elyse Mugridge

- Master of Science (Nutrition, Dietetics and Exercise Rehabilitation)
- Bachelor of Science (Exercise Science and Nutrition)
- AEP and APD

My position at the Medicare Local includes leading group exercise and education classes in the HEAL™ program and, as part of a multi-disciplinary team, in a metabolic rehabilitation program for patients with severe obesity and co-morbidities. I also complete individual exercise physiology and dietetics consultations to assist patients to manage and prevent chronic disease. I sometimes travel to GP clinics to provide patient services and to promote the work of the Medicare Local. My role includes presenting to GPs, health professionals and community groups about the importance of regular exercise and balanced nutrition in building a healthy lifestyle. My position also includes supervision of students on clinical placement for both exercise physiology and dietetics.

Requirements

Position requirements include the ability to:

- perform exercise assessments and anthropometry measures
- prescribe exercise for home programs to manage and prevent chronic disease
- facilitate group exercise sessions
- communicate skillfully with both groups and individuals from children to the elderly to clients with mental health issues
- use organisational and time management skills to complete a variety of tasks in one day (individual appointments, writing up case notes, letter writing, quality improvement tasks, group facilitation and travel to other locations)

Career Opportunities & Pay

A number of opportunities for advancement exist within our Medicare Local, including chronic disease management and prevention roles, GP practice support, care coordination for Indigenous people, program coordination and clinical manager positions. The HEAL™ program is run in a number of local government areas across Australia, and by many private allied health practices. Salaries range from \$49 000 to \$82 000 depending on experience.

I was proactive in gaining healthy placement hours with this organisation at the beginning of the third year of my degree. Once my hours were complete I was offered a casual position and was able to assume more responsibilities as I continued with my studies. I gained full AEP status at the end of my fourth year and was able to work part time whilst I completed the final year of my Masters degree. After completion of my studies, I progressed to a full time role within the Medicare Local. Dual qualification is invaluable in the chronic disease management sector; I use both exercise physiology and dietetics skills on a daily basis. However, single qualification AEPs, APDs and diabetes educators also work within our organisation. Current first aid and CPR accreditations are essential for this position. My position gives me a wide variety of experiences and challenges to build my skills and open up opportunities within the exercise physiology and dietetics industries.

"Embrace the opportunity to work in a variety of roles, and with diverse population groups. It's great to have a different schedule everyday and it keeps your skills well rounded so that you have many options open in the future."

Further Information

Medicare Locals

Medicare Locals are primary health care organisations charged with improving healthcare within their local area. Most advertise job vacancies and information about local programs (which often include chronic disease management and preventative health programs) on their websites.

You can find a full list of Medicare Locals on the Australia Medicare Local Alliance website amlalliance.com.au.

ESSA has produced a <u>YouTube video</u> highlighting of the work of AEPs within Medicare Locals.

Occupational Health Consultant



Maryam Saligheh

- PhD candidate
- Master of Philosophy
- Master of Exercise Physiology
- Bachelor of Sports Science
- AEP, ESSAM

My work includes conducting functional capacity & ergonomic assessments and I prescribe exercise to increase functional capacity and physical capabilities to allow work-related specific tasks to be carried out. This entails testing work-specific strength, fitness and body composition; and measuring BMI, blood pressure, heart rate and range of motion. In addition I provide functional and manual handling education. I also conduct musculoskeletal assessments and sub-maximal and maximal fitness tests. The work involves regular liaison with GPs and other allied health professionals.

Requirements

The ability to time manage effectively is vital as the clinic can be very busy. Good decision-making skills and the ability to work without supervision are also required. Most clinics require you to hold an occupational health certificate (to enable you to test for drugs and alcohol), and I highly recommend attending musculoskeletal & workers' compensation workshops and occupational health and safety training to add value to your services.

Career Opportunities & Pay

Some of the organisations working in this area include Kinetic Health, Work Focus Australia, Advanced Personnel Management, ORS group, Konekt, People Sense, Active Injury Management and Medibank.

AEPs interested in working in this sector need to undertake workers' compensation workshops to gain knowledge about Comcare, WorkCover and return-to-work plans. Baseline salary is \$58 000 to \$60 000; a Rehab Consultant earns about \$70 000; senior positions may offer up to \$80 000.

