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Synergies of Translational and Transnational Neuroethics for Global Neuroscience

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The momentum for global neuroscience that is geopolitically-free has never been greater, and neuroethics holds a unique place in this context both in its *translational and transnational* forms.

In their *AJoB Neuroscience* target article on translational neuroethics, Wexler and Specker Sullivan (2023) propose a movement toward more rigorous agendas and interdisciplinary relationships for the field of neuroethics, greater inclusivity of people and content, and a more specific emphasis on the translation of scholarship into practice than has existed over the past 20 years since the formalization of the field. As the current leaders of the International Brain Initiative (IBI; internationalbraininitiative.org), we fully embrace the forward-looking vision and trajectory proposed by these self-identifying early-career investigators. One of the coauthors of the target article (LSS) was a postdoctoral fellow with one of us (JI) at the University of British Columbia (2015–2017). We hold both Wexler and Specker Sullivan in esteem as accomplished and thriving colleagues today.

We find the opportunities for the novelty of their argument to be more transnational than translational. Neuroethics, from its beginnings, has had translation at its core. This focus existed squarely in three of the original pillars when neuroethics was formalized in San Francisco, California in 2001: in clinical medicine, in the nonclinical world, and in education and outreach. Even before then, Ron Cranford wrote about translational neuroethics and decision-making in end-of-life care in neurological conditions (e.g., in children with brain damage – Cranford 1995). Considerations of the brain and the self – the neurobiology of consciousness (separate from medical and ethicolegal pertaining to disorders of consciousness) was the fourth and most theoretical pillar.

From its very inception, neuroethics has also taken anticipatory, scientific, and highly pragmatic approaches, setting itself apart, for example, from more philosophical engagement with ethics, brain, and mind, or purely legal analyses. Neuroethics has grappled head-on with topics

in neurotechnology and neurogenetics for major neurologic and neuropsychiatric conditions. It has taken on issues regarding the adoption of pharmacologics and devices for nonmedical conditions, including the improvement of cognitive states, and fully embraced the imperative to grow and build a dedicated community toward sustainability (e.g., Chandler et al. 2021; Dubljevic et al. 2019; Illes et al. 2010; Illes 2023; Kellmeyer et al. 2019; Stevenson et al. 2016). There is always work to be done, clarity about differences between recommendations, standards, and codes of conduct still needed, and creative new methods for operationalizing metrics of impact and success welcome, but neither translational goals nor their pursuit and achievement through rigor have been lacking.

We would argue that collaborations with neuroscientists, neurologists, and engineers are deep today and still expanding, as is the genuine, non-tokenistic engagement of multidisciplinary teams of diverse set of stakeholders and perspectives worldwide. Like much of the life sciences of the past however, methods in neuroethics might have benefited from better inclusivity out of the starting block, both from the point of view of explicitly growing the community of scholars to comprise it and the breadth of engaged research participants. However, calls for broadening the base of leaders and contributors to the new generation have not gone unattended (Chiong 2020), and today the movement away from exploitive and extractive research toward community and patient-participant involvement, and attention to the fundamental matter of social justice is extraordinary.

We believe, therefore, that the growing transnational breadth of neuroethics (Rommelfanger et al. 2019) will be its truly new strength, ushering in a new generation of synergies with other focus areas and leadership in global neuroscience. In this context, we situate translational neuroethics as we see it in the context of the IBI's Neuroethics Working Group – one of seven Working Groups around which the IBI is structured – and the

innumerable synergies the Working Group shares with the six others. They amply build on the strengths of the past (International Brain Initiative 2020). Synergies include strategies for the collection, standardization, and utilization of structural and functional big data related to affective behaviors, molecules, circuits, and bio-signals with the IBI's Data Sharing and Standards Working Group. Translating these data requires coordination with IBI Working Groups on Technology and Tools, Brain Mapping, and the Emotional Brain. Synergies with the Brain Mapping Working Group, with a focus on mesoscopic mapping, will advance mutual neuroimaging discovery goals with the European e-Brain and Big Brain projects. Brain mapping at single-cell resolution is also an important component of the US Brain Initiative 2.0 and offers a platform for careful integration of data obtained by that initiative with those obtained by other national and international neuroscience projects.

The Neuroethics Working Group recognizes that neuroethics is not limited to any specific region or culture. It is committed to considering diverse perspectives from around the world to ensure that any frameworks and resulting deliverables from the work of the IBI reflect a truly global, border-free, cooperative perspective. Its work, closely aligned with IBI's Crosscultural Working Group, also integrates ethical considerations, methods, and values from different communities. The focus of the IBI Neuroeducation Working Group is equally transcendent, developing and delivering IBI Training and Education activities that build on and support the actions of the other IBI Working Groups.

Translational neuroethics and resulting transnational outcomes, therefore, are one of the many binding forces at the core of IBI activities and aspirations. To this end, global neuroscience and the continued growth of translationally-focused, transnational neuroethics will be a cornerstone of science, medicine, education, and other human endeavors in the 21st century.

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REFERENCES

- Chandler, J., K. I. Van der Loos, S. Boehnke, D. Z. Buchman, J. S. Beaudry, and J. Illes. 2021. Building communication neurotechnology for high stakes communications. *Nature Reviews Neuroscience* 22 (10):587–8. doi:10.1038/s41583-021-00517-w.
- Chiong, W. 2020. Insiders and outsiders: Lessons for neuroethics from the history of bioethics. *AJOB Neuroscience* 11 (3):155–66. doi:10.1080/21507740.2020.1778118.
- Cranford, R. E. 1995. Withdrawing artificial feeding from children with brain damage. *BMJ* 311 (7003):464–5. doi:10.1136/bmj.311.7003.464.
- Dubljevic, V., I. Coates McCall, and J. Illes. 2019. Neuroenhancement at work: Addressing the ethical, legal, and social implications. In *Organizational Neuroethics*, ed. E. Racine, 87–103. New York: Springer.
- Illes, J. 2023. Reflecting on the past and future of neuroethics: The brain on a pedestal. *AJOB Neuroscience* 14 (3):223–6. doi:10.1080/21507740.2023.2188282.
- Illes, J., M. A. Moser, J. B. McCormick, E. Racine, S. Blakeslee, A. Caplan, E. Check Hayden, J. Ingram, T. Lohwater, P. McKnight, et al. 2010. Neurotalk: Improving the communication of neuroscience. *Nature Reviews Neuroscience* 11 (1):61–9. doi:10.1038/nrn2773.
- International Brain Initiative. 2020. International Brain Initiative: An innovative framework for coordinated global brain research efforts. *Neuron* 105 (2):P212–216.
- Kellmeyer, P., J. Chandler, L. Cabrera, A. Carter, K. Kreitmair, A. Weiss, and J. Illes. 2019. Neuroethics at 15: The current and future environment for neuroethics. *AJOB Neuroscience* 10 (3):104–10.
- Rommelfanger, K., S. J. Jeong, C. Montojo, and M. Zirlinger. 2019. Neuroethics: Think global. *Neuron* 101 (3):363–4. doi:10.1016/j.neuron.2019.01.041.
- Stevenson, S