
Page 1: ASNM BOARD ELECTION CANDIDATE FORM

Q1 Name

Marat Avshalumov

Q2 Credential(s)

PhD, DABNM, CNIM

Q3 Current Position and Organization

Chief Neurophysiologist, IOM Solutions

Q4 Education

Education

1995 Rostov State University, Russia Ph.D. in Biochemistry/ Neurochemistry

1991 Daghestan State University, Russia Master of Science, Department of Biochemistry with Highest Honors

Related coursework:

2006 Clinical trials: structure and management, NYU School of Medicine, New York, New York

2005 From Idea to IPO: the technology venture (Case Studies), New York Academy of Sciences, New York, New York

Q5 PROFILE QUESTIONS:How do you feel you can contribute to the leadership of ASNM? What strengths/passions/talents do you hold that would benefit ASNM?

The last 9 years of my life have been very exciting: I made a transition from academia from the Mount Sinai school of medicine to Chief Neurophysiologist and Director of operations for an IOM practice (which I spearheaded from the ground up) in a private neurosurgical group. I also run an IOM training online and on-site program for international (Australia, Bulgaria and Russia) IOM professionals. These domestic and international experiences required me to develop the ability to negotiate differing points of view and build effective teams from different parties with diverging ideas - that requires both flexibility and the ability to stand your own ground. In a changing environment around IOM as a part of our healthcare system, I truly believe that these strengths of mine will help ASNM to overcome challenges that society is currently facing. My passion is to see ASNM as "all inclusive", catering to both small and big players in the IOM field, with an emphasis on the role of the neurophysiologist as a critically important member of the ASNM.

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Q6 With changes in health care service delivery and reimbursement, how do you feel you can contribute to keep ASNM moving forward in the right direction?

- It is important that the ASNM remain a leader in education in the field of IONM at all levels, including neurophysiologists and physicians. The society should also reach out to educate insurance providers and governmental regulations to improve patient safety and lower healthcare costs
- The only way to keep moving forward is as a united group of health care professionals. This must include IOM professionals in academic centers, small IOM groups, and large IOM companies. As a PHD degree holder, I feel that I can contribute towards the further consolidation between physician and non-physician IOM professionals.
- ASNM is a great society, however, I am sure that ASNM will benefit from more intense interaction with the relevant societies in the USA and internationally. This should include not only IOM groups, but also surgical societies.
- I believe that it is time for the ASNM to focus on the specific education of the different patients and patient interests groups

Together these will result not only in an increase of the ASNM influence and recognition in the field of intraoperative monitoring, but it will also positively affect the growth of the ASNM

Q7 ASNM 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 ASNM could offer its members that would provide value?

To better serve the membership:

- ASNM needs to advocate for collection of IONM data that can help us understand its clinical value for different surgical procedures. It is important to realize that this data must result in peer-reviewed publications. This will result in making the case for medical necessity to all parties: surgeons, patients, government legislative bodies, and insurance companies.
 - Based on the "functional and active" clinical outcome database, ASNM should forge consensus and uniformity on monitoring modalities and methods. This will result in improved patient care, helping with the reimbursement process, as well as building a strong defense against litigation. IOM field needs a standardization of operating procedures.
 - Continuously improve the educational programs that are run by ASNM. My belief is that educational programs, at least some, should be based on unedited, raw data clinical cases, presented by technologists. Bringing up "not so ideal" cases to learn from mistakes and errors.
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Q8 Personal Statement: Please provide any additional information to the members.

It is an Honor to be nominated to run for the ASNM board. At the same time, it is a great responsibility. However, if one would like to participate in the joint effort to move the IOM field and the ASNM forward to success and recognition, one has to get actively involved in such an effort. So, I decided to run for it.

Q9 Professional Affiliations

Scientific societies memberships

2012 – present International Society for Intraoperative Monitoring

2008 – present American Society of Neurophysiologic Monitoring

1999 – present American Society for Neuroscience

Q10 Publications, Awards and Appointments

Professional Experience

Chief Neurophysiologist

09/2009 – Present

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Director of Operations, Neurophysiology Monitoring Unit,
Neurological Surgery, P.C., Rockville Centre, NY

Assistant Professor and Assistant Director Intraoperative Unit Department of Neurosurgery
Mount Sinai School of Medicine, New York, New York 09/2007 - 09/2009

Research Assistant Professor Department of Neurosurgery
New York University School of Medicine, New York, New York 09/2005 – 03/2007

Postdoctoral Fellow/Research Scientist,
New York University School of Medicine, New York, New York 09/1998 – 09/2005

Adjunct Appointments

Assistant Professor, Laboure College, Milton, Massachusetts 2014 - Present
Assistant Professor, New York University School of Medicine
New York, New York 2007 - Present

Awards

2009 M. Stecker Award, ASNM Vancouver, Canada

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Peer-reviewed Articles

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3. Chen, B. T., Avshalumov, M. V., Rice, M. E. Modulation of somatodendritic dopamine release by endogenous H₂O₂: susceptibility in substantia nigra but resistance in VTA. *J. Neurophysiol.* 2002; 87:1155-1158.
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8. Avshalumov, M. V., Rice, M. E. Activation of ATP-sensitive K⁺ (KATP) channels by H₂O₂ underlies glutamate-dependent inhibition of striatal dopamine release. *Proc. Natl. Acad. Sci. (U.S.A.)* 2003; 100:11729-11734.
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11. Bao, L., Avshalumov, M. V., Rice, M. E. Partial mitochondrial inhibition causes suppression of striatal dopamine release and depolarization of medium spiny neuron via H₂O₂ elevation in the absence of ATP depletion. *J. Neurosci.* 2005; 25: 10029-10040.
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13. Fedirko, N., Avshalumov, M. V., Rice, M. E., Chesler, M. Regulation of postsynaptic Ca²⁺ influx in hippocampal CA1 pyramidal neurons via extracellular carbonic anhydrase. *J. Neurosci.* 2007; 27: 1167-1175.
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3. Rice, M. E., Avshalumov, M. V. Somatodendritic H₂O₂ from medium spiny neurons inhibits axonal dopamine release. In: *Dendritic Neurotransmitter Release*, Ludwig, M., ed. New York: Springer, 2005: 301-313.
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