
Professionalization of Exercise Physiology_{online}

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Career Choices

The ASEP perspective is that the college degree should set the stage at graduation to locate a financially stable career in the public sector.

– FRANK DARGAN
Exercise Physiologist

I t was the night before the EPC exam and all through the house, there were sounds of music and people having fun. Then, a moment of panic set in – "Tomorrow, I take the EPC exam." As instructed, my plan was to get plenty of sleep and avoid alcohol. Upon waking the next morning, the only thing that got me out of bed was that I knew I had to sit for the exam. My parents would kill me if I didn't. In six hours, it would be over. All my anxiety and fear of not knowing the right answers would be over. No more school for me. Finally, I find myself at the test site and meeting up with several of my friends. We were taken to a room to start the 200 multiple choice written exam. We had four hours to complete it. At 175 questions, I got tired and absolutely worn out

The best college students can do is to give their best while in school. It is a time in their lives that is seldom repeated. And of course it not just about courses, there are many other things that help make up their thinking and views regarding the profession of exercise physiology.

thinking none of my answers made sense. I kept saying to myself, "I should have studied more." Part II of the exam was hands on, where I rotated from one station to another, first the 12-lead ECG and treadmill, followed by exercise prescriptions on the bicycle ergometer, and then the analysis of muscles, flexibility, and something else. I don't remember the fourth station. It is all a blank now. Each of the four stations was 30 minutes in duration. You could see the anxiety in the faces of the candidates when passing them during the rotations. A few were crying, which made me think that I should have studied harder when in school. The teachers tell us to study, but we are too busy working or having fun. As six hours of testing came to a close, I knew I had failed and decided that I would work for Bob's Gym. He is a nice guy, and I will just have to make on \$12/hour with no health benefits. The next day I got my results. I had passed. I was a Board Certified exercise physiologist.

This example of the EPC experience brings home the anxiety that candidates experience when they commit to taking the Board Certification to practice exercise physiology. Understandably, it is a major accomplishment. When it is completed, everything falls into place. After all, in most cases, the tuition to attend college isn't a small thing. Most students must repay big loans after graduation. It is fair to say the stakes are high. Passing the exam helps to ensure that the exercise physiologist is believed to be a credible healthcare professional. Failing the exam will only cause doubt in locating a good job. So, college teachers in particular, why not take the time to share the following information with your students?

The exercise physiologist's professional education is separate from the exercise science or sports science programs. That's why the certification model under the ASEP leadership is what matters.

The Individuality of Learning

Everyone learns in his or her own way. Often, this means that learning the muscles that flex the shoulder or adduct the thigh is done at one's own pace. Hence, it is helpful in preparing for the EPC exam that it may take one person a few minutes every other day and another person several hours daily. This point is generally understood among students, but a little reinforcement is likely to be helpful. Plus, it

is important for candidates to get the message that staying up late and trying to memorize everything the night before is generally a waste of time. The exam is a composite of content across many different academic courses; all of which requires studying throughout the entire exercise physiology program. It is not likely that a person can put everything together in one or even two nights of study. Many of the questions require the ability to think critically, which is acquired over at least two years of synthesis of the exercise physiology content.

The EPC Web Site

To begin preparing for the exam, go to the EPC web page located on the ASEP web site (<http://www.asep.org/services/EPCexam>). There you will find the current edition of the EPC Manual and everything you need to know to sit for the exam. Note also that the web page is full of information about the exam content, topic areas you should emphasize in your studying, and how to study for the hands-on part as well (<http://faculty.css.edu/tboone2/asep/ASEPepcPART2.pdf>). The candidate must successfully complete both components to receive ASEP certification. We urge those interested in becoming EPCs to read this study guide carefully.

Part II of the examination is designed to test the hands-on knowledge and application of exercise physiology using equipment typically found in exercise physiology laboratories. All candidates should demonstrate competency in at least the following areas, although not every area will always be tested:

- Implement a specific exercise stress test protocol in healthy and unhealthy populations, including an understanding of risk stratification.
- Demonstrate an understanding of contraindications, risks, and safety precautions, along with the interpretation of appearance, symptoms and significance of resting and exercise ECG patterns.
- Collect and analyze submaximal and maximal physiological data.

