

## 2022 ASNМ Elections Information Form

**Name (as you would like it to appear on the ballot):** Natalie A. Peartree

**Credentials:** PhD, CNIM

**Position and Organization:** Senior Manager of Research at MPOWERHealth

**Education:** B.S., M.S., Ph.D.

Doctor of Philosophy | Behavioral Neuroscience (2015) Arizona State University

Master of Science | Behavioral Neuroscience (2011) Arizona State University

Bachelor of Science | Psychology (2008) Arizona State University

**Professional Affiliations:** ASNМ member, ASET member

### **Publications, Awards & Appointments:**

#### Publications:

11 peer-reviewed publications in neuroscience journals. Full list of publications can be found here: <https://pubmed.ncbi.nlm.nih.gov/?term=Peartree+N>

#### *Selected publications:*

**Peartree, N.A.**, Hatch, K.N., Goenaga, J.G., Dado, N.R., Molla, H., Dufwenberg, M.A., Campagna, A., Mendoza, R., Cheung, T.H.C., Talboom, J.S., & Neisewander, J.L. 2017. Social context has differential effects on acquisition of nicotine self-administration in male and female rats. *Psychopharmacology*. 234(12):1815-28.

Bastle, R.M., **Peartree, N.A.**, Goenaga, J., Hatch, K.N., Henricks, A., Scott, S., Hood, L.E., & Neisewander, J.L. 2016. Immediate early gene expression reveals interactions between social and nicotine rewards on brain activity in adolescent male rats. *Behav Brain Res*. 313:244-254.

Kufahl, P.R., **Peartree, N.A.**, Heintzelman, K.L., Chung, M., & Neisewander, J.L. 2015. Intravenous cocaine challenge induces c-fos under isoflurane anesthesia in rats with a history of repeated cocaine administration. *Brain Research*. 1594:256-66.

Pentkowski, N.S., Harder, B.G., Brunwasser, S.J. Bastle, R.M., **Peartree, N.A.**, Yanamandra, K., Adams, M.D., Der-Ghazarian, T., & Neisewander, J.L. 2014. Pharmacological evidence for an abstinence-induced switch in 5-HT1B receptor modulation of cocaine self-administration and cocaine-seeking behavior. *ACS Neuroscience*. 5(3):168- 76.

Cheung, T.H.C., Nolan, B.C., Hammerslag, L.R., Weber, S.M., Durbin, J.P., **Peartree, N.A.**, Mach, R.H., Luedtke, R.R., & Neisewander, J.L. 2012. Novel phenylpiperazine derivatives with selectivity for dopamine D3 receptors modulate cocaine self-administration in rats. *Neuropharmacology*. 63(8):1346-59.

Pentkowski, N.S., Painter, M.R., Thiel, K.J., **Peartree, N.A.**, Cheung, T.H.C., Deviche, P., Adams, M., Alba, J., & Neisewander, J.L. 2011. Nicotine-induced plasma corticosterone is attenuated by social interactions in male and female adolescent rats. *Pharmacology Biochemistry & Behavior*. 100(1):1-7.

Awards:

*National Awards:*

Ruth L. Kirschstein National Research Service Award Individual Predoctoral Fellowship (2012-2014)

NIDA Early Career Investigator Travel Award (2012), NIDA Conference & Society for Neuroscience

NIDA Early Career Investigator Travel Award (2011), NIDA Conference & Society for Neuroscience

NIDA Directors Travel Award (2011), College on Problems in Drug Dependence Conference

NIH Fellowship Supplement Recipient (2010-2012)

*Local Awards:*

Faculty Women's Association Distinguished Graduate Student Award (2015)

College of Liberal Arts & Sciences Graduate Excellence Award (2014)

Commendation for Outstanding Service, Faculty Women's Association (2012)

Pre-Doctoral Fellowship: Arizona State University Graduate College (2008-2009)

**1. How do you feel you can contribute to the leadership of ASNMM? What strengths/passions/talents do you hold that would benefit ASNMM?**

My greatest passion is quality patient care and my love of research is my strength, both of which are at the core of ASNMM's mission and vision. My combined professional experiences as a former academic neuroscience researcher, fellowship-trained IONM clinician working in the operating room, IONM area manager, educator, clinical preceptor, and current research manager focused on quality patient outcomes have collectively allowed me to pursue my career passions and put patient-focused care at the forefront of my work every day. With almost 1,000 members, ASNMM has a wealth of qualified individuals regularly contributing to the success of its vision to serve as the leading organization for the field of IONM and its mission to promote better patient outcomes through education and advancement of quality neurophysiologic monitoring practices. As a clinician in the operating room over the past 5 years, I have had the pleasure of directly benefiting from my esteemed colleagues through ASNMM's many educational offerings and network of seasoned members. In my relatively short time in our field, I have seen the direct impact that evidence-based methods for neurophysiologic monitoring and quality clinical standards have on improving patient outcomes. I believe I can most effectively contribute to the leadership of ASNMM by providing a perspective of an early-career IONM clinician with a comprehensive background in research and an intense passion for quality patient care to advocate for best practices and expanded educational opportunities for ASNMM members and those considering the benefits of ASNMM membership.

**2. With changes in health care service delivery and reimbursement, what and how do you feel you can contribute to keep ASNMM moving forward in the right direction?**

The Healthcare system in the U.S. is rapidly shifting towards a value-based model of care and the burden falls upon healthcare providers to prove their value through quality outcomes. For IONM, this shared responsibility falls upon all of us to show how we impact patient's lives through quality neurophysiologic monitoring by publishing our outcome-based data. I believe ASNMM leadership should continue to be at the forefront of advocating for- and emphasizing- research that demonstrates the quality benefits of IONM. In the same vein, ASNMM leadership should also continue to play an active role in critically reviewing and openly critiquing research publications with flawed methods and analyses that negatively impact our field, as it has effectively done for recent publications.

