SEPTEMBER 2022

ENGWELLNESS ECE GRADUATE NEWSLETTER

Produced by: the ENGWellness Ambassador

IN THIS ISSUE

Your New ENGWellness Ambassador!

Hello hello! It is so wonderful to meet you all! My name is Spencer and I will be your new ENGWellness Ambassador for the Fall 2022 Term! I am a 4th year psychology student here at the University of Waterloo! I got interested in psychology through volunteering in specialized-care homes throughout high school. As of right now, I plan to pursue a career in mental health to learn how to help people as best as I can!

At UW, I've been a part of the 2022 Science Orientation Team welcoming in the new first year students (and hyping up those 2nd year students who wanted to enjoy some in-person orientation!). In my free time I love the outdoors; going on hikes, camping, or kayaking whenever I can! I am also a HUGE fan of the video game Dark Souls! Anyways, I am SO excited to be a part of the ENGWellness team and can't wait to meet everyone one of you!

WELLNESS BREAKS

Below are a couple of wellness breaks taken from our website. These are compilations of breaks and/or tips to help improve your well-being.

Tired, cranky, or unable to concentrate? These are just few things that happen when people are hungry. Snacking while studying is a great tool to increase your productivity. However, if the foods you eat are overly processed, it could make you even more tired. Choosing the right food can increase your brain's ability to focus. So what are the "right foods"? Foods that are high in fiber, protein, and healthy fats provide an awesome combination to help you along during those long hours studying or just functioning in general. Some simple examples are nuts (almond, pistachios, cashews), dried fruit, and frozen grapes. If you have access to a kitchen, the following super quick and easy recipes are fantastic to try out. These help to fuel your body and clear your mind from that intense work you just did.

- No-Bake Oatmeal Cookie Energy Bites
- Crispy Garlic Bread Chickpeas
- DIY Spiced Popcorn
- Chocolate-Peanut Butter Granola Apple Bites
- Avocado Toast

WHAT MAKES A SUCCESSFUL STUDENT? AN INTERVIEW WITH PROFESSOR AND ASSOCIATE CHAIR OF GRAD STUDIES CHRIS NIELSEN

A brief introduction

Greetings everyone, my name is Chris Nielsen. I will start as the associate chair of graduate studies on July 1st. I have been a professor in the department since 2008, so I've been around for almost 14 years now. For the last four years prior to becoming Chair, I was graduate officer, so I basically reviewed and dealt with MASc and PhD admissions in the department. So, certainly for all the research students, I probably have read their application package and are familiar with their background!

What are some important character traits that you've seen in successful grad students?

I would say the most important character trait is intellectual curiosity. This desire, this curiosity; you're not just going through the motions to get through school, you're actually curious about what you're engaged in. This is very hard to find and it's not quite passion. I mean, passion is important, but it's just this curiosity, this desire to want to learn, to really learn the topic you're working on. Another trait I would say is courage. Courage in two ways. Firstly, the courage not to be afraid, to not make mistakes. Sometimes you're going to make a mistake when you're trying to do research. You're going to go down dead ends sometimes, and this also goes for our course-based graduate students. Courage to present your ideas as clearly as you can. Sometimes students are afraid to present their idea or they're not as confident as they should be. So a confidence is necessary to adequately present your ideas so that other people can understand them. That takes courage. Sometimes students hide behind fancy language, to try and avoid clear representation of their ideas. Lastly, I'd say grit. I mean, the thing is probably cliché now, but there'll certainly be points where things are hard and you just have to kind of work your way through it and you have to be able to deal with it, and deal with lots of setbacks along the way.

How necessary is it to have work-life balance in grad school?

I think it's extremely important. When you're really engaged in Graduate School, it can be all consuming. I remember, and it still happens, that you wake up in the middle night thinking about something that you've been working on. I think it's very important to get away and sometimes you know, you can get this spark of creativity while you're away, like, for example, I like to go in the outdoors. I like camping. And I always bring a notebook with me because if I get an idea, I want to be able to write it down. So I do find that that work life balance is very important. In terms of recommendations on how to achieve that, I think it's a good start to try and learn that community that you're a part of. So, if you're at Waterloo, try to go to the market on Saturday, or go for a bike ride. There's lots of things to do in the community, and this is a way to sort of get away from the office. My main thing would to be to try to get away from screen time. Sometimes the way I like to think about it is if work lights up one part of your brain and activates it, it’s good to have other things that activate other parts of it. And some tasks are better at this than others. For example, certain kinds of recreational activities are able to get you into the moment more than others, and get into a "zen" state if you will. This for me is sports, but for others it can be different things. So I would definitely recommend trying to find activities that activate this state of mind to be more in the moment.