*Exercise physiologists do not
need permission from others
to think and to grow as
professionals.*

- Determine and interpret blood pressure at rest, during exercise and recovery following exercise on different ergometers, and identify potential sources of error.
- Demonstrate knowledge of exercise prescription and the ability to organize and administer exercise and fitness programs.
- Determine body composition and flexibility measurements using standard laboratory equipment.
- Demonstrate the ability to educate and/or counsel individuals in starting fitness and endurance programs.
- Demonstrate an effective and safe weight lifting/conditioning program for normal and special populations.
- Demonstrate special exercises addressing the musculoskeletal and fitness needs of various age groups, obesity, and those with low back conditions.
- Demonstrate knowledge of supervision and administration of health promotion and fitness programs.

The information provided in the study guide is intended to help qualified candidates prepare for the EPC exam. The EPC certification and the Board of Certification were first conceived, developed, and supervised by the Board of Directors of the American Society of

Because exercise physiologists have dichotomized themselves into teachers and practitioners, there is little appreciation among teachers for the obstacles and challenges faced by the practitioners.

Exercise Physiologists (ASEP). The specific objective was then and still is to develop and ensure the continuation of a credible credential.

For example, the Board of Certification may revoke or otherwise take action with regard to the application or certification of an individual in the case of non-compliance with ASEP membership, annual fee, ASEP Code of Ethics, and the Exercise Physiologist's Standards of Practice. Hence, the EPC examination is designed to ensure professional competence among exercise physiology

practitioners, and to promote exercise physiology professionalism. And, there are other personal and professional benefits:

- Take your resume to the next level with the "EPC" - Exercise Physiologist Certified."
- To gain professional status for a job interview or to attain promotion.
- For prestige (e.g., to gain acceptance or a title such as "Exercise Physiologists Certified" with The Center for Exercise Physiologists-online).
- Board Certification Registration with the ASEP organization.
- Improve your education and resume so you can get that job you want or protect the job you have.
- Opportunity for ASEP Committee and Board Member position.
- To obtain professional qualifications and education previously missing in exercise physiology.
- To position yourself with the opportunity to be a paid EPC Evaluator.
- To become a Fellow of the ASEP organization.
- To increased self-esteem and respect from other healthcare professionals.

Be Prepared

To begin with, rely on what you have learned in your courses and during your study. Where appropriate, to fill in the gaps, search your books or those in the library for all the details you can learn about hot topics. Also, take full advantage of your teachers. They, too, have access to articles along with new textbooks that may loan to you.

Professionalism demands that exercise physiologists develop a credible body of scientific knowledge and use it under the leadership of those who are ASEP exercise physiologists.

The ASEP leadership believes that all this upfront thinking will pay off. So, be confident that you will do well with the test. Remember that the exam was prepared by the Board of Certification to welcome candidates into the profession of exercise physiology. The

majority of the people who take the EPC exam pass it.

Be confident from the very moment you begin the test. Don't allow the first few questions to get you down. Keep going regardless and, most importantly, keep a positive outlook throughout the exam. Part of this latter strategy is to go to the test site in comfortable clothing. Eat a meal that you are comfortable with, and always get a good night's sleep before. If you are on campus where the exam is being given, you should have no problem. But, if you have to travel some distance, perhaps, from a hotel to the test site, then, get up plenty early to allow for transportation and location issues. That's just life. If something can go wrong, it usually does. So, make sure you have plenty of gas or money. Always have a backup plan, particularly phone numbers to whom you can call if you are delayed.

Academic programs should help their students prepare for graduation, career opportunities, and the interview process.

When the test begins, do your best to take time with each question. Don't get in a hurry. When you come to questions that require calculations, be sure your calculator works. Don't leave anything to chance, especially with the instructions that require a photo ID card. After you have figured out exactly what the question is asking, then go about answering it without getting too involved (i.e., don't get into the habit of second guessing yourself). And, when you think you are right, then, go for it. Don't change your mind. Stay relaxed and calm so you will be free to think clearly.

Identifying Your First Job

Now that you are an EPC, it is time to start your career as a healthcare professional. Of course it would be great if you had several offers and all you had to do is choose your employer. The reality is that the public sector and others in and on the edge of healthcare are not knowledgeable about the EPC. Like all other things in life, change is more often than not a very slow process. A career in exercise physiology isn't one take lightly. It requires a college degree, Board Certification, and unwavering determination. Now, it is time to put the pedal to the metal and get on with life.

The ASEP leadership is very much interested in exercise physiologists choosing an exercise physiology specialty (e.g., sports training and athletics, childhood obesity, or rehabilitation to mention several and) and employment that you are truly passionate about. So, where do you begin? First, it is important to point out that the need for credible exercise physiologists is expected to increase due in part to the aging population and other factors associated with a sedentary lifestyle. As a result, exercise physiologists are in a unique position to become recognized as experts in prescribing exercise to decrease the negative effects of diseases and disorders such as obesity, musculoskeletal pain and discomfort, depression and anxiety, and risk factors for cardiovascular diseases.