I started working as an exercise physiologist in the corporate health and rehabilitation sector both within government bodies and in the private sector. This involved educating employees about their health and delivering a healthier work-place. A good knowledge of corporate health and work place rehabilitation will assist you when applying for a position.

"This is a very competitive industry and graduates can raise their profile and increase their chances of employment by taking part in workshops related to occupational health and by completing part of their clinical hours in the area of work place rehabilitation and workers' compensation."

Further Information

Explore the websites of major employers in this area to get more information on this field of employment and to search for job vacancies:

Kinect Health

Work Focus Australia

<u>Advanced Personnel Management</u>

ORS Group

Konekt

People Sense

Active Injury Management



Rachel Davila

- Bachelor of Applied Science (Sport & Exercise Science)
- AEP, ESSAM
- Accredited WorkCover treatment provider

As a health service officer with MAXimus I usually see six clients per day (who come to my office) to perform either assessments or interventions. Clients have an initial assessment and are then recommended for a work-conditioning program that involves exercise prescription for rehabilitation after injury, education/advice on chronic health management (e.g. for obesity, diabetes, hepatitis), and/or exercise for mental health. All interventions are work focused and aim to increase the client's capacity to return to work. I have also been involved in project development - a group pain management program and a young women's health program - and in a community-based project providing physical health support and vocational skills for disadvantaged young women. In addition, I have performed pre-employment screening and functional capacity evaluations.

Requirements

Sound skills in assessment and exercise prescription for a range of injuries are a must for this position. Also required are well-developed report-writing skills, plus the ability to market AEP services, and to build rapport and communicate effectively with all stake holders. In addition, time management skills, the ability to focus on work-related and functional activities, motivational skills, computer skills and flexibility to adapt to new roles and environments are vital.

Career Opportunities & Pay

I work with the following government-contracted organisations alongside other allied health professionals: Job Services Australia, Disability Employment Services and the National Panel of Assessors. Employment service providers such as MAXimusSolutions Australia (a subdivision of MAXNetwork) are organisations that work under the Department of Education, Employment and Workplace Relations.

The salary range is \$50 000 to \$70 000+, based on prior experience, and progression within the organisation.

To secure a position as a health consultant, prior experience in exercise prescription in a functional, work-focused setting is helpful. There are different roles within my organisation and room for progression. Roles include clinical quality development, project management and team management. For example, the current National Operations Manager began his career in my role. Other employees also have dual roles as rehabilitation providers within Comcare and the Department of Veterans' Affairs. The organisation is continually growing and developing new projects and business areas in which to work in...

"The majority of clients I work with on a daily basis have co-morbidities, especially in mental health (depression, anxiety, PTSD, schizophrenia, bipolar disorder, drug and alcohol dependence). My advice is that someone working in this area would benefit from background knowledge of these conditions, although it can also be learned on the job."

Further Information

Below is a list of websites for providers in this area where you can find more information on the services they offer and investigate job opportunities:

Job Services Australia

Disability Employment Services

Nova Employment

Breakthrough People Solutions

MAXNetwork

National Panel of Assessors



Sharon Hetherington

- PhD (Rural Health)
- Bachelor of Human Movement (Hons)
- Certificate IV in Workplace Training & Education
- AEP, ESSAM

The Healthy Eating Activity & Lifestyle (HEAL ™) program assists people to make lifelong, positive lifestyle changes through an 8-week program of education and supervised physical activity. My role as project officer is to train AEPs, exercise scientists and other allied health professionals to facilitate the program, and to support them as they start to deliver the program.

My role also involves collection and collation of participant data for reporting to the Department of Health and Ageing, and the production of course and promotional materials.

Requirements

The role requires me to work closely with our project partners at South Western Sydney Medicare Local to oversee the day-to-day administration of the program. Good interpersonal and organisational skills are essential, as is the ability to work autonomously. A large part of the role is to train allied health professionals to deliver the program, for which my background in teaching at both TAFE and university has been an advantage. Staying up to date with the latest trends in self-managed change and lifestyle modification is also important to ensure our teaching and program content remains current.

Career Opportunities & Pay

Project officer work is generally undertaken on a fixed-term contract and therefore provides the ability to work on a variety of different projects over time.

Remuneration is in the range of \$65 000 - \$80 000 dependent on qualifications and experience.

The job description for this position required the applicant to be an AEP with 5 years of experience and to have, or have the ability to gain, a Certificate IV in Workplace Education and Training. Skills which have also been invaluable in fulfilling this role are the ability to use software packages such as design programs, spreadsheet software and database packages (for data collection and collation).

