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The first NSA Social of this year is planned for November 10th at 7-11pm at Hudsons on Campus. Everyone is welcome. THERE WILL BE FREE WINGS – DON’T MISS IT!
**2010 NSA Executive Bios:**

**Daniel Paddon: President**

Hey Everyone!

My name is Daniel Paddon, and I am very excited to get to serve you as your Neuroscience Students’ Association (NSA) President this year. I am in my 4th year and can tell you that things have grown so much in the 3 previous years I’ve been a part of the NSA, that I’m sure we can bring you a ton of great events and helpful seminars for you this year. This year we will be continuing on with some traditions that were started last year with great success, such as our “Lab Day” and our “International Project” (wait till you see what we have planned for this year!), as well as trying out a few new ideas that we think will help you in both your studies/academics (Scheduling seminars, study sessions, etc), as well as in your leisure time (social events, and......a day ski trip!!). If any of these ideas interest you (and i KNOW some must!), be sure to read the entire newsletter to find out more, and keep your eyes peeled for the future editions for updates. Our main goal this year is to get a real sense of community built within the Neuroscience population at the university, so make sure you come out to all our socials/events/meetings, and get to know some of your fellow neuros!

If you have any questions or concerns, feel free to email me at dpaddon@ualberta.ca, and I’ll try to respond as quickly as I can,

Good luck with your studies!

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**Rebecca McCourt: VP External**

Hi everyone!

My name is Rebecca McCourt, I’m in my second year of neuroscience & very excited to serve with the NSA exec! It’s my job to make our program known on campus, so you never have to hear “we have a neuroscience program?”, and to involve our brother/sister programs so you know your graduating party. With the help of a great exec team, I hope the NSA will not only be a great part of your life, but will also be involved in the diverse projects that befit such an interdisciplinary program, from recruiting new students to international aid projects. When I’m not putting up bake sale posters or updating our facebook page (check out ‘U of A Honors Neuroscience’!), I’m dancing with UADC or hanging out with friends & family. This year I’d love to meet every neuro student in the program and learn your name, so if you see me on campus stop & introduce yourself!

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**Kian Parseyan: VP Merchandise**

I’m in my 3rd year of the Neuroscience program and this year, I have been able to put together a class schedule that is only Tuesdays and Thursdays. By having such a dense schedule, I’m able to take on a research position on Mondays-Wednesdays-Fridays. I absolutely love what I do: I work in a neuroprosthetics Lab with Dr. Vivian Mushahwar assisting multiple projects run by grad students while also carrying out my own project related to an insertion method for microelectrodes within the spinal cord. I’m hoping to pioneer a novel method that would allow for chronic microelectrode implantation that could possibly restore function to individuals with spinal cord injury and other disabilities associated with reduced function and the spinal cord.
**Mischa Bandet: VP Communications**

Hello Everyone!

My name is Mischa Bandet, 3rd year neuroscience and my first year serving with the NSA exec. In my VP Communications position I put together the newsletter that I know you love to read so much, as well as look after the website. When I’m not peeled over in my textbooks, I work part time as an English to French translator for a chemical company and hang out with friends, family and my wonderful girlfriend. On top of my school knowledge, I am an A+ certified computer technician and hold a black belt in Tae Kwon Do and a brown belt in Ju-Jitsu. O yes, and did I mention that I am a Trekkie. Feel free to contact me about anything at bandet@ualberta.ca (or if your computer needs fixin).

**Michael Kreuzer: VP Internal**

Hey everyone!

I’m Mike, and I’m happy to be come back as VP Internal for the NSA!! I’m in the fourth year of my degree, and it’s my third as part of the NSA (and I’m still loving every minute of my degree & the NSA!!). I’ve worked in a handful of labs over the past few years, doing work related to microbiology, organic chemistry, psychology, and anatomy (but even now I’m only JUST starting to know what types of research interest me most…). I guess it’s kind of my job as VP Internal to motivate you all to get out there, and expose yourself to different courses and lines of research in your degree too, because that’s the best way to understand how diverse neuroscience can be! I’ll be sending out periodic interviews of faculty members that will hopefully highlight this diversity: touching on how to contact professors, what you can do within neuroscience (something you only really have a chance to see in class when you take both Pmcol 371 & Physl 372 and A TON of related options…), and hopefully these professors will give you a sense of their passion that you probably also feel about being in neuroscience!! If you ever have any questions research, or courses, or neuroscience in general, then feel free to ask me!! You will probably see me around from time to time, cheerily walking through the hallways, or otherwise you want you can send me an email at kreuzer@ualberta.ca. In any case, I hope you all have a great year, and that you enjoy learning about what I think is one of the coolest subjects you could ever study!

