MILESTONE REVIEW SELF-APPRAISAL: BILL GRIESAR, Ph.D.

Fall 2015 – Spring 2021

Key Accomplishments Fall 2015-Spring 2021

It is both an honor and a pleasure to teach at Portland State University. I've taught in multiple departments (including Psychology and Speech and Hearing Sciences) since the year 2000.

Over each of the past six years (Fall, 2015 – Spring 2021) I've taught (on average) nine undergraduate courses. Several of these I developed in their entirety, and successfully added to the formal course curriculum, including Psychopharmacology (PSY 450) and Advanced Neurophysiological Psychology (PSY 452). I've also taught an annual teaching practicum (as a volunteer) for graduate students in Behavioral Neuroscience at OHSU, integrating current NIH funded research and researchers into our Advanced course. I also developed and co-taught a unique FRINQ course (The Neuroscience of Creativity and Learning) along with my University Studies/Psychology adjunct colleague Jeff Leake.

I also contributed, along with my colleagues in Biology and Speech and Hearing Sciences, to the development and implementation of a brand new Interdisciplinary Neuroscience minor, which was formally approved by the PSU Faculty Senate in June, 2021!

In response to the coronavirus pandemic, I produced hundreds of new youtube videos, reworked syllabi, and thoroughly re-organized online course resources to more effectively serve our undergraduates through remote instruction.

I have informally mentored thousands of undergraduates in Psychology through weekly office hours, and through extensive volunteer outreach via the non-profit I co-founded with Jeff known as <u>nwnoggin.org</u>. I have served as the formal career mentor for many students in the NIH BUILD EXITO program, including Andrea Rano and Jasmin Mabry last year, and was the Honors College thesis advisor for many more, including (in 2020-21) both Danny Leister-Gray (Internet, Music, and Activism During Crisis — LGBTQ Communities in 2020) and Ronan Peck (The Psychedelic Renaissance: a convergence of Indigenous knowledge and science).

I have regularly served on the Undergraduate Committee in Psychology, and as the Faculty Advisor to the popular SALPie-award winning Neuroscience Club. I have annually introduced Neuroscience Club members to both local and national Society for Neuroscience conferences, routinely presented posters, webinars and engaged in outreach in conference-area K12 public schools. Along with Jeff, I gave the keynote address on brain awareness for SfN in 2018, and I continuously engage our students in extensive, collaborative, all volunteer (that includes me, and Jeff) STEAM (STEM + Arts) outreach efforts in our community through nwnoggin.org.

Personal Self-Evaluation of Progress

In this section, I present my personal self-evaluation of progress made since fall 2015.

a. Professional goals, professional development activities, and progress toward professional goals

I am thrilled about opportunities to listen, collaborate, help out, grow, and improve my own teaching skills and community connections. During six years in Psychology I've made significant progress as an educator, and in public outreach and engagement. I'm inspired by the words of Maya Angelou: *"I've learned that you shouldn't go through life with a catcher's mitt on both hands. You need to be able to throw something back."*

Since arriving at PSU, I've been recognized by our students with five John Eliot Allen Outstanding Teaching Awards, including three in Psychology (2020, 2017, 2013) and two in Speech and Hearing Sciences (2010, 2007).

Since 2012, my colleague Jeff Leake and I have introduced real brains and brain-related art projects we've developed to over 50,000 urban and rural K12 students, houseless youth, incarcerated youth, members of the Neuroscience and STEAM caucuses in the US House of Representatives, museum-goers at the Portland Art Museum (where I serve on their Teacher Advisory Council) and the Phillips Collection in Washington DC, letting knowledge serve. I've brought together neuroscience and psychology graduate students with local collaborating artists for free public outreach events at Velo Cult (a former bike shop/pub) and Floyds Coffee in Old Town. I've raised tens of thousands of dollars in grants to support innovative arts-integrated outreach efforts through partnerships with the Portland Alcohol Research Center at OHSU, the Dana Foundation, OnPoint Community Foundation, Spirit Mountain Community Foundation and more. In 2016 I was recognized (along with Jeff) as among 500 "innovators" by the Obama White House, and briefly met the President at the Frontiers Conference in Pittsburgh (he told me he "loved" our signature pipe cleaner neurons!).