"During my undergraduate and postgraduate studies I became very interested in the process of change and how we as allied health professionals can assist our clients to implement meaningful lifestyle changes. In my current role I am enjoying introducing others to these techniques."

Further Information

Further information on the HEAL™ program can be found on the ESSA website www.essa.org.au under the Health Care tab.



Lyn Peacock

- Bachelor of Applied Science (Hons) (Human Movement)
- Bachelor of Applied Science (Health Science)
- Cert IV (Assessment & Workplace Training)
- Certificate in Fitness Instruction
- AEP, ESSAM

In my role I prescribe exercise for the management of chronic diseases, rehabilitation from injury and the prevention of lifestyle diseases. Most chronic disease clients present for help with managing their diabetes and are referred by the multidisciplinary 'Early Intervention for Chronic Disease Diabetes Program'. Clients are seen individually, are risk-stratified, complete an exercise assessment and are prescribed a home-based exercise program or are referred to community based exercise. Clients are then monitored by telephone or face-to-face with a view to progression. Other clients are seen individually for weight management assistance. Exercise for rehabilitation involves participation in a Cardiac Rehabilitation Phase II program. Over 8 weeks clients receive instruction and supervision in a group setting. All work is completed under the supervision of a cardiac rehabilitation nurse. The 'Life! program: Taking Action on Diabetes and Cardiovascular Disease' is facilitated in a group setting to educate clients about prevention of lifestyle disease and is delivered based on demand. I also make presentations to community-based organisations about exercise for the management of a range of health issues.

Requirements

Core skills required for this role are interviewing and health screening, health / wellness coaching, risk factor stratification and exercise testing, prescription, programming, instruction and supervision. Other skills required are group facilitation and delivering presentations. The ability to communicate effectively with clients, staff and external organisations is essential.

Career Opportunities & Pay

Exercise physiologists working in public health are employed by hospitals and community health centres.

Pay rates are in line with the Health Professionals and Support Services award.

Previous experience in community health, a multidisciplinary environment and the fitness industry helped to secure this position. This role could be expanded to provide exercise (individual or group-based) for the management of a broad range of chronic diseases and to address mobility issues.

Community health provides an excellent opportunity to conduct clinical work in a multidisciplinary team setting. You will gain particular insight into the knowledge and skills of other allied health disciplines and into how a teambased approach maximises overall health outcomes for clients.

"If exercise physiology is a new role within the organisation there may be limited resources to support it. You may find other allied health professionals are not familiar with your approach and your skill set and it may take some time to for them to recognise how exercise physiology can benefit individual clients and the broader community."

Further Information

Community health is subject to economic and political climates, such that change is ongoing. Expect to work in a challenging environment. Keep a team approach in mind, implement best practice, keep abreast of current research findings and let your work 'speak for itself'.

A copy of the Health Professionals and Support Services award can be found at the <u>Health Services Union website</u>.



Tarryn Clarke

- Bachelor of Exercise Science (Hons)
- Bachelor of Human Movement (Exercise Science & Rehabilitation)
- AEP, ESSAM

In my current role in the exercise physiology department at Canberra hospital I provide exercise interventions and education to inpatients and outpatients with a range of chronic and complex conditions. My duties include conducting client assessments (including taking medical histories), functional assessments, exercise prescription, the exercise component of cardiac rehabilitation and heart failure rehabilitation programs, hydrotherapy sessions and education seminars. I also coordinate clinical placements for exercise physiology students, attend and provide input at regular executive-level meetings (e.g. ESSA's Cardiovascular Special Interest Group, the Allied Health Clinical Educators Network and the Heart Failure Working Group).

Requirements

- demonstrate effective communication
- work effectively individually and within a team
- collaborate with other health professionals and nursing staff
- critically evaluate and interpret results to ensure appropriate clinical decisions are made
- · conduct effective client assessment
- develop safe and effective exercise management plans
- · coordinate clinical placements for exercise physiology students

Career Opportunities & Pay

The exercise physiology department is an outpatient service at the Canberra Hospital.

Pay rates are between \$50 000 and \$80 000. (Salaries are based on the ACT Health Professional Officer pay scale, so your salary depends on your equivalent level on this scale.)

