**Organizational Neuroscience:**

**Proposal for a New Interest Group in the AOM**

September 30, 2019 (revised on Nov. 14, 2019, Jan. 3, 2020, and Jan. 14, 2020)

David Waldman (Chair) and Sebastiano Massaro (co-Chair)

1. *Executive Summary*

We propose to form an interest group (IG) within the Academy of Management (AOM) focused on the emerging field of organizational neuroscience. The name of our proposed IG is “Organizational Neuroscience” (NEU). The steering committee and proposed domain statement are as follows:

**Steering Committee**:[[1]](#footnote-1)

* *David Waldman (Chair), Arizona State University*
* *Sebastiano Massaro (Co-Chair), University of Surrey (UK)*
* *Mary Katherine Ward, Curtin University (Australia)*
* John Antonakis, Faculty of Business and Economics, University of Lausanne (Switzerland)
* Pierre Balthazard, California State University - Sacramento
* Richard Boyatzis, Case Western University
* Georgios Christopoulos, Nanyang Business School, NTU (Singapore)
* Anne Miner, University of Wisconsin

**Domain Statement**:[[2]](#footnote-2)

“Specific Domain: *The Organizational Neuroscience (NEU) interest group is dedicated to using neuroscience knowledge and approaches at different levels in organizations, as well as promoting linkages to management practice.*

We encourage knowledge generation through theoretical propositions and/or empirical evidence pertaining to the neural mechanisms associated with behavior in the workplace. Concurrently, the interest group seeks to understand how the environment, culture, and institutions can affect organizational actors’ nervous system functioning. By considering neuroscience at different levels of analysis in organizations, we encourage interdisciplinarity and multi-methods research. Moreover, we stress ethical considerations when using neuroscience technology in workplace research.

The goals and objectives of the proposed IG are threefold:

1. To integrate neuroscience concepts, theories, and approaches to the study of management and organizations.
2. To form bridges between scholars and practitioners through the use of neuroscience as applied to management and organizational issues.
3. To broaden the appeal of the AOM to scholars and practitioners currently working in other disciplines (e.g., psychology, economics, marketing, and neuroscience) who might not have yet viewed the AOM as applicable to their own pursuits.

Over two years ago, David Waldman and Sebastiano Massaro began discussions about the creation of a possible IG. Collectively, they had noticed growing and sustained activity in the broader area of neuroscience at AOM events [see also part “b”) below], as well as in management journals. Other scholars worldwide gradually joined in the conversation, including members of our Steering Committee.

Things solidified further with a caucus session at the 2019 AOM meeting in Boston that was specifically dedicated to the notion of forming the proposed IG. It was attended by over 40 individuals, representing a number of different divisions, interest groups, research topics and perspectives within the AOM. Attendees included, among others, senior Editors of the *Academy of Management Perspectives* (Philip Phan), *The Leadership Quarterly* (John Antonakis), and *Entrepreneurship Theory and Practice* (Johan Wiklund). In that session, we targeted for discussion several of the issues raised in part “b)” of this proposal.

In addition, we considered the necessity of informing officials of several existing divisions and IGs of the AOM for which we felt that our proposal might be most relevant (e.g., in terms of potential overlap of interests with the proposed IG). Those divisions/IGs include: entrepreneurship (ENT), human resources (HR), organizational behavior (OB), organization and management theory (OMT), research methods (RM), strategic management (STR), and managerial and organizational cognition (MOC). We received responses from the ENT, RM, OB, STR, and OMT divisions. The overwhelming sentiment was positive toward the concept of establishing an IG in ON. In only one instance was there specific feedback to be acted upon. Specifically, the RM division commented, and we readily embraced their suggestion, that we should change our domain statement line from *“… using neuroscience knowledge and methods …*” (i.e., our earlier wording) to “*… using neuroscience knowledge and approaches …*” (i.e., our revised wording shown above).