Today, more so than ever before, recent graduates are in an excellent position to ask the following questions: Are you interested in working in a hospital, say cardiac rehabilitation? Do you want to start your own healthcare business? Are you interested in working locally or is relocation an acceptable option? What type of advancements within the organization is possible if the job is in a rural area or in a big city? Do you have a sense of the salary range and advancement opportunities? In addition to these questions, there are others

Students must see examples of professionalism while in school. Through the teacher's actions and interactions with students and colleagues, students can develop the correct sense of what is important. Then, they will be able to exemplify the same in their practice of exercise physiology as practitioners in the public sector.

that should be considered. For example, have you started work on your resume? Every job search requires a new resume. It is imperative that your resume contains at least the following elements: List of qualifications, your expertise and work-related experience, major accomplishments, education, certificates, and degrees, your hands-on skills, professional organizations, and references (available upon request).

It's time to begin finding the job that is right for you. The first place to look is the Internet. The exercise physiology links feature a variety of employment opportunities. Of course, the ASEP leadership features a list of jobs on the web site

and throughout the ASEP electronic journals and ASEPNewsletter. Be sure to speak to friends and, frankly, anyone who is presently working in exercise physiology about job opportunities. Networking has certainly proved useful when conducting a job search. You may also want to consider the impact of working at a particular job by answering the following questions as: Does it allow your strengths to be recognized? Are you excited about starting to work? Is there a significant drive to work? How do you feel about your co-workers? It never hurts to speculate about these questions.

The Interview

Amazingly, recent graduates are so excited to get an interview that many fail to stop and prepare properly to it. Here are just a few questions every Board Certified exercise physiologist should have answers for at the interview: Why are you interested in working here? So, you believe this is the best fit for you? What are your greatest strengths, weaknesses? How would your friends best describe you? Are you a team player? What is your leadership experience? Are you a self-starter? Do you see yourself as having a willingness to learn? Naturally, the employer is interested in finding the perfect fit for the position. As a Board Certified exercise physiologist, you are ahead of others who are seeking employment. Your academic

Students should abandon the notion that the world is responsible for them. Life is the commitment to live regardless of the obstacles. Getting a college degree is a great first step. The second step is the EPC credential. The third step is to take full measure of what must be done and, then, do it.

training is actively sought after, and your hands-on laboratory skills are valued in today's market. The future looks very bright for EPCs.

You have the opportunity to ask questions. By asking your questions, the employer will get the impression that you have taken the time to determine whether the position is a good fit for the both of you. Such questions might include the following:

What is the organization's philosophy in hiring just Board Certified exercise physiologists for this position? How many EPCs

have been hired in the past several years? May I see where I would be working if I were to be hired? In general, how long have exercise physiologists worked in this position before relocating elsewhere? Does the employer help support the employee's continuing education? Obviously, there are more questions. The point here is to place emphasis on doing so. It is always best to know as much as possible about the position, employer, and the location (city/state).

Finally, be open and honest and, in short, be yourself at the interview. When asked, tell the employer what you feel you can contribute to the position. There is no need to be overconfident and go beyond your abilities. Most employers will see through such behavior. Since this is likely to be your first position, focus on those aspects of working with clients and/or patients. Share with the employer that you are interested in learning to lead and improve yourself and how your academic training can contribute. Naturally, you want to be confident, poised, and professional.

The interview is about your qualifications. Keep it professional. Do not bring up your friends, family, or pets. Leave your personal history at home, and do not ask the interviewer personal questions.

Always speak the truth, and if you don't know the answer to something, then, say so. Do not feel that you must have the answer to every question.

Do dress appropriately, tastefully, and professionally for the interview. Solid colors (e.g., black or navy blue) along with a white shirt are always best for both genders. Do not wear gym clothing, especially athletic

shoes to the interview. If you use cologne and aftershave, do so sparingly or not at all for the interview to avoid triggering an allergic reaction in the interviewer. Make sure your breath is fresh and clean, and dispose of the gum or breathe mint before entering the interview area. If you have a handbag or briefcase with you, make sure the papers are organized, clean, and professional. This also applies to your glasses and frames as well as your jewelry. Remove nose rings, and lip and tongue studs since they are not appropriate in a professional interview. Cover any body art (tattoos) if possible.