Cardiac rehabilitation is offered as an outpatient service by a majority of Australian hospitals.

Since graduating, I have been an active member of ESSA, attending ACT Chapter meetings, volunteering for chapter positions, attending continuing education courses, volunteering for research opportunities that become available and networking whenever possible. Most importantly, I kept in regular contact with the manager of the exercise physiology department to ensure that, when an opportunity became available, they were aware of my interest in gaining a position. It's vital to 'get your name and face out there'. Eventually I would like to work in health policy or research. The clinical experience I have gained working in the department will assist me substantially in these endeavours. My current role is both diverse and challenging.

"Never underestimate the importance of networking. Creating a network of professional contacts can help to find jobs, build professional skills to make you more employable, helping to get your career on the right track. Networking is the perfect way to meet other industry professionals who can offer new perspectives and assist in job seeking opportunities."

Further Information

More information on cardiac rehabilitation and other services offered at the Canberra hospital can be found on their <u>website</u>.

You can also find more information on cardiac rehabilitation on the website of the

Australian Cardiovascular Health and Rehabilitation Association

ESSA's Cardiovascular Special Interest Group supports members working and researching in this area, and those with interests in the field. The group communicates via a Facebook Page with access restricted to ESSA full and student members.



Elizabeth Calleja

- Master of Science (Exercise Rehabilitation)
- Bachelor of Applied Science (Hons) (Sport and Exercise Science)
- AEP, ESSAM

My duties as the Senior Exercise Physiologist in the Cardiac Rehabilitation and Heart Failure Service at the Nepean Hospital include conducting exercise classes for and assessments of patients undergoing cardiac rehabilitation, and performing home-based exercise consultations for patients with congestive heart failure. As the only AEP in the hospital, I also provide consultation to the service managers of the Nepean Hospital. I have recently become involved in inter-hospital communication to improve representation for exercise physiologists in NSW Health. This role includes liaising with other AEPs and departmental directors to provide advice on exercise physiology practices in NSW Health.

Requirements

When working with high-risk patients, it is essential to identify any potential risks of exercise for patient health. Good communication skills are required to assist patients with their self-management of chronic diseases via face-to-face consultations, goal setting and demonstration of appropriate exercises, which are individualised for each patient. You also need to maintain accurate clinical notes and to write and review risk assessments, policies and procedures. I also liaise with other staff to educate them on the role of exercise physiology within primary health care.

Career Opportunities & Pay

Within NSW Health, most AEPs are employed in the area of cardiac rehabilitation. However, new opportunities are emerging in mental health and other areas as the skills and competencies of AEPs become better recognised. Remuneration is between \$54 000 and \$95 000, dependent on qualifications and experience.

Before taking up this position, I worked for three years as an AEP in a fitness and health facility. There I managed the Healthy Hearts program (for patients in phase III of cardiac rehabilitation and patients with diabetes), and exercise programs for patients with disabilities and those requiring musculoskeletal rehabilitation. Working with patients in phase III of cardiac rehabilitation in the community gave me an advantage in securing my current position. I had also completed my clinical experience at Nepean's sister hospital and had developed strong networks within the nursing staff. A Master of Science (Exercise Rehabilitation) has also been beneficial working in this role.

My current position, as a senior level 4 and the only AEP in the area health service, encompasses a wide scope of practice. I am required to consult with other departments to educate and inform them of the clinical competencies of AEPs and the benefits of exercise physiology to the health service. I have worked with departments, such as the mental health and diabetes services, to provide exercise physiology services.

Developments and progress in the health system can be slow but are extremely rewarding. My vision is to establish an exercise physiology department to provide more comprehensive exercise therapy for patients throughout the hospital, both to improve patient health and reduce hospital re-admissions.

"I would encourage all students contemplating a career in chronic condition health care to start by working in the community with healthy populations. This will increase their confidence in exercise prescription before working with patients with chronic and complex conditions. This patient cohort requires patience and a regression of exercise therapy from many principles that are taught. The aim of working with these patients is to increase their quality of life through building functional capacity and confidence. Gaining experience with multiple conditions would also be advantageous as most patients present with multiple comorbidities."



Craig Duncan

- PhD (Exercise and Sport Science)
- Graduate Diploma of Adult Education
- Bachelor of Human Movement Science
- Australian Strength and Conditioning Association member
- AEP, ASp, ESSAM

My role with Sydney Football Club was to manage all aspects of the team's performance. This included planning and supervising strength and conditioning training, managing rehabilitation following injury, applying knowledge of sports science to achieve maximum results, analysing gameday performances and liaising with other allied health staff to ensure that athletes received optimal nutrition to support performance and recovery.