This past pandemic year, along with Jeff Leake, I collaborated with Dr. Theanne Griffith, a celebrated neuroscientist and children's book author at UC Davis for several online K-12 school visits. I've also thoroughly enjoyed exploring the benefits of remote instruction, decorating my virtual classroom space with informative 3D printed brains, real brains, various skulls and art, inviting international participants and visiting U.S. public schools in Oregon, Washington and Hawaii.

I also organized *in person* outreach activities in the midst of COVID-19, notably at p:ear, a nonprofit serving houseless youth in Portland. At p:ear we joined young people without safe places to sleep and helped them build a new restorative outdoor "brain garden." We raised funds to offer youth screen-printed shoulder sacks (a.k.a. "Noggin Vesicles") filled with hand-

stitched brain masks and other supplies. For our all-volunteer engagement, we were recognized as p:ear's 2020 Community Partner of the Year.

b. Teaching philosophy, instructional goals, and pedagogical methods

My teaching is based on "applied neuroscience"; that is, how understanding the biological basis of our perception, cognition, behavior and development, and engaging directly with community organizations, classrooms, research laboratories, artists, policy makers and the public at large can help students acquire useful implicit skills, introduce them to diverse educational and career options, and offer them actionable knowledge and insight into how their own strengths in psychology and neuroscience teaching, research, policy and the arts might contribute to our greater understanding of the brain and behavior, and a better world.

For example, in the Perception course (PSY 347) I work closely with artist and adjunct instructor Jeff Leake to integrate original art projects and perspectives into the curriculum, and not only cover the neurophysiology of sensation and perception, but examine how artists demonstrate intuitive understanding of biological systems and effectively capture and often direct perceptual experiences through art. This cross-disciplinary approach also helps engage a broader, more diverse student population in learning about the brain and behavior.

c. Classroom and individual instructional processes

I strive to provide my students with in-depth, relevant mentoring and instruction in interdisciplinary neuroscience. My work is informed by knowledge of the brain and behavior, and how direct engagement and multi-generational, cross-disciplinary creative exploration of concepts and ideas attracts diverse students, builds confidence and implicit skills, and leads to better understanding, retention and discovery (e.g., <u>Hardiman 2014</u>). I've managed to maintain full, engaged online Zoom classes throughout the COVID-19 pandemic by investing significant time and effort in organizing rich, current online course websites, with extensive self-made video reviews, text descriptions and links to supportive research.

I fundamentally thrive on sharing inherently compelling neuroscience research, and as a committed educator I am thrilled to offer students the chance to creatively "let knowledge serve." I work to connect undergraduates to graduates, artists, psychologists, neuroscientists, policy makers, K-12 students and members of the public - including houseless youth, and those currently not over-represented in STEM - through my outreach photography and posts on the popular website I built and maintain, nwnoggin.org. These posts are rich with detail, including links to relevant NIH-funded research pertaining to the material we present. I also created the popular @NWNoggin Twitter and Instagram accounts, and have built strong communities of followers (1500+ on Twitter, 1800+ on Instagram), including the Dana Foundation, the American Brain Coalition and the Society for Neuroscience.

Contributions to the Undergraduate Program

I am particularly excited about the new Interdisciplinary Neuroscience minor at PSU beginning in fall (2021), and the collaborative efforts required to bring this unique, innovative program to our skilled and enthusiastic undergraduates. It's a been a distinct pleasure and a career highlight to assist PSU Neuroscience Club students in effectively advocating for this minor, and I look forward to its implementation this year.

I continue to serve on the Undergraduate Committee in Psychology, and as the Faculty Advisor to the Neuroscience Club.