Arrive at the interview with all the appropriate papers that might have been requested by the interviewer. Organize them in your handbag or briefcase, and when requested present them accordingly. Similarly, upon meeting the interviewer, engage in a brief greeting often while shaking hands. And, as to the latter, make the handshake firm but don't break bones in the interviewer's hand. It is much like making confident eye contact, that is, it is unnecessary to stare the person down. Also, you don't want your cell phone going off during the interview. Turn it off before the interview, not after the introduction.

The interview is about your qualifications. Keep it professional. Do not bring up your friends, family, or pets. Leave your personal history at home, and do not ask the interviewer personal questions. As much as it seems logical to do so, do not bring up salary. If the position is offered to you, the salary will be addressed. Be professional and remain that way throughout the interview. This includes following up with a simple yet personal note expressing your thanks for the time and interest in you.

Writing a Brief Narrative

It is important to provide the very best written narrative possible at the interview. Be sure to include specifics about any work related experiences that might be viewed in a positive light. Identify internships along with the kinds of clients and/or patients you work with and what the responsibilities were. Describe what you know, what you learned from your courses, and why you are interested in the position. Demonstrate how you can solve problems and work with others in the organization. In general, the narrative shouldn't be too long but of sufficient length so as to properly emphasize your skills in exercise physiology as well as your ability to write and express yourself. Always double-check your writing style and use of words by editing the narrative several times before submitting to a potential employer. Finally, be sure to print your narrative on white, high-quality paper using a top-of-the-line printer. Remember, the narrative represents you. The information in the narrative is important in helping to convince the employer that you are the right person for the position.

Where to Start?

Sometimes the idea of locating finding a job after graduation is simply too much. As they say, “We can’t see the forest for the trees.” Fortunately, there are several good sources to help you know what the ASEP leadership believes about exercise physiology and healthcare (Boone, 2006; Boone, 2005). It should be pointed out that a certain percent of exercise physiologists continue their education beyond the BS degree (i.e., masters and doctorate degrees). In accordance with the ASEP efforts, a growing number of exercise physiologists are starting their own healthcare business. At first glance, this may be too hard for most recent graduates. The ASEP leadership doesn’t think so. That is in part why they developed the EPC credential. They believe the Board Certified exercise physiologist has the academic training and hands-on experiences to improve the quality, efficiency, and equity of healthcare by encouraging a more active lifestyle through education and testing. After all, healthcare is one of the fastest growing employment sectors in the nation and this trend is expected to continue, which is good for exercise physiologists. It should also reinforce the employment of exercise physiologists in offices of healthcare practitioners (physicians, dentists, and chiropractors).

Be professional and remain that way throughout the interview. This includes following up with a simple yet personal note expressing your thanks for the time and interest in you.

What does all this mean for new exercise physiologists? The short answer is that the percent of projected job growth will be good the profession of exercise physiology. Imagine the need for exercise and the understanding that exercise is medicine, and who is the expert in prescribing exercise – the EPC. All of this linked to the fast growing health problems in the U.S. That is why there will be a high demand for exercise physiologists, especially the EPC with specialty certifications.

Career Choice Examples



Desiree A (MA, 2004)

I am co-owner of Ahrens Exercise Physiology, a full service exercise physiology clinic. We are located in South Minneapolis at 48th Street and Nicollet Avenue. We offer metabolic assessments, personal fitness training, and nutrition and meal plans. My company has 3 Exercise Physiologists and 1 business manager. Two of the Exercise Physiologists are EPC and the third is studying for the next exam. Ahrens Exercise Physiology focuses on individual attention and exercise prescription by educated staff. The clinic is a renovated apartment building, offering private weight training areas, cardio rooms, and changing rooms. We facilitate a variety of goals, from running a marathon to weight loss.

My Masters degree in Exercise Physiology has given me instant credibility to work in this field. I have the knowledge and background to assist with my clients' goals. More clients understand the importance of a professional educated in the field of Exercise Physiology.