Editor's note: Craig now holds the position of senior lecturer at Australian Catholic University and is a consultant to the Western Sydney Wanderers.

Requirements

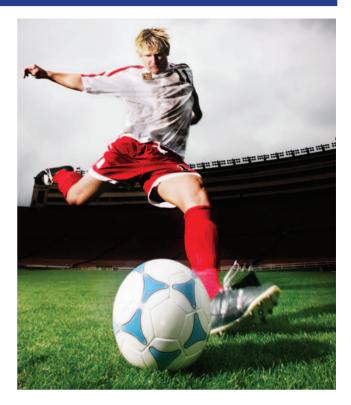
Although in high performance management very good technical skills are imperative, but the ability to communicate effectively is more important. Furthermore, as these positions are leadership roles, an understanding of effective management and leadership is also vital.

As such positions of this type are not suitable for recent graduates: you must spend time learning your trade and developing your skills. Try to secure an internship with an appropriate mentor and learn all you can. Volunteer if necessary, thinking not of the dollars but rather of your self-development. I think it is also important to obtain postgraduate qualifications in sports science and in other areas that focus on leadership.

Career Opportunities & Pay

Opportunities exist with professional sporting teams and in Olympic sports. Pay ranges vary across sports; I am only speculating, but in Australia I would think they range from \$140 000 to \$400 000.

There is no doubt my qualifications helped me to secure employment. However, never underestimate word of mouth. I have always had a philosophy based on service, and athletes always know and appreciate that they are my priority. Thus, my reputation has often been the catalyst for employers to seek me out. I have also spent many hours volunteering in a variety of roles and in establishing a great network. Building networks and gaining experience takes time but is a great investment in your future.



"I think it is important to keep challenging yourself so I hope to always be involved in a position that offers a challenge, wherever that may be."

Further Information

Visit the ESSA website to download the latest version of the sports science application form.

More information on the Australian A-League can be found at the website http://www.footballaustralia.com.au/aleague.



John Quinn

- Master of Science and Technology
- Bachelor of Applied Science (Sports Science and Coaching)

My key role is to develop the strategic direction of and to manage the sports science and medicine departments at the Greater Western Sydney Giants (GWSG). That is, to take a holistic view of AFL and its requirements as it relates to elite physical training, game-day performance, recovery, medical services, nutrition and sports science; further, to drive the concept of elite performance through evidence-based practice, research and innovation. I oversee the strength and conditioning of the GWSG playing list (52 players) and the sports science department (GPS, nutrition, load monitoring). Finally, I oversee the medical department which consists of part-time doctors, two full time physiotherapists, a part time physiotherapist, and a number of massage therapists and other allied health professionals.

Requirements

My role requires a knowledge base in a number of key areas such as strength, conditioning, rehabilitation, nutrition and evidence-based medicine. You then must be able to apply that knowledge in the practical setting of professional sport. You also need to 'think on your feet', communicate widely, develop strong rapport with players on the list and with staff, and be consistent and honest in all your dealings.

Career Opportunities & Pay

The obvious opportunities are with elite sporting organisations but opportunities are beginning to expand into the corporate world, especially with regard to health and wellbeing. I also conduct my own exercise physiology business and have found quite a few parallels between this business and professional sport: one person's grand final is another person's return to work, return to full function or escape from pain. High performance coaches in the AFL can be paid up to \$400 000 per year; however, a realistic average is around \$180 000. Whilst this sounds very attractive, the hours are extremely long and the demands and expectations are very high.

I was a track and field coach with the AIS (in Hobart) back in 1998 when Essendon FC was seeking someone who could look outside the normal day-to-day operations of a football club to bring a different and more professional approach to player preparation. Previously, my involvement in experiential learning and athletics allowed me the opportunity to travel globally and look at world's best practice in an applied setting. I have also worked as an AEP with numerous individuals in a variety of contexts such as return to sport, return to work and complicated health issues; and with victims of motor vehicle accidents, the Department of Veterans' Affairs, and patients with obesity issues. In addition, I have been involved with company health and wellness and see this as a very exciting part of what I do. In fact, working one on one with people whose main desire is to be well again is every bit as rewarding as working with an AFL team or an Olympic track and field squad. It all comes down to why we do what we do and, for most AEPs, I think that would be the desire to help people.