**Victor Choi: VP Finance**

Hello Everyone,

My name is Victor Choi and I am very excited to serve as your VP Finance in NSA this year. A special welcome to all the first year students in Neuroscience; it is my second year in neuroscience and I find that this program just gets more and more interesting! I mean, who doesn’t find Neuroscience fascinating? As your VP Finance, I will be working closely with all the other executives in devising budgets and financial reports for our events and projects. I will try my best to manage our finances so all of these amazing things can take place!

When I am not busy with school, I usually listen to music, play pool, and participate in events all around campus. If you have any questions or simply want to talk more about neuroscience, just email me at vchoi1@ualberta.ca. Other than that, I wish everyone a fascinating year in Neuroscience!
Hello everyone,

The NSA is planning on having a dodgeball team this year. The tournament is November 19-21 and there is a $10 sign up fee per person. If you are interested please email neuro@ualberta.ca ASAP so we can sign our team up.

- Zoe Gould
Social Coordinator

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**Jan Armstrong: VP Graduation**

Hello!

My name is Ian Armstrong, and as VP Graduation I'll be working to organize an awesome celebration at the end of the year. If you have any suggestions, ideas, or words of caution, let me know at iarmstro@ualberta.ca! Within my busy fourth-year schedule, I enjoy volunteering, playing music, walking up staircases, writing midterms, sleeping, and passing slow walkers. But neuroscience is all about counterbalancing those weeks of stress with wild partying, or sophisticated formal events, so be sure to pay attention to that light at the end of the tunnel! (Not death, the grad.) I'm looking forward to meeting as many of you as I can, and good luck with the second half of Fall 2010.

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**Claire Gizowsky: VP Fundraising**

My name is Claire Gizowski, and this is my second year of neuroscience. I am super thrilled to be on the executive committee this year, and I am looking forward to meeting all of you! I will be serving as your VP of Fundraising this year. When school allows me (on rare occasions), I like to hang out with my friends and get up to mischievous business, and ride my bicycle. If anyone has any ideas regarding fundraisers, please let me know! Two brains are always better than one... (most of the time, anyway). Don't hesitate to get in touch with me at cgizowsk@ualberta.ca.

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**Madiha Mueen: VP Recruitment**

My name is Madiha and I'm in my second year at the U of A, 1st year in Neuroscience. I'm the new VP Recruitment and Integration and so my main goals for this year are to work toward recruiting new students into the Neuroscience program as well as helping new students transition into the program. I think it is important that we all get to know each other since we are a small group and to develop a sense of community so I encourage you to come to our social events and study sessions. Transitioning into the Neuroscience program at the university from high school or another program at the U of A can be a challenge so feel free to contact me at mmueen@ualberta.ca if you have any questions or concerns. I look forward to meeting all of you this year and helping you with your transition into our wonderful Neuroscience program!
Study Sessions:

The NSA will be hosting study sessions every Monday at 5:00pm in KATZ 5-003. Come to help, get help or just to study. Everyone is welcome!
First session will be held on Wednesday, November 3rd at 5:00pm!!!

SKI-TRIP!

Yes, that’s right, the NSA is planning to take a break from their studies and heading out to go skiing, and we want you to join us! Price and date has not been set yet, PLEASE LET US KNOW IF YOU ARE INTERESTED BY SENDING A QUICK EMAIL TO NEURO@UALBERTA.CA.

T-Shirt Contest:

Hey Guys,

Submit a T-shirt design that you think would look awesome!
You can post it on the NSA Google Groups (http://groups.google.com/group/uofaneurosci) and we will all vote on the best t-shirt design. Otherwise, if you feel shy, you can post the idea and I can see if I can throw it together on PhotoShop. Designs can be posted whenever they’re ready but voting will begin in 2 weeks so get your designs (or suggested designs) in! I look forward to seeing tons of people wearing NSA clothing this year!