Pat A (BA, 1995; MA, 1997)

Currently, I work for a small medically-based fitness management company, LifeStyle Management. We have several sites (private and corporate) that we manage the fitness facility and services. We employ about 20 professional trainers (all have degrees in the field, but I'm the only EPC!), 10 massage therapists, 10 group exercise instructors and there are 6 manager's, including myself that run the show. Each site varies in size, having between 2 and 15 staff. I currently do all the marketing for the entire company and program development. My recent projects include an overhaul of our website www.lifestylemanagement.net and developing a "Virtual Training" program, which is a personalized exercise DVD for clients with challenging schedules. I also manage our testing office, which I use as a central testing office for several of our sites (so we don't need multiple metabolic carts). I also use this office for testing and training cardiac referrals from our medical director, who is affiliated with the Minneapolis Heart Institute. My degree from Scholastica gave me an excellent knowledge base, and critical thinking skills to become an effective communicator with clients. The ability to educate and facilitate their understanding of their body, and how it responds to exercise, is very valuable to them. My technical skills learned in exercise prescriptions class and ability to have a confident, calm "bed-side" manner has allowed me to be an effective tester, trainer, educator, program developer. Most importantly, at CSS I learned how to think, not what to think. To be successful in this profession, we must unite and understand that our daily work is far more an art than it is a science.

Erin R (MA, 2001)

From January 2002 to October 2005, I worked for Arete HealthFit. Arete HealthFit is a fitness company with two private, personal training centers in the Twin Cities metro area. At Arete, clients complete a comprehensive fitness evaluation, including measurement of the body composition (via the Bod Pod), resting metabolism, and cardiovascular capacity (via a metabolic analyzer) and receive a personalized fitness program. While at Arete I worked with clients who wanted to lose weight, clients who were recovering from disease and musculoskeletal injuries, athletes, and young children. Currently, I am back in school pursuing a master's degree in management. I am learning valuable skills which I hope will help me fulfill my dreams of owning and operating my own fitness facility.

The education I received at St. Scholastica set me apart in an industry that is saturated with people who refer to themselves as "Exercise Physiologists". Most of the clients I worked with had trained at other facilities with other "professionals", but they recognized the difference the first time we talked. They came to value the knowledge that I brought to their fitness program. Consequently, most are anxious for me to open my own facility.

Shane P (BA, 1996; MA, 1998)



From 1998 to 2004, I worked for the U.S. Air Force as a Fitness Program Manager on 3 different bases over the six years. In August, 2004, I started working at Community Memorial Homes in Osakis as the Director of the Exercise Physiology Department. I own PhysioLogic Human Performance Systems, a consulting company that focuses on the wellness program development.

The College of St. Scholastica's Exercise Physiology programs prepared me with the knowledge I needed to succeed in this emerging profession. Beyond the curriculum, the individualized attention and mentorship the professors helped me build confidence into what I was learning. I don't think I'd have the same aptitude, drive or passion if I'd attended a different program.

Jocee V (MA, 2004)



I am the Fitness Coordinator for the Rehabilitation Institute of Chicago Center for Health and Fitness. The Rehabilitation Institute of Chicago (RIC) has been the number one rehab hospital in the United States for the past fifteen consecutive years. The Health and Fitness Center is a 4,000 square foot facility specifically created for

people with physical disabilities; spinal cord injuries, multiple sclerosis, cerebral palsy, amputees, stroke, and blind individuals. Its purpose is to provide an arena for individuals to develop, maintain, and improve their physical well being. My duties at the Rehabilitation Institute of Chicago consist of managing the staff, interns, and fitness center, evaluating patients, designing exercise prescriptions, teaching educational sessions to staff, interns, patients, doctors, and therapists, teaching Arthritis and Parkinson's aerobic classes, developing at home exercise video's for persons with physical disabilities through the National Center on Physical Activity and Disability (NCPAD), being a lead investigator in two grant studies, along with several other miscellaneous duties.

My Master's in Exercise Physiology from St. Scholastica has allowed me to give my patients the best possible analysis, treatment delivery, rehabilitation, and professional guidance possible.

Chris B (MA, 2003)



I am a strength and conditioning coach in Duluth, MN, and have recently founded Impact Sports Training, a business dedicated to the performance enhancement of athletes. I am currently working with hundreds of local high school and collegiate athletes, as well as the UW-Superior Men's and Women's Hockey Teams. I am also the Assistant Men's Hockey Coach at UW-Superior. Prior to coming back to Duluth, I served for two years as the Director of Strength and Conditioning at PerformanceONE Athletic Development in Columbus, Ohio, as well as the Head Strength and Conditioning Coach for the Columbus Destroyers of the Arena Football League.

In 2003, I was offered an internship and worked for the United States Olympic Committee at the Olympic Training Center in Lake Placid, New York and trained athletes from both winter and summer sports. In addition to Olympic athletes, I've had the opportunity to train athletes from the NHL, NFL, NFL-Europe, and MLB, and serve as a lecturer and strength coach for USA Hockey.