"This job allows me to continue to develop my skills in managing people and bringing about improved performances. It also allows me to travel and discuss ideas with leaders in this field around the world. I am not sure where it is taking me exactly – I do have my own plans for the future. Right now it is an exciting adventure to be involved with the youngest team in the AFL and to be able to lay the foundations for what I am sure will be a very successful future for this football club.

Understand that qualifications only give you the green light to apply for a position, nothing else. While I believe that a university qualification is essential, it is really only a theoretical pass mark. Practical application is the true key to success and I believe that it takes twice as long to obtain this. In essence, if a degree takes you 4 years, then the practical learning aspect will take a further 8 years. Think of this as an apprenticeship. Whilst a lot of new graduates think that they are equipped and ready to go, I think that this just signals their intent. The journey has just begun. I have been in this industry for almost 30 years and I am still on the path of discovery!"



Mark Osborne

- PhD
- Masters of Science (Hons)
- Graduate Certificate in Research Management
- Bachelor of Applied Science

In my recent role as sport science manager with the Queensland Academy of Sport, I provided direct support to a number of programs and sports. I managed a diverse group of staff from all sport science disciplines and oversaw their professional development to ensure services to athletes were effective and of an excellent standard.

My role also included forecasting future trends and potential applications of sports science in improving athlete performance. I also undertook supervision of postgraduate students.

Editor's note: Mark is now working in a similar role with Swimming Australia.

Requirements

This position demands well-developed skills in communication and in general and financial management. In this role you also require a broad understanding of applied sport science, its application in specific circumstances, and an understanding of the history of your organisation - that is, understanding what has been done previously so the same mistakes are not repeated! Lateral and strategic thinking are also required, as is a thorough understanding of fundamental science.

Career Opportunities & Pay

Employment in similar roles is available within the state and national institutes and academies of sport (SIS-SAS network), and in a growing number of national sporting organisations and with professional sporting teams. Salaries range from \$50 000 to (reportedly) \$400 000 across the breadth of sport science positions within Australia.

To fulfil this role successfully requires postgraduate qualifications and experience and an understanding of sport and the SIS-SAS network. Networking and a demonstrated ability to 'fit in' immediately and work independently is essential. As I get older I tend to have less hands-on interaction with the athletes on a day to day basis, but more strategic imput, working behind the scenes as a mentor and advisor to other members of staff and postgraduate students.

Anyone wishing to enter the area of sports science needs to demonstrate an excellent knowledge of basic science, an understanding of the broad application of science to sports performance, common sense and initiative at an early stage in their career. With many organisations now having their own in-house postgraduate programs, many graduates already involved in the high performance sports arena; thus gaining employment in this field is a cut-throat and difficult endeavour. Employers would rather engage someone they know and have either nurtured themselves, or who comes highly recommended by their peers - these individuals will often require less training than someone completely external to the system. Because most new recruits are generally known within the system, those interested in this field need to demonstrate a willingness to get involved, to show initiative and to demonstrate their skills. If they cannot work independently, show excellent attention to detail, show initiative, and communicate with a broad range of stakeholders, then this is not the field for them!

"I see one of my roles is to challenge staff and coaches to look at ways we can do things better. Thus I'm potentially impacting across a broader number of sports and athletes."

Further Information

For more information you can visit the: **Queensland Academy of Sport**

Contact details for the Australian Institute of Sport and SIS-SAS network members can be found on the <u>AIS website</u>.

Swimming Australia's website is at www.swimming.org.au



Ryan Timmins

- Bachelor of Applied Science (Hons)
- Bachelor of Applied Science (Human Movement Studies)

As a member of the high performance staff I am involved on a daily basis with recording and monitoring GPS (global positioning systems), heart rate and load data. I also design and conduct rehabilitation sessions for athletes in the early and middle stages of recovery from injury. Monitoring and controlling hydration status and nutritional supplements also forms part of my job role.

Requirements

It is essential in this role to understand loading patterns in elite sport and the ability of heart rate and GPS data to display variations in actual and potential training load during a session.

You also need to be able to design and deliver rehabilitation programs that meet the specific recovery goals set out by the medical staff.