What practical advice would you give to graduate students to have a productive and successful grad career?

I'd say time management is definitely a big one. Especially in engineering. Undergraduate engineering education is very structured and your day is almost planned for you because you have courses and deadlines constantly coming up and it's just very structured, whereas in Graduate School you have a lot more control over how you use your time or how you schedule your time. So, trying to be structured with your time is, I think, a very important aspect of that. Personally, I like to do research every day. If you're a research student, even if you have courses, even if you spend at least some time doing research every day, I like to do it in the morning. I find I'm at my most creative during that time. My brain is kind of freshest, but it really just depends on the person. Then maybe you also have to work on your TA jobs or your courses. You could do that in the evening if possible, or in the afternoon, right? So I don't know, try to carve some time out of each day for research. I think that's kind of a good habit to get into if you're a research student. If you're an MEng student and your degree is course based, then it's a bit different. But if you have a project, maybe you want to do your projects in the morning and homework in the afternoon.

How important is it for people to figure out what works for them?

Everyone has their own way of working and you have to optimize what works best for you. I think that's very important. In terms of ways to work, I've supervised many graduate students and they all had different ways of working. One of the great things about grad school is that you can fine tune your schedule to what you want. Networking is another one where some people are more outgoing than others: they like to be networking. But I do think that that's a very important part of it and so while it is important to find your own way, it's also good to get a little bit out of your comfort zone and work on some of these things that maybe you're not as good at., but that you recognize are important as well.

What are some of the biggest difficulties students face and how have you seen them overcome those challenges?

There are a couple of things. First thing is isolation. One thing that certainly happens if you're doing research, is that as time progresses, you're the person that knows your problem the best. You know your particular problem better even than your supervisor in some cases, right? Your supervisor might know it as well, but like, you're the one that's most intimate with it. And this sometimes can be isolating. Even if you're working in a project as a team, the part that you're working on might be the part that you really know best. That can feel isolating. The second piece here is this feeling that people don't belong or I'm not smart enough or something like that -- imposter syndrome. I think in both of these cases the best thing to do is to just talk to people. I think talking to your lab mates is really fundamental. It's important to not get into this kind of isolated feeling that, because when you're left to think by yourself you think you can't solve this problem that only you know. You think everyone else is doing so well and I'm doing so poorly. I don't belong here, but just talking to other people you will realize that you're all going through the same sorts of things. So I think that's the most important thing.

What advice would you give to a grad student that feels overwhelmed and/or burnt out by their work?

The first thing I would say is that the department has put out a lot of resources for you like The Wellness team. So certainly try to use the resources that are available to you as much as possible. You're not alone, you don't have to go through this alone, so try to use the resources. Beyond that, circling back to what I said before, I do think getting outdoors, even if it's just going for a walk after dinner, simple outdoors things like that simple stuff can make a big difference. This may be a generational thing, but I think getting away from a screen for a bit is very important. This can be practical thing that makes you realize that, hey, there's a bigger world out there than maybe what you're dealing with.

How common is it for Grad students to feel overwhelmed or burnt out?

It really depends on the type of work you do. I think for some people that are doing very experimental work it can be especially challenging. For example, designing and fabricating computer chips, there's a lot of stress when you send it away between manufacturing and whether or not it works because this could delay you by six months of graduating. I think that part can be quite stressful. So those kind of very experimentalist type of people, I think that they sometimes suffer some of these things. How common is it though? I guess I don't have a good feeling for that. I don't know the answer to that. Maybe I'll learn as I go in this role. In my previous role I dealt with some students who had trouble with their advisors, but less so with students who had troubles of burnout, so I'm not quite sure about this one at the moment.

Can you talk a little about your own grad school experience and why you chose to do what you do?

I graduated from Waterloo in the Class of 2002, and, at the time, was interested in robotics and automation. My area is control systems, and I took all the courses that I could in that area and did well in school. So, at the time I had a chance to go into industry, and it would have been a good offer, but I also had the chance to go to grad school, and I convinced myself that I wanted to try it out. I had done well academically so I thought maybe I'd be good at grad school. In grad school, I really started to realize the importance of your advisor. My advisor was outstanding, and he lit a passion in me for what I was doing and I guess I got a little bit lucky in that the problems I was working on I was able to have some insight into and progress through and solve to complete my masters. Once I finished my masters I wasn't convinced I wanted to do a PhD because I knew that if I did a PhD then the road to becoming a Prof was a risky one. So, after talking to a lot of my family members and advisor, I decided to go for it, and here I am now. I will say this about Graduate school in terms of whatever follows it in life: It is the most pure period of research and intellectual growth that I had in my life. Once you go into industry or academia, lots of other things start to take up your time. I thoroughly enjoyed graduate school, very much, and I really look back fondly on that period of my life.