I am certified by the National Strength and Conditioning Association as a Certified Strength and Conditioning Specialist (CSCS), certified by the American Society of Exercise Physiologists as a Board Certified Exercise Physiologist (EPC), and certified by USA Weightlifting as a Club Coach (USAW).

My MA in Exercise Physiology from St. Scholastica has certainly helped in my career advancement. I learned more in the first semester than I did in the four years I spent getting my BA. I realized, however, that I did not want to spend my career in a clinical setting, so I took my degree and went a different way. What it did was open a lot of doors for me. I got to know as many people as I could in my field, got as much experience as I could regardless of what the pay was, and made things happen. It wasn't long after graduating that I was offered a position as a Director of a large

facility. I was offered the job mostly because of who I knew. Networking is very important and can certainly create opportunities. One piece of advice for those about to graduate, don't expect people to start offering you jobs just because you have a degree. You need to work for it, and it might take a while. Just like a tool, a degree is worthless unless you use it.

Sarah D (MA, 2003)



Currently, I work in Tampa, FL at St. Joseph's Hospital in Cardiopulmonary Rehabilitation. I work full time as an Exercise Physiologist and a case manager for about 30 cardiac patients. On Mondays, Wednesdays and Fridays I monitor up to 8 patients at a time on 3-Lead heart monitors. They follow an exercise prescription comprised of aerobic and strengthening exercises geared towards reaching their personal goals. We take their blood pressure before, during, and after exercise. Meantime, our maintenance patients arrive exercising on their own and monitoring their own heart rate and blood pressure. We are there if they have any concerns about their vital signs or if they do not feel well. I take 12-Leads if necessary for patients. I schedule patients to have lipids taken and stress tests with their cardiologists. I also teach educational classes, such as, Heart Disease and Risk Factors, Stress Management, and Exercise Precautions and Guidelines. On Tuesdays and Thursdays I work with a Respiratory Therapist in Pulmonary Rehabilitation. I work with pulmonary patients taking their oxygen levels during each exercise mode. Of course, with any hospital job, there comes tons of paperwork. Our department is extremely organized and each paper has its own spot and/or certain required signatures. It is all set up and so it is very easy to follow along as long as you stick with your work!

Having my Master's degree allows me to relate well to patients by knowing exactly what is going on and what they can do to help themselves treat their heart/pulmonary disease. I can educate them efficiently and effectively with the right information. There is no way I would have gotten this opportunity without my degree. And having my degree allows me to have more choices when it comes to deciding what jobs to apply for.

Kevin R (BA, 2004; MA, 2005)



I am an Exercise Science Instructor at Winston-Salem State University, North Carolina. I teach several courses including functional anatomy, kinesiology, biomechanics, sports nutrition, and a few others. I am also responsible for health promotion in regards to Phase III and IV cardiac rehabilitation as well as the application of physiological training principles to cardiac rehabilitation, adult fitness clients and athletes.

My EXP degree has helped me reach my goal of teaching exercise physiology in a collegiate setting by giving me a strong background in the exercise physiology field. It has given me the ability to extend my knowledge of the effects of exercise on the body to my students, whom I hope will use that knowledge to improve the uniqueness and need for the exercise physiologist profession.

Danita S (MA, 2005)



Soon after completing my graduate degree, I was hired as a consultant for an occupational wellness company. My duties include group presentations and one-on-one interventions with high-risk employees relating to cardio-pulmonary disease, obesity and diabetes. Currently my coverage area includes the Duluth area and central Minnesota, and may expand into the Twin Cities Metro area in the near future. My credential as a registered dietitian enabled me to get this position, but my graduate degree increased my hourly contract rate by \$10-15 per hour. Also, when it was discovered that my MA was in exercise physiology, I was asked to participate in planning exercise challenges. My career interests lean toward chronic disease, and since most of the high risk employees I work with are at least 35 years old, I'm able to work with the types of health issues which interest me most. These include chronic joint pain and neuropathy related to diabetes and obesity, and other limitations caused by cardiac and pulmonary disease.

Joe W (MA, 2003)



Upon receiving his MA in exercise physiology from the College of St. Scholastica, Joe moved to Minneapolis to begin work on his PhD degree in exercise physiology at the University of Minnesota. Joe's research focuses on bone, muscle, and tendon and how these tissues are affected by various loading modalities as well as certain disease states. Joe recently traveled to Manchester, England to learn some of the novel and cutting-edge techniques being used by Dr. Joern Rittweger's group to non-invasively assess the mechanical and structural properties of bone and tendon via MRI, ultrasound, and computed tomography. Joe and his colleagues will attempt to use unique models like ACL reconstruction and stroke to assess the effects of various degrees of unloading magnitude and duration on the musculoskeletal, vascular, and metabolic systems.