1. *Demonstrated evidence that this body of knowledge is not addressed adequately by current Divisions or IGs*

As described further below, over the past decade, a number of articles pertaining to ON have appeared in management and organizational journals. These articles include the use of neuroscience concepts and methods as applied to various topical, theoretical, and practical areas that are represented by current divisions and IGs within the AOM. These areas include, but are not limited to OB, STR, RM, and MOC. However, for a number of reasons that were considered and discussed at our caucus session in Boston, the domain of ON is sufficiently unique and innovative as to constitute its own body of knowledge and be represented by a dedicated IG. For example, ON includes technologies, metrics and approaches (e.g., electroencephalography and functional magnetic resonance imaging, skin conductance, heart rate variability, hormonal assessments, genetics analyses, neural networks, artificial intelligence) that can complement, yet remain distinct from, traditional approaches to management research. Further, ON includes interdisciplinary and novel concepts and theories that are highly relevant to organizational and managerial processes. As such, ON is not only about the use of innovative instruments; it is also about new concepts and theories from the neurosciences that can be applied to management and organizations.

Added to the scholarly rationale above, we envision three key advantages of having a distinct IG. First, over the past decade, over 70 contribution (symposia, PDW, and/or scholarly sessions) at AOM annual meetings have been devoted specifically to neuroscience topics, issues, and developments. However, for the most part, they have been included in the programs of various years under exiting divisions or IGs, somewhat parceling this growing body of knowledge. By having an IG that is dedicated to ON, members who have a specific interest in ON will be able to more easily target submissions and identify sessions of interest. Moreover, they can work towards inclusive community-building, which is a priority of the AOM (see for one example, the main themes of the most recent and upcoming AOM Meetings). Second, an important part of the mission of this IG would be to help members become more comfortable with the incorporation of neuroscience into their own research and teaching programs. Accordingly, researchers and instructors who are associated with the AOM will be in a better position to keep up with emerging neuroscience trends, including research practices, ethical issues and requirements, and so forth. This opportunity will also facilitate knowledge generation and dissemination by helping editors, reviewers and researchers to engage in constructive dialogue with a body of scholars who are purposively working in ON. Third, we see a high likelihood that new members might be drawn to the AOM by such an IG. For example, psychologists and neuroscientists who might not have previously viewed the AOM as a relevant professional association might be drawn to AOM conferences. In this respect, we have already been in touch with societies in allied disciplines, such as the Society for Neuroeconomics and Society for Industrial and Organizational Psychology, with the goal to attract scholars who are working in ON, yet at present are not AOM members. Indeed, the current president of the Society for Neuroeconomics, Alan Sanfey, has expressed particular interest in cross-fertilizing the ON and neuroeconomics research communities.

As suggested above, existing AOM divisions and IGs have some interests that could overlap to some extent with ON. At the same time, we wish to underscore that no other division/IG meets the specific needs that we address in our domain statement. For this reason, we strongly believe that it is inadequate to attempt to operate as an ON subgroup/community within any particular division/IG. The lack of a dedicated IG would just further the parcelization of this emerging field and limit its focused development within the AOM. Moreover, we are confident that our proposed IG will not harm the welfare of existing divisions/IGs. To the contrary, we believe that individuals in many other divisions/IGs already see the mutual synergies and opportunities that will be offered with our proposed IG.

It should further be noted that our proposed IG is entirely in line with an initiative that has drawn the attention of a number of entities (e.g., the AOM, American Psychological Association, SIOP, AACSB, and so forth), specifically “Responsible Research in Business & Management (<https://rrbm.network/>). This effort is being spearheaded largely by Anne Tsui, and its goal is to inspire and support “credible and useful research in the business and management disciplines.” For example, one of the 7 principles of responsible research is “valuing plurality and multidisciplinary collaboration” (<https://rrbm.network/position-paper/principles-of-responsible-science/>). We believe that the interdisciplinary nature of our proposed IG embodies this principle quite well.

In sum, our proposed IG would contribute uniquely to the AOM by providing an identifiable “home” and sense of identification for scholars who are interested in neuroscience. As described below, although there has been a growing presence on the part of ON in AOM events and management journals, its unique contribution could be highlighted better through the development of this IG.