What are some *personal* (not vocational or academic) benefits of grad school?

Critical thinking is a huge one. There is a lot of media out there that is often not trustworthy and so being able to think for yourself is a necessity. Critical thinking is certainly helpful in a job and your career, but its also helpful just to be a critically thinking person. Another one is communication. Being able to communicate clearly and succinctly is something that you get quite a bit of practice in in grad school, and that's also something that is very useful for, well, everything. Clarity, or cutting through the noise, or being able to clearly identify the issue at hand or what it is you're trying to deal with, is self-evidently useful as well.

What are some reasons for students to not do well or not get what they want out of grad school?

People often take the wrong approach when they look at a Master's or PhD degree. They often think the courses or the thesis is the 'thing' you're trying to accomplish, and yes, you will accomplish those things along the way, but when you're in a research degree, you want to focus on the research. You want to publish and disseminate your work, ideally publishing in high quality venues. Your degree should be thought of as an opportunity to do original research and your time should be spent trying to take advantage of that. Another thing to keep in mind is that graduate school is not professional or vocational school. Yes, you may learn how to use, say, a particular software package, depending on the courses you're taking, but what you're hopefully learning is actually how to think. For example, how to formulate problems. You'll also learn transferable skills, skills that will help you solve open-ended problems which you're bound to encounter no matter what you choose to do afterwards. I often say with my colleagues "what is our product as academics"? You know, if you had to turn academia into industry, what would it be that we produce? Well, the product is hopefully highly educated people who can go out and do great things in society. So going back to an earlier point on the example where you fabricate a chip: the product is not actually the chip, ultimately the product is the students who are going to go out and use their education to help other areas of society.

Any general advice or comments for ECE Grad Students?

Firstly, take advantage of your opportunities. You're young, you're creative, you're excellent students, you know, take the chance to take a risk and be ambitious. You'll never know what you can accomplish until you try. It's a perfect opportunity to push yourself and do amazing things, so please take advantage of it. Second, Grad school can be hard. If research were easy, we would just call it search: you would just search for the answer and there it would be. So it's important to be prepared along the way that there is going to be roadblocks. Things won't always go your way, but that's okay. Don't be discouraged, take advantage of the opportunity.

UNIVERSITY OF WATERLOO

SOME UPCOMING EVENTS FOR ECE!

Therapy Dogs - October 24, 5:30pm - 6:30pm in E5 3102

Conrad Grebel Music - TBD!

And this is just the beginning of an awesome event filled term!

Be sure to follow our Instagram account (@uwengwell) for updates, new events, and volunteer opportunities!

WELLNESS REPRESENTATIVES

The goal of the Wellness Representative initiative is to help monitor and enhance the well-being of MME and ECE Undergraduate and Graduate Engineering students in an organic, peer-supported manner. This is done not only by championing wellness initiatives and promoting wellness strategies within these departments, but also by encouraging interactions amongst peers that would occur organically anyways. If you are interested in becoming a Wellness Representative or want to learn more about what Wellness Reps do, visit our 'Get Involved' page on the ENGWellness Website or click the hyperlink!

ADDITIONAL RESOURCES

The following mental health supports are available to you
Counselling Services: 519-888-4096

The following crisis supports are available to you as well
Crisis Services Canada: 1-833-456-4566 or text 45645
UW Police: 519-888-4567 ext. 22222

Academic Support

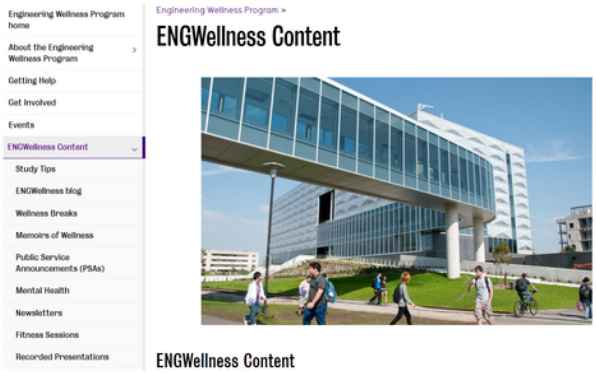
- Student Success Office: Compilation of learning and life skills resources.

Contacts to book a one-on-one coaching session:

Sam Vandekerckhove (MME) - srvandek@uwaterloo.ca / ENGWellness@uwaterloo.ca
Leah Foster (ECE) – ljsims@uwaterloo.ca / ENGWellness@uwaterloo.ca

ENGWELLNESS CONTENT

Check out our ENGWellness resources including mental health pages and PSAs. All resources as well as previous newsletters can be accessed under the ENGWellness Content section of our website.



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