Joe has taught a number of courses at the University of Minnesota. He has been an invited lecturer in 7 undergraduate and graduate level classes in the School of Kinesiology. He also assists the head strength and conditioning coach at Minnesota on a volunteer basis and is co-chair of the University of Minnesota Sports Biomechanics Special Interest Group. Joe has his own column in the National Strength and Conditioning Association's *Performance Training Journal* and has written for that journal since 2004 in addition to being an editorial reviewer.

Aside from his doctoral program, Joe continued his competitive power lifting after leaving the College of St. Scholastica and set 2 Minnesota state bench press records in the 165- and 181-pound weight classes before suffering a complete rupture of his pectoralis major muscle while competing at the national bench press championships in September 2005. Surgical repair was performed immediately after the injury and only time will tell if he can return to his pre-injury level of performance.

Azur B (BA, 2002; MA, 2003)

I am currently working at St. Luke's Hospital in Duluth. I do a number of different jobs. I work for our Heart Partners program, cardiac rehab, stress testing, holter and event monitoring and EKG's. I have had a couple of title's since I have been here for the past three years, Exercise Assistant (Personal Trainer) Diagnostics Technologist (EKG Tech), and Exercise Physiologist. Depending on what job I do, I am paid by that position.



Jake H (BA, 2002; MA, 2003)

Jake joined the Wolfe-Harris Center for Clinical Studies (WHCCS) in 2004 where he serves as an Exercise Therapist/Research Assistant for several federally funded randomized clinical trials. In this role he performs initial eligibility screening and informed consents with potential participants and provides supervision and guidance to patients in supervised rehabilitative exercise and home exercise programs.

Erin H (MA, 2001)

At the time of entering the EXP program, I had decided I really wanted to teach at the college level. Because of my Kinesiology background, I always envisioned myself teaching in a Kinesiology Dept. However, almost upon the completion of my thesis for my EXP Degree, I applied for a part-time position teaching Human Anatomy and Physiology laboratories at the University of Wisconsin-Eau Claire in the Biology Dept. This is my fourth year of teaching there. The part-time position works wonderfully for me in the fact that I'm married with a daughter and am pregnant with my second baby. Other perks of the position are that I receive full state benefits at only 50% contract. Additionally, of course, I have much vacation time. Don't get me wrong, teaching is and can be a 'burn-out' job, and it does take a lot of prep time to be ready for classes, but I enjoy the students and I enjoy learning. The College of St. Scholastica, and more specifically, the EXP Program, really enabled me to do what I enjoy doing and I am grateful for that. Further, I have considered going for my doctorate in EXP at St. Scholastica if a program becomes established there. My experiences with the professors were above and beyond what I ever expected.



Todd C (BA, 1998; MA, 1999)

Exercise Physiology has been good to me through the years. After finishing my clinicals at the Rehabilitation Institute of Chicago I worked at Unity/Mercy hospital in their cardiac rehab departments. This led me to an opportunity just outside of New Orleans as the Director of Community/Corporate Health Exercise Programs at St. Charles Parish Hospital. They did not have a current program and had asked me to start something from the ground up. I worked there for just over 3 years and during that time met my wife. That is what brought me to Wisconsin where I went back to school for my RN degree and license. I am currently an RN working at a small rural hospital in Wisconsin called Barron Medical Center.



Ann M (BA, 2004)

After completing my BA in Exercise Physiology at The College of St. Scholastica, I started working as a Physiology Lab Instructor for the Anatomy/Physiology course at the school. Many of the lab exercises deal with the physiologic processes that I studied in depth as an undergraduate in the Exercise Physiology program (i.e., cardiac function/ECG's, muscle contraction, respiratory function, blood pressure) and with my background, I was well prepared to answer questions and relate the concepts covered in class. Through the Exercise Physiology program I developed greater concern for promoting public health through education and effective health care policy. In the fall I will start addressing these issues by working toward a Master's in Public Health at George Washington University.



Jonathan B (BA, 2004)

After graduation I moved to St. Louis, MO and worked in cardiopulmonary rehabilitation for three years. This was great opportunity and significantly deepened my understanding of cardiopulmonary physiology, pathophysiology, and intervention. This experience inspired me to further my medical education. I am currently studying in Augsburg College's Physician Assistant master's degree program. My strong education and health care experience that I gained as an exercise physiologist strengthened my application significantly. My background in exercise physiology has also been very beneficial to my studies. Upon completion of the physician assistant program, I plan to work with a cardiology group in the twin cities.