Cheers,
Kian Parseyan
VP Merchandice
Interview Intro:

For any of you who read our newsletter last year, you might notice that this is a new section: we never used to interview non-Centre for Neuroscience faculty members. So you might wonder... why are we doing it this year? Well, we decided it would be good to show you all how truly vast the field of neuroscience is: it doesn’t just have connections to science, but it can extend into arts, medicine, religion, and these can be linked with interdisciplinary studies. By including a second interview into our newsletters, we hope to give you a fresh new take on neuroscience every issue, which will hopefully pique your interest, or at least help you choose some interesting and related options! – Mike

Professor Interview

Octavian Ion

What courses do you teach at U of A?

Phil 102: Intro to Philosophy;  Phil 200: Metaphysics;  Phil 205: Phil of Mind; (I also taught Phil 265: Philosophy of Science in the past)

What interests you about Philosophy of Mind; how did you get involved in this aspect of Philosophy?

Philosophy of Mind has always been one of the most fascinating areas of philosophy for me. It's the hub where all other aspects of philosophical inquiry intersect. Inquiries concerning value, meaning, knowledge, reasoning, all need to be informed by the study of how the mind works, both in terms of understanding the potential and limitations of our unique ways of processing and communicating information.

How much neuroscience is involved in your Phil. Of Mind class?

Literature on the philosophy of mind is divided on many topics, and one of the central divisions occurs between those who see the task of the philosopher of mind as being that of debunking the dogmatic conceptions of why and how we do what we do by appealing to empirical neuroscientific research and those who hold a more classical position, seeing the psychological distinctions between states of believing or desiring, etc as what is crucial to explaining human behaviour regardless of what these states amount to in neuroscience. I guess you could say that this is the split personality of the discipline, and part of my aim in the 205 course is to discuss the dynamic of the situation and to emphasize the importance of understanding the deep motivations for both of these positions.

How do questions about consciousness integrate within Philosophy of Mind in general?
Problems regarding conscious mental states are typically understood by philosophers of mind to form a proper subspecies of mental states. While not all mental states are conscious, what specifically distinguishes the ones that are, is an interesting problem. Answers to this question range from those that take conscious states to be special cases which do not admit of reductive analysis in terms of neurobiological processes to those which take consciousness to be so reducible. Philosophy of Mind attempts to integrate ongoing research in evolutionary biology and psychology and other fields like general systems theory to inform philosophical reflections on what makes consciousness such a distinctive phenomenon.

You are studying the Philosophy of Language, can you tell us briefly what that’s about?

My doctoral work is on language about psychological states like beliefs and desires. The language used to capture such mental phenomena does not seem to follow the usual logic of language used to capture such non-psychological phenomena as running or waving or whatnot. My aim is to investigate the special character that logically distinguishes these different parts of language.

If you weren’t in Philosophy, which program of studies do you think you would pursue?

Having pursued philosophy for so long, it's hard to think of an answer. Most likely I think I would be interested in studying Art History. Part of my reason for choosing to work in Philosophy of Mind having to do with a general interest in representation, I find the historical shifts and movements that have occurred in artistic representation to signify profound insights into the life of the mind.

Professor Interview

Dr. Yves Sauvé

What courses do you teach at the University of Alberta?

I instruct several classes at the university, including: Physl 405, 465, 466, 467, 506, and 527; Neuro 450, and 452; and Biol 499.

What are your major research interests?

How do we see? How do some people lose their vision? I approach these large questions in a multidisciplinary fashion: electrophysiology, anatomy, biochemistry, molecular biology, psychophysic, genetics, nutrition and lifestyle. A particular focus of my work is related to ageing: changes do occur in our eyes and brain as we age, and it predisposes us to some devastating blinding diseases such as age-related macular degeneration and diabetic retinopathy. I rely on animal models and human subjects.

How did you choose this area of research?

It chose me. As some of you, I wanted to enter Medicine but when refused, I did a bachelor of biochemistry at the University of Montreal. Then I tried again at Medicine and was again refused, so I thought of doing an MSc. Since my favorite class throughout my undergrad in
biochemistry was the only Neuroscience class we received. The late Dr. Thomas Reader was teaching us about neurotransmitters and their receptors, and about second messengers: this blew my mind. Wow! I was thinking, that neurochemistry was part of what underlies our ability to think. I was so lucky that he accepted me as an MSc student. My project was related to neurochemistry, but not its relationship in thinking (I did not know of anybody who was doing that yet). Somehow, I found myself often visiting the neighbouring lab where electrophysiological recordings of visual responses were taking place in rat brains. It was clear that this would be my next move. As a PhD student, I got to grow back axons from the eye to the brain of rodents and to test whether this approach would allow the recovery of visual responsiveness in the brain… And for my post-doc, my challenge was to still record from the brain of animals, but this time, from models of eye diseases (retina degeneration). For the first time, I started to learn about the retina and was so taken by its own little “brain”,

