

About NW Noggin (Not part of WSU)

NOTE: WSU withdrew their formal support for [innovative](#), multi-institutional, arts-integrated STEM outreach (certain administrators did not want to highlight our collaborative efforts involving students from other area campuses). We thoroughly respect and appreciate our Vancouver volunteers (learn more about them [here](#), [here](#), and [here](#)), and encourage them to stay involved through nwnoggin.org.

Bill Griesar and Jeff Leake can be reached at griesar@pdx.edu and jleake@pdx.edu...

Want to gain experience that will improve your job prospects?

Are you excited by what you're discovering about the brain and behavior?

Are you intrigued by opportunities to do *more than talk about science with other scientists*, but actually integrate the arts and arts practices into science education?



Would you like to explore career opportunities related to research, teaching science, public outreach, and neuroscience? Are you interested in developing marketable skills, including public speaking, performance, and the ability to

organize complex material? Would you like to work directly with undergrads and grad students in neuroscience, psychology and art from other area institutions, including Portland State University, OHSU, and the Pacific Northwest College of Art..?

Do you want to get young people as engaged by the brain, and science, and discovery – as you are?

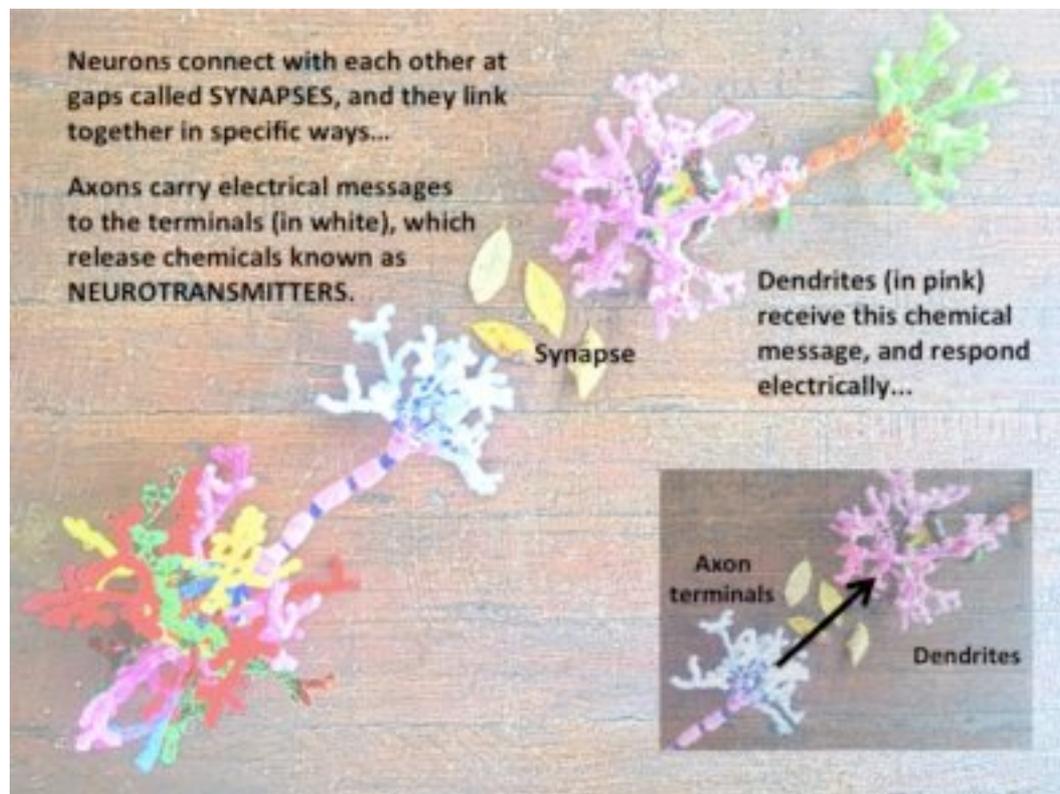


Please join us, and enjoy the chance to introduce yourself and explore your interests, and design and deliver instruction to academic priority K-12 students in area public schools! Please check out the following website for details on upcoming opportunities to get involved: [NW NOGGIN EVENTS](#)



NW Noggin (Northwest Neuroscience Outreach Group: Growing in Networks, www.nwnoggin.org) is a robust, creative, and largely volunteer driven non-profit organization (EIN: 81-3885713) that brings scientists, artists and students of all ages together to share their expertise, excite young people about science and art, share educational resources, and inform and excite the public about ongoing, taxpayer supported neuroscience research...