Tim D (MA, 2004)

I currently work for PRACS Institute, Ltd. It is the largest privately owned pharmaceutical research facility in North America. We do various types of studies for various pharmaceutical companies, and it is my responsibility to make sure these studies are completed correctly, successfully, and with high quality assurance. When completing my thesis at St. Scholastica, it was my responsibility to make sure all testing was done correctly as it was designed. In order for the findings to be deemed factual, it was imperative that every tiny detail was observed. If not, then there can be no validation to the testing or findings. It is this learning and training that helped me understand the foundation with my current employment, and what makes me successful in all I do.



Jeremy G (BA, 2004; MA, 2005)

I am currently living in Littleton, Colorado on a small ranch. I am the Athletic Development Program (ADP) Director at the High Intensity Training Center in Highlands Ranch, CO. We use a metabolic cart to perform VO₂ max and RMR tests for our Hit-Fit (recreational adult athletes) and Lighten-Up (weight loss) clients. We also use the Bod Pod for body composition tests for those clients along with our Speed-Up (ADP) clients. My clients have been (and will continue to be) impressed with my vast knowledge in the field of EXP I gained from my time at CSS.

I am a Certified Strength and Conditioning Specialist (CSCS) through NSCA. My degree, along with that certification, will give me enough clout in the field to pursue a strength coach position with a college or professional basketball team. Another route I may choose to take is to train alpine skiers. I would like to eventually start my own business where I would cater to those who come to Colorado for extended periods of time to ski/snowboard. The business would be geared toward altitude acclimation for said clientele. I feel confident that being in a state where fitness is the focus of many, I will find success in whatever I choose to do.



Tom R (BA, 2001; MA, 2002)

I am currently working as a certified athletic trainer at The College of St. Scholastica and have been employed at the College since August, 2002. As an athletic trainer, it is my goal to prevent, identify, treat, and rehabilitate athletic injuries in varsity athletes at the college. I also work with the University of Minnesota Duluth athletic training program, educating their students when they come to St. Scholastica for their clinical rotations.

I feel the exercise physiology program at St. Scholastica prepared me well for my current career choice. Obtaining my masters degree clearly gives me an edge when applying for athletic training positions that desire, but do not require, a masters degree. It also gave me the opportunity to reinforce and expand on what I learned as an undergraduate student, and developed my ability to educate others.

Liz W (MA, 2003)

An M.A. in Exercise Physiology has provided me with a sound knowledge base for a career in electrophysiology. Currently, I am employed at Abbott Northwestern Hospital and work in the Electrophysiology Lab. I assist Electrophysiologists during pacemaker/ICD implantation, monitor electrograms for diagnostic data and operate the catheter stimulation system during electrophysiology studies and ablations. The EXP degree has allowed me to obtain a job that provides an opportunity for continuous learning and essentially improves the quality of life for patients with arrhythmias and cardiomyopathy.

Marvin S, DPT, MA, EPC, CSCS

I graduated from Eastern Washington University in Spokane, WA in 2005 with his Doctor of Physical Therapy and prior to that in 2002 I received my Masters in Exercise Physiology from the College of Saint Scholastica in Duluth, MN. I also am a Certified Strength and Conditioning Specialist through the National Strength and Conditioning Association (NSCA) as well as a Certified Exercise Physiologist through American Society of Exercise Physiology (ASEP). Recently I have been working outpatient physical therapy as part of the team for rehabilitation of neuromuscular and orthopedic patients. I also works two days through the Chronic Pain Clinic.

I have been working in- an out-patient physical therapy clinic through a large teaching and research hospital in Portland, OR. I have made great use of the EPC in means of having a more complete understanding of the systems in the body and their interactions with both various external stressors like exercise or weather, as well as internal stressors like disease and medications. I see a large number of patients that are not straight forward disease cases, and my EPC education has allowed me to better understand how cardiac pathology or muscle pathology will interfere with their prognosis and thus allow me to educate them and improve my treatments. This, unfortunately was not a very strong portion of my PT studies. The studies for the EPC, as well as the MA in exercise physiology from the College of St. Scholastica, enable me to assist in identifying specific conditions (e.g., AV block), which improves treatment strategies and patient outcomes. I feel that this is a must for any person attempting a career in patient or client centered care so they have a holistic view and appreciation of rehab, training or education of these populations.

References

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