1. *Demonstrated evidence of a body of scholarship in the proposed domain and its relevance/importance to the field of management*

As can be seen in the below list of articles and a book, an existing body of scholarship exists in recognized management, organizational, and applied psychology journals. These articles cover a range of topics including personality, leadership, justice, gender differences, ethics, entrepreneurship, and organizational learning. All of these topics are at the core of the field of management, and moreover, address a dialogue at multiple levels of analysis (i.e., micro, meso, and macro). Further, although there is some representation of this work in the various divisions or IGs of the AOM, there is still under-representation. For example, with the advent of the proposed IG interest group, we envision significantly more work incorporating neuroscience concepts and approaches with regard to such topics as entrepreneurship, HR, and strategy.

**Existing Scholarship**:

Ashkanasy, N. M., Becker, W. J., & Waldman, D. A. 2014. Neuroscience and organizational behavior: Avoiding both neuro-euphoria and neuro-phobia. ***Journal of Organizational Behavior***, 35: 909-919.

Bagozzi, R. P., & Lee, N. 2019. Philosophical foundations of neuroscience in organizational research: Functional and nonfunctional approaches***. Organizational Research Methods***, 22: 299-331.

Bagozzi, R. P., Verbeke, W. J., Dietvorst, R. C., Belschak, F. D., van den Berg, W. E., & Rietdijk, W. J. 2013. Theory of mind and empathic explanations of Machiavellianism: A neuroscience perspective. ***Journal of Management*,** 39: 1760-1798.

Balthazard, P. A., Waldman, D. A., Thatcher, R. W., & Hannah, S. T. 2012. Differentiating transformational and non-transformational leaders on the basis of neurological imaging. ***The Leadership Quarterly***, 23: 244-258.

Becker, W. J., Cropanzano, R., & Sanfey, A. G. 2011. Organizational neuroscience: Taking organizational theory inside the neural black box. ***Journal of Management****,* 37: 933-961.

Becker, W. J., Volk, S., & Ward, M. K. 2015. Leveraging neuroscience for smarter approaches to workplace intelligence. ***Human Resource Management Review***, 25: 56-67.

Beugré, C. D. 2009. Exploring the neural basis of fairness: A model of neuro-organizational justice. ***Organizational Behavior and Human Decision Processes***, 110: 129-139.

Boyatzis, R. E., Passarelli, A. M., Koenig, K., Lowe, M., Mathew, B., Stoller, J. K., & Phillips, M. 2012. Examination of the neural substrates activated in memories of experiences with resonant and dissonant leaders. ***The Leadership Quarterly***, 23: 259-272.

Braeutigam, S., Lee, N., & Senior, C. 2019. A role for endogenous brain states in organizational research: Moving toward a dynamic view of cognitive processes. ***Organizational Research Methods***, 22: 332-353.

Cropanzano, R. S., Massaro, S., & Becker, W. J. 2017. Deontic justice and organizational neuroscience. ***Journal of Business Ethics***, 144:733-754.

Dimoka, A. 2010. What does the brain tell us about trust and distrust? Evidence from a functional neuroimaging study. ***MIS Quarterly***, 34: 373-396.

Dulebohn, J. H., Conlon, D. E., Sarinopoulos, I., Davison, R. B., & McNamara, G. 2009. The biological bases of unfairness: Neuroimaging evidence for the distinctiveness of procedural and distributive justice. ***Organizational Behavior and Human Decision Processes***, 110: 140-151.

Dulebohn, J. H., Davison, R. B., Lee, S. A., Conlon, D. E., McNamara, G., & Sarinopoulos, I. C. 2015. Gender differences in justice evaluations: Evidence from fMRI. ***Journal of Applied Psychology****,* 101: 151-170.

Haesevoets, T., De Cremer, D., Van Hiel, A., & Van Overwalle, F. 2018. Understanding the positive effect of financial compensation on trust after norm violations: Evidence from fMRI in favor of forgiveness. ***Journal of Applied Psychology***, 103: 578.

Hannah, S. T., Balthazard, P. A., Waldman, D. A., Jennings, P., & Thatcher, R. 2013. The psychological and neurological bases of leader self-complexity and effects on adaptive decision-making. ***Journal of Applied Psychology***, 98: 393-411.