Career Opportunities & Pay

Elite sporting clubs employ a range of professionals as members of their high performance staff.

A starting salary might be in the range of \$30 000 - \$70 000 per year, increasing as skills are developed and experience gained.

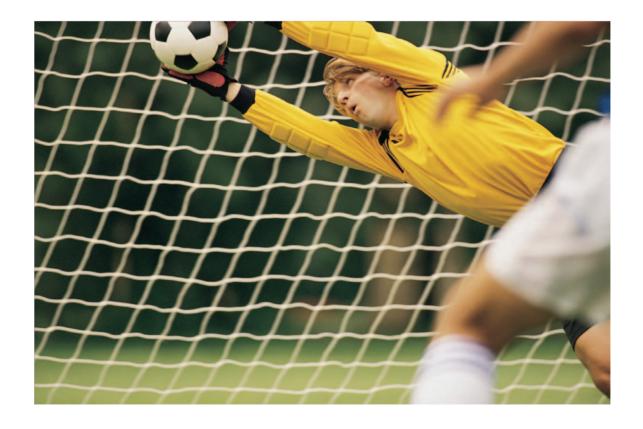
Employment in this field can also be gained with members of the SIS-SAS network (state institutes and state academies of sport).

You shouldn't expect to gain employment as a high performance manager or similar role immediately after graduating. Developing practical skills and abilities not taught in the tertiary system can be achieved through volunteering and other unpaid work, and is probably necessary to secure employment in this area.

Further Information

Contact details for the Australian Institute of Sport and SIS-SAS network members can be found on the <u>AIS website</u>.

ESSA offers a range of professional development opportunities in the sports science area as does **Sports Medicine Australia**.



The following websites feature job opportunities for careers in exercise and sports science and are also useful resources to help you build your networks and knowledge in the exercise and sports science industry.

Websites

ESSA Jobs Online

(you must be a member of ESSA to access this resource)

www.essa.org.au Go to Member Login then select

Resources - Jobs Online

Physical Activity Australia Job Board

http://www.physicalactivityaustralia.org.au/index.php/job-board/

SEEK <u>www.seek.com.au</u>

CareerOne <u>www.careerone.com.au</u>

My Career <u>www.mycareer.com.au</u>

Medicare Locals

Medicare Locals are primary health care organisations charged with improving healthcare within their local area. Most advertise job vacancies and information about local programs (often including programs for chronic disease management and preventative health) on their website. A full list of Medicare Locals can be found at the Australia Medicare Local Alliance website amlalliance.com.au

Australian Physical Activity Network

This network is facilitated by the National Heart Foundation. They send out regular newsletters with grant and funding opportunities, physical activity programs, job advertisements and some of the latest research on physical activity www.heartfoundation.org.au/information-for-professionals/australian-physical-activity-network/Pages/auspanet-e-news-subscription.aspx

Corporate bodies and non-government organisations

Many larger corporations and non-government organisations such as the Heart Foundation, the Australian Cancer Council, the Australian Football League and the Australian Institute of Sport advertise job vacancies on their websites. If you develop an interest in a particular area of health or sports science you may like to contact employers within that field.

Websites

Federal & State Health Departments

Department of Health and Ageing

www.health.gov.au/internet/main/publishing.nsf/Content/Career+Opportunities-1

Queensland Health

www.health.qld.gov.au/jobs/default.asp

NSW Health www.health.nsw.gov.au/careers/Pages/search_job.aspx

SA Health www.sahealthcareers.com.au/

Department of Health and Human Services Tasmania

www.dhhs.tas.gov.au/career/home

Department of Health, Victoria

www.health.vic.gov.au/jobs/index.htm

WA Health <u>www.health.wa.gov.au/careers</u>

Department of Health (NT)

www.health.nt.gov.au/Careers/index.aspx

ACT Government Health

www.health.act.gov.au/c/health?a=sp&did=3000000

LinkedIn au.linkedin.com

There are numerous organisations that you can follow on LinkedIn which may provide industry updates, information, the latest research or job opportunities. For example:

- Exercise is Medicine
- Exercise & Sports Science Australia
- Sports Medicine Australia
- Clinical Exercise Physiology Association
- Exercise Jobs
- American College of Sports Medicine
- Fitness Australia

Fitness Australia <u>www.fitness.org.au/page.php?id=34</u>

Australian Sports Commission <u>www.ausport.gov.au/about/jobs</u>