This past year I mentored Carli Cox, an undergraduate in Psychology and a PSU Rosenbaum Scholar, and together we raised over \$5000 for an entirely online "Noggin Fest" (the largest free public celebration of art, music and neuroscience research in the Pacific Northwest) in March of 2021. Our students have organized and run live NogginFest events in past years, raising funds to help them to present their own outreach accomplishments at Society for Neuroscience conferences, and also engage with K12 students in area public schools.

As mentioned, I also bring our undergraduates to p:ear (a Portland houseless youth center we've collaborated with for seven years), correctional facilities, coffee shops, pubs and K-12 classrooms, both live and virtually.

There are too many outreach experiences to fully describe; here are links to more details:

<u>Noggin outreach at P:ear</u> (Ongoing). I organize students from OHSU, PSU and other campuses to offer art and neuroscience experiences at this houseless youth center, where our volunteers engage in science activities and art projects that help teach people about our brains.

<u>Noggin @ Society for Neuroscience</u> (Ongoing). I regularly bring our undergraduates to present their own posters and engage in local community outreach at both local chapter and international Society for Neuroscience conferences.

<u>Synaptic Community Connections</u> (Ongoing). I regularly organize and raise funds for outreach efforts in small towns across the Pacific Northwest, arranging support for housing and meals for our undergraduate volunteers who enthuse, inform, learn from and engage local communities through interdisciplinary neuroscience.

<u>Correctional Facilities</u> (Ongoing). We visit and explore neuroscience with young people incarcerated at the MacLaren Youth Correctional Facility and women at Coffee Creek to consider the state of *all* our changing and developing brains.

<u>OLD TOWN TALKS: Free Art & Science</u> (Ongoing). I regularly organize accessible, all ages opportunities to hear from artists and graduate/post-doctoral researchers studying the brain. They collaborate on public presentations of their cutting edge work.

<u>A brain garden grows @ p:ear</u> (October, 2020). We answered questions, examined brains and painted colorful brains to plant in an outdoor garden. This post is also published in Spanish: Crecimiento de un jardín de cerebros junto a p:ear.

<u>Returning to find a voice</u> (October, 2020). We continued work on the brain garden, helped young people register to vote and gave away Noggin vesicles packs with useful supplies.

<u>Uploading your brain from Vancouver</u> (February 2021). We spent several school days on Zoom with Washington state high school students, teachers and our PSU undergraduate outreach volunteers exploring compelling questions about neuroscience.

<u>Ho brah, he lolo maoli kēlā!</u> (February, 2021). As a snowstorm descended on Northwest Oregon, our informed and enthusiastic Noggin volunteers were thrilled to travel (virtually) to the sunny Hawaiian island of Oahu to talk lolo ("brain") research – *and art!* – with fifth graders in Waikiki School. More about this experience from PSU undergraduate Greyson Moore: <u>If you</u> <u>like be akamai, make sure you get choke shut eye</u>.

<u>NogginFest 2021: Threshold Potential!</u> (March, 2021). We had so much fun sharing our love of neuroscience research, art, and music at our first online student-run celebration!

<u>A crayon in Homer's brain</u> (April, 2021). This month our NW Noggin volunteers hopped online to meet with curious 4th grade students at Sunnyside Environmental School, a Portland Public School with a focus on "environmental education, environmental justice, culturally responsive teaching, place-based education and service learning." More about this experience here: <u>Neurons in Minecraft & More!</u> and <u>Thank You Northwest Noggin!</u>

<u>Clatsop Community Cortex</u> (May, 2021). We were thrilled to return both virtually and live to Astoria, Oregon, a remarkable historic city near the mouth of the Columbia River to hear what high school juniors and seniors are learning about their brains!

Hosford, Hippocampi & Hope (June, 2021). We made two virtual online visits to Portland's Hosford Middle School to consider questions from 200+ 6th graders in Jane Van Dam and Kevin Marquardt's biology classes. Then we followed up with two LIVE campus visits!

Thank you, as always, for the opportunity to teach & Cheers!

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