In 2012, a small group of graduate and undergraduate volunteers, along with neuroscience educator Bill Griesar, developed a four week summer class on the brain and behavior for 20 middle schoolers at [Sabin K-8](#), a Northeast Portland public school. A Portland artist and now NW Noggin Arts Coordinator, [Jeff Leake](#), devised related art projects to help us better communicate STEM (science, technology, engineering, math) concepts, and draw in more students struggling with school...



Since that summer in 2012, Jeff and Bill have taught multi-disciplinary courses at Portland State University, OHSU, and WSU Vancouver, and have enthused graduate and undergraduate students to communicate science through the arts to more than 14,000 academic priority students in Portland, Vancouver, San Diego and DC public schools! We also created the first arts-integrated STEM class to pass the WSU system UCORE committee (Neuro 150: Art & Brain), which had maximum course enrollment (40) for two years, and influenced many to consider pursuing neuroscience and art...



We've also offered free cross-disciplinary talks at Portland's [Velo Cult](#), and have informed thousands of community members about research, training graduates to present their work to a lay audience.





Our graduate and undergraduate art and neuroscience volunteers are developing experts in science communication, teaching in schools, theaters, museums, symphonies, homeless youth centers, breweries, and bike shop pubs! For more information see [NOGGIN BLOGGIN...](#)



Essential to our training of new scientists is the inclusion of art ([the “STEAM” approach](#)). **Arts integration makes learning personally relevant.** It allows open ended exploration of scientific concepts, and offers science teachers a broader palette from which they can differentiate their lessons. This cross-disciplinary collaboration is also valuable to artists, who often use

their skills to explore and enhance work in other fields. Yet art students are seldom exposed to this kind of cross-disciplinary collaboration during their education.



We start by integrating [OHSU](#) graduate students into advanced undergraduate neuroscience courses at [Portland State University](#) during the academic year. The undergraduates learn about neurons, networks, electrophysiological and imaging techniques, pore over peer-reviewed journal articles, and gain fluency in the language of the discipline, before working directly with graduate students, who spend several weeks in the classroom teaching about their work. This informs our undergraduates about currently funded research opportunities, and helps train our graduate students to teach.



Starting in 2015, we dramatically expanded outreach both in schools and the broader community. **Noggin volunteers now regularly visit K-12 classrooms throughout the academic year, and arrange public, semi-monthly collaborative presentations on research and art.** In spring of 2016, we were invited to bring 26 outreach volunteers to [Washington DC](#) to present brains in [public schools](#), [Congress](#), the [White House](#), and the [Phillips Collection](#)! In October of 2016, [we were recognized for our innovative outreach model by the Obama White House](#) – specifically for bringing together students from multiple institutions, and multiple academic disciplines, and connecting them directly with the broader community...



An exciting aspect of NW Noggin is how everyone gains useful experience. Our undergraduates benefit from exposure to graduate students, and learn about graduate school, and federally funded research opportunities at OHSU, WSU-V, PSU and elsewhere. Graduates and undergraduates develop their own cross-disciplinary lesson plans and activities, and they teach K-12 students, conveying concepts in science in effective and engaging ways...



Our art students contribute immensely to our outreach activities, by brainstorming effective and creative, hands on projects to explore concepts in neuroscience, and by developing arts-integrated lessons that further student understanding of science and art. Finally, our K-12 participants get very excited about these subjects, and discover how to further satisfy their interests by continuing their education through college and beyond...



We also partner with [many local institutions](#), including Portland's [P:ear homeless youth center](#), the [Portland Art Museum](#), and [Velo Cult](#), a bike shop/event space/pub in Northeast Portland where our volunteers offer collaborative presentations of their lab and studio work, and raise awareness of exciting art projects, and ongoing, federally funded neuroscience research underway at area universities...

» » Join us! There is a diverse and exciting world of opportunity in classrooms and communities away from the suburban commuter campus of WSU. Get involved in your community, and check out <http://nwnoggin.org> to learn more...