**3. ASNMM constantly seeks ideas of how to better serve our membership through education, resources, representation to other professional entities, connections and networking or other means of advancement. What do you think ASNMM could offer its members that would provide value?**

Given the challenges over the last year and a half, ASNMM has done a fantastic job adjusting to the needs of the virtual world through COVID with many successful online meetings replacing the typical in-person events. Now that most of us have adjusted to the virtual learning setting as the new normal, I believe ASNMM should continue to embrace this type of learning environment and expand upon the current online offerings perhaps with new video training sessions, more frequent webinar offerings (both live and on-demand formats), expert panel discussions of important research publications, and providing consistent options for virtual attendance of future annual meetings to enable remote interaction from individuals that cannot attend the in-person events. Keeping up with current trends in virtual and on-demand learning platforms as a consistent option for learning and continuing education will only benefit our members and likely drive new membership as a result.

**4. How do you see the role of the ASNMM in advocating for the profession on intra-operative neuromonitoring?**

I would love to see ASNMM advocating more aggressively for the benefits of IONM outside of our own community. We have seen these efforts emerge through ASNMM leader involvement in IONM advocacy and education other medical societies, such as NASS, but I would like to see ASNMM leadership take it a step further in the medical community. These efforts should ultimately be aimed towards an audience of key opinion leaders comprised not only of surgeons, but also of hospital executives and decision-makers, to drive the conversation surrounding IONM as the standard-of-care for patients undergoing surgeries that present an established risk that is proven to be reduced with the use of IONM. Lack of understanding for the value of IONM among key decision-makers will without a doubt be detrimental to the advancement of our profession in the long run; therefore, we need our surgeon partners as well as other healthcare providers and allied professionals to be educated enough to advocate for the use of IONM when

it stands to benefit their patients. Additionally, I am not aware of any efforts to develop or disseminate education on the benefits of IONM aimed directly towards patients to equip them with the knowledge and awareness to advocate for themselves and ensure they receive optimal care. I believe ASNM could develop this content to engage and educate our patient community directly.

**5. Describe your academic or professional contributions to the field of intra-operative neuromonitoring (this can include publications, reviews, research contributions, creating or advancing professionalism in a service that is dedicated to intra-operative neuromonitoring, education, outreach, presentations, running or organizing meetings (in-house, local, national, international), societal contributions ...)**

I started my career in IONM as a fellowship-trainee and worked my way up to a clinical preceptor where I was able to provide both hands-on and supplemental didactic training to both new and experienced clinicians. This particular training included in-depth CNIM preparation, one-on-one mentoring, and developing and presenting original educational content in the form of lectures and presentations to clinical staff. As I moved into the role of clinical manager overseeing multiple states, I led a team of IONM clinicians where I regularly reinforced best practices and evaluated my team to ensure every one was exceeding our clinical quality assurance metrics. Additionally, I have been deeply involved in service efforts to provide IONM to those in need. Specifically, I coordinated IONM services for our company-sponsored surgical mission trips, most notably to the Dominican Republic, where our team monitored 12 surgeries across 3 days, working day and night to help our patients. I now hold the title of Senior Manager of Research at MPOWERHealth, where I lead our Research Department in developing and launching original research initiatives focused on improving patient outcomes and capturing data that drive efficiency metrics in IONM and beyond.

As far as societal contributions, I have been an active member of ASNM's webinar committee since 2019 and have served as a moderator for the following online events:

- "CNIM Prep Course" presented by James Watt (2019)
- "Technique Review: D Wave Motor Evoked Potentials" presented by Kent Rice (2020)
- "Out on a Limb: Key IONM Concepts for Peripheral Orthopedic Surgery" presented by Cheryl Wiggins (2021)
- "Probing Pedicle Screw Stimulation: Considerations for Thoracic Screw Placement" presented by Jonathan Norton (2021)
- Online Virtual Winter Symposium (2021): Presenters: Bryan Wilent, Chuck Yingling, Jay Shils, Kathleen Seidel, Mirela Simon

**6. Personal Statement: Please provide any additional information to the members.**

My career is driven by the need for quality patient care and my love of research, both of which are fundamental to ASNM's mission and vision. This is precisely why I feel so drawn to ASNM and its members. It feels like I have found my home being surrounded by like-minded individuals who are passionate about what they do and strive to advance our field through

collaboration and knowledge sharing. In my few years of ASNMM membership, I have already given back to the ASNMM community by serving on the webinar committee, which has been a true delight. Serving on the Board for ASNMM would be an absolute honor, if elected. As an IONM clinician and researcher, I am dedicated to making a positive impact on our field and I will be just as dedicated to serving the ASNMM members at large, if elected.

#### 2022 Nominees Conflict of Interest Disclosure categories

- Disclosures
  - **Scientific advisory board:** N/A
  - **Scientific research:** N/A
  - **Speakers bureau:** N/A
  - **Stock holder (only if >5% in the company):** N/A
  - **Stock options:** N/A
  - **Company leadership/board of directors:** N/A
  - **Product Royalties:** N/A
  - **Travel (paid for by other than your employer):** N/A
  - **Society leadership and IONM related boards:** N/A
  - **Patents:** N/A
  - **Employed by:** MPOWERHealth