*What is the most rewarding aspect of your job?*

Getting the freedom to do what I truly love: doing research, teaching, interacting with people to understand the intricate beauty of the brain. Waking up in the morning, knowing that you are going to play, and you are paid for it! I can create! I can even take risks. I have the luxury of being able to make mistakes and learn from them. My job is a blank canvas on which I can paint whatever I like. One big personal reward is to get to see the students become amazed by the beauty of the brain, become siphoned (for a time that seems to freeze) into the realms of neurons, second messengers, transduction, plasticity, development, neural encoding, emulation of reality by the brain itself… this is endless. Who on this planet gets to do this for a living? We are privileged, wake up people! This is a unique opportunity, not a chore, nothing you should feel forced to have to do, if so give your place to other people who will truly be in awe. In these classes that I teach, between the different theoretical concepts, is that very message that I am hoping to send. I aim at making my passion contagious. Warning students: do not come immunized to my classes or you’ll miss the whole point.

*And the most challenging?*

A challenge for me is to convince student to devote their life to research while understanding that they might not, at this very moment in their life, share the passion for this seemingly atypical yet often exhilarating lifestyle as I do. The truth for myself, is that as an undergraduate student, while I already loved research, my interest and passion and discovery of a true vocation came slowly when working very hard and especially when my projects were stuck and my supervisors disagreed with some of my ideas. This really was a key moment, I had to trust myself and disagree respectfully with authority, which meant working even harder to prove my point and being resourceful to bring new techniques and sometime new collaborators. Going back to “convincing” students, this is the wrong wording, my approach is to remain who I am and hope that my passion is in some way contagious when I teach, that it will lure a few crazy students to consider this career choice. Another challenge is the ridiculous amount of paperwork and committee engagement that can easily distract from what I truly love: bench work… nobody teaches you how to balance… so you learn as you go along, even though you might pay with your own health in the way. Resilience is in all of us. After more than 5 and a half years having set up my lab here at the UofA, I get to spend at least two days doing hands-on research: experiments and data analysis, in animals models and human subjects. I cannot see myself without being able to do this. Of course, blocking time for teaching is a must, my favorite class is PHYSL 405, it is my little indulgence…
A bit of a general question: what do you find most captivating about research in neuroscience, and what motivates you to keep pursuing research?

Neuroscience Research opens up a new territory and it always relates to us at the end of the day, our own nervous system. We have been given a superb engine to live our life, our human body with its fascinating nervous system. It is our responsibility to respect this intriguing machine and to be in awe in face of its greatness and beauty. So much we do not know about it, and I have the luxury of working on the brain, which seems to have a mind of its own... how could that be? In my particular field, visual electrophysiology and anatomical correlates, I get to tap into the very substrate of how we see the world as our brain wants us to see it. I get to record activity related to phototransduction, synaptic transmission at several orders in the neural processing, and get to see (no pun intended) these very photoreceptors and synapses on histological section of the eye and brain targets. Moreover, by relying on animal model of blindness, I get to play a role in understanding how vision works but also how to potentially prevent blindness or even cure it. Finally, I get to apply the very same electrophysiological tests in human beings!!! The traces even look the same between rodent’s eyes and our very eyes: a unique opportunity to make direct correlation between animal models and ourselves.

If students are interested in doing summer research or graduate studies in neuroscience, what do you recommend they do to prepare for these?

Be inquisitive about the area of research you choose for you summer research. Use all of the knowledge gained from your studies. Read papers from your prospective supervisor(s) and think carefully: how can I push this forward, take it further? Do not satisfy yourself with textbooks or papers but ask yourself questions for which you cannot find a clear answer, and go for it with all that is at your disposal: asking your prospective supervisor(s) and members of their lab, e-mailing authors of related papers (even though you do not know them), design your own experiments, think outside the box, engaging collaborators, rock the boat and enjoy the ride. There will be frustrations (experiments do not work by magic, Murphy’s law tends to apply rigorously to your experiments: whatever can go wrong, will), and there will be monotonous things to do (repetitive, mind shrinking things), but keep in mind the big picture: you have put forward your own hypothesis and have designed experiments to test it. This is your baby, don’t give up on him or her. At the same time be flexible.