Healey, M. P., & Hodgkinson, G. P. 2014. Rethinking the philosophical and theoretical foundations of organizational neuroscience: A critical realist alternative. ***Human Relations***, 67: 765-792.

Jack, A. I., Rochford, K. C., Friedman, J. P., Passarelli, A. M., & Boyatzis, R. E. 2019. Pitfalls in organizational neuroscience: A critical review and suggestions for future research. ***Organizational Research Methods***, 22:421-458.

Lahti, T., Halko, M. L., Karagozoglu, N., & Wincent, J. 2019. Why and how do founding entrepreneurs bond with their ventures? Neural correlates of entrepreneurial and parental bonding. ***Journal of Business Venturing***, 34: 368-388.

Laureiro‐Martínez, D., Brusoni, S., Canessa, N., & Zollo, M. 2015. Understanding the exploration–exploitation dilemma: An fMRI study of attention control and decision‐making performance. ***Strategic Management Journal***, 36: 319-338.

Lindebaum, D., & Jordan, P. J. 2014. A critique on neuroscientific methodologies in organizational behavior and management studies. ***Journal of Organizational Behavior***, 35: 898-908.

Mason, M. F., Dyer, R., & Norton, M. I. 2009. Neural mechanisms of social influence. ***Organizational Behavior and Human Decision Processes***, 110: 152-159.

Massaro, S., & Pecchia, L. 2019. Heart rate variability (HRV) analysis: A methodology for organizational neuroscience. ***Organizational Research Methods***, 22:354-393.

Molenberghs, P., Prochilo, G., Steffens, N. K., Zacher, H., & Haslam, S. A. 2017. The neuroscience of inspirational leadership: The importance of collective-oriented language and shared group membership. ***Journal of Management***, 43: 2168-2194.

Murray, M. M., & Antonakis, J. 2018. An introductory guide to organizational neuroscience. ***Organizational Research Methods***, 22: 6–16.

Nicolaou, N., & Shane, S. 2014. Biology, neuroscience, and entrepreneurship. ***Journal of Management Inquiry***, 23:98-100.

Niven, K., & Boorman, L. 2016. Assumptions beyond the science: Encouraging cautious conclusions about functional magnetic resonance imaging research on organizational behavior. ***Journal of Organizational Behavior****,*37:1150-1177.

Powell, T. C. 2011. Neurostrategy. ***Strategic Management Journal***, 32: 1484-1499.

Robertson, D. C., Voegtlin, C., & Maak, T. 2017. Business ethics: The promise of neuroscience. ***Journal of Business Ethics***, 144: 679-697.

Rochford, K. C., Jack, A. I., Boyatzis, R. E., & French, S. E. 2017. Ethical leadership as a balance between opposing neural networks. ***Journal of Business Ethics***, 144: 755-770.

Senior, C., Lee, N. J., & Butler, M. J. R. (2011). [Organizational cognitive neuroscience.](http://eprints.aston.ac.uk/15714/) ***Organization Science***, 22: 804-815.

Waldman, D. A., & Balthazard, P. A. (Eds.) 2015. ***Organizational neuroscience***. London: Emerald Books.

Waldman, D. A., Balthazard, P. A., & Peterson, S. 2011. The neuroscience of leadership: Can we revolutionize the way that leaders are identified and developed? ***Academy of Management Perspectives***, 25(1): 60-74.

Waldman, D. A., Wang, D., Hannah, S. T., & Balthazard, P. A. 2017. A neurological and ideological perspective of ethical leadership. ***Academy of Management Journal*,** 60: 1285-1306. DOI: 10.5465/amj.2014.0644

Waldman, D. A., Wang, D., Hannah, S. T., Owens, B. P., & Balthazard, P. A. 2018. Psychological and neurological predictors of supervisor abusiveness. ***Personnel Psychology*,** 71: 399-421.

Waldman, D. A., Ward, M. K., & Becker, W. J. 2017. Neuroscience in organizational behavior. ***Annual Review of Organizational Psychology and Organizational Behavior***, 4: 425-444.

1. *Demonstrated evidence that Academy members are making or are likely to make scholarly contributions to this body of knowledge*

As can be seen below, there are numerous examples of scholarship in either AOM journals, or journals associated with regional divisions of the AOM. In addition, we show examples of paper/symposia that have been presented at various AOM meetings since 2015.

**Scholarship in AOM or Regional AOM Journals:**

Bagozzi, R. P., Verbeke, W. J., Dietvorst, R. C., Belschak, F. D., van den Berg, W. E., & Rietdijk, W. J. 2013. Theory of mind and empathic explanations of Machiavellianism: A neuroscience perspective. ***Journal of Management*,** 39: 1760-1798.

Becker, W. J., Cropanzano, R., & Sanfey, A. G. 2011. Organizational neuroscience: Taking organizational theory inside the neural black box. ***Journal of Management****,* 37: 933-961.

Molenberghs, P., Prochilo, G., Steffens, N. K., Zacher, H., & Haslam, S. A. 2017. The neuroscience of inspirational leadership: The importance of collective-oriented language and shared group membership. ***Journal of Management***, 43: 2168-2194.

Nicolaou, N., & Shane, S. 2014. Biology, neuroscience, and entrepreneurship. ***Journal of Management Inquiry***, 23:98-100.

Waldman, D. A., Balthazard, P. A., & Peterson, S. 2011. The neuroscience of leadership: Can we revolutionize the way that leaders are identified and developed? ***Academy of Management Perspectives***, 25(1): 60-74.

Waldman, D. A., Wang, D., Hannah, S. T., & Balthazard, P. A. 2017. A neurological and ideological perspective of ethical leadership. ***Academy of Management Journal*,** 60: 1285-1306. DOI: 10.5465/amj.2014.0644

**Sampling from the Academy of Management Proceedings and Sessions (2015-2019)**

Becker, W. J., Boyatzis, R. E., Jack, A., & Reeck, C. 2015. Organizational neuroscience: A discussion among interdisciplinary scholars. In J. Humphreys (Ed.) ***Academy of Management Proceedings***, vol. 2015: 13914. Briarcliff Manor, NY: Academy of Management.

Binder, J. K., McBride, R., Sud, A., Wuebker, R. J., Gregoire, D. A., Martin de Holan, P., & Pereira, D. 2015. Is "neuroentrepreneurship" worth pursuing? In J. Humphreys (Ed.) ***Academy of Management Proceedings***, vol. 2015: 15922. Briarcliff Manor, NY: Academy of Management.

Christopoulos, G., & Keller, J. 2017. Working together in the century of the city: psycho-biology, urban densification and cooperation. In G. Atinc (Ed.) ***Academy of Management Proceedings***, vol. 2017: 14958. Briarcliff Manor, NY: Academy of Management.

Cummings, T., & Nickerson, J. A. 2017. An exploration of brain science and its potential contributions to strategic management & thinking. In G. Atinc (Ed.) ***Academy of Management Proceedings***, vol. 2017: 13144. Briarcliff Manor, NY: Academy of Management.

Dulebohn, J., Beugre, C. D., & Waldman, D. A. 2019. Building a field of organizational neuroscience: Challenges and prospects. Panel discussion session.

Healey, M. P., Hodgkinson, G. P., & Massaro, S. 2017. Emotion regulation in organizations: Integrating neural and social processes. In G. Atinc (Ed.) ***Academy of Management Proceedings***, vol. 2017: 16741. Briarcliff Manor, NY: Academy of Management.

Langelett, G. 2016. Dopamine, serotonin, and oxytocin: Three neurotransmitters for sustainable employee engagement. In J. Humphreys (Ed.) ***Academy of Management Proceedings***, vol. 2016: 15032. Briarcliff Manor, NY: Academy of Management.

Massaro, S., & Waldman, D. A. Organizational neuroscience: Towards an interest group. 2019. Caucus session.

Treffers, T., & Fehse, K. 2015. Be Happy, but Always Remember: The Neural Correlates of Affect and Overconfidence. In J. Humphreys (Ed.) ***Academy of Management Proceedings***, vol. 2015: 12633. Briarcliff Manor, NY: Academy of Management.

Vongas, J. G., Al Hajj, R., & Fiset, J. E. 2018. Leader emergence, testosterone, and empathy: Testing the dual-hormone hypothesis in men. In G. Atinc (Ed.) ***Academy of Management Proceedings***, vol. 2018: 18105. Briarcliff Manor, NY: Academy of Management.

Zunino, D. 2016. Are genetics and environment substitutes or complements in affecting entrepreneurial choice? In J. Humphreys (Ed.) ***Academy of Management Proceedings***, vol. 2016: 12173. Briarcliff Manor, NY: Academy of Management.

1. *Demonstrated evidence that the full proposal has been circulated widely and reflects the collective thinking of a cross section of members who will provide intellectual leadership and ongoing support (including a description of procedures used to circulate the petition and collect signatures)*

Since the earliest version of this proposal, we have engaged in a wide circulation of our concept among the AOM members. For example, the domain statement was reviewed and agreed upon by the steering committee members of the proposed IG. Then, we started the petition process by providing an initial proposal to the DIGR in late July. The petition included the domain statement and an abstract of our proposal. After receiving some feedback from the Committee, we revised our petition. We received final approval (for both our petition form and process of collecting signatures) from the DIGR Committee on Aug. 2, 2019. We began to immediately circulate our approved petition among AOM voting members to garner signatures in one of two ways:

1. We distributed paper copies of the petition at various sessions (e.g., the caucus session mentioned above, related symposia, paper sessions, PDWs, social events) at the AOM meeting in Boston. These sessions were limited to those attended by the Chair and Co-Chair of the Steering Committee. In addition, several individuals were sent paper copies, and they returned scanned, signed forms through email.
2. We liaised and cooperated with the IT team of the AOM to produce an online version petition. To the best of our knowledge, this is the first instance that a petition of this kind has been distributed online within the AOM. Concurrently, we established an AOMConnect page for Organizational Neuroscience, with the aim to help provide important infrastructure to the ON community, should the IG be approved.

Regarding the above online process to attain signatures, we engaged in dissemination through social media (e.g., Twitter, Linkedin) to increase visibility of the proposed IG. In addition, we attempted to “get the word out” by contacting via e-mail close colleagues, as well as colleagues working in management departments on several continents.

**We received a total of 533 signed petitions as of 10 am EST on Sept. 30**, including 101 through the paper petition process and 432 online.[[3]](#footnote-3) A scanned file containing the 101 paper petition signatories is attached to this proposal,[[4]](#footnote-4) as is an excel spreadsheet containing a listing of the 432 online signatories. These individuals not only represent a cross-section of scholars who have greatly contributed to our profession, but they also span a wide range of backgrounds, interests, and levels of analysis in the AOM.

It should be noted that a number of elements of the current proposal were refined following the engaging discussion that took place at our caucus session in Boston in which a well-attended audience represented the different areas of the AOM. As mentioned earlier, following the AOM, the domain statement and extended abstract of the proposal was sent (with request for feedback) to officials of 7 AOM divisions/IGs. As reported above, demonstrating the symbiotic cooperation that we envision between the proposed IG and existing divisions/IGs, this latter viewing led to only a minor change in one word in our original domain statement.

Finally, the current proposal has been viewed and approved by the entire Steering Committee.

1. The steering committee members who will act as the first nominating committee are in italics. [↑](#footnote-ref-1)
2. This statement represents the final result of several iterations throughout the review and approval process. Its final approval occurred on Jan. 12, 2020. [↑](#footnote-ref-2)
3. We checked for, and eliminated, any duplicate signatures – both within and between our two methods of collecting signatories. We also attempted to eliminate any doctoral students from both of our methods of collecting signatories. [↑](#footnote-ref-3)
4. The first page of this document (introducing the petition) is the same first page of all petitions in this file. To avoid repetition and a lengthy file, only signature pages were scanned after the first page. [↑](#footnote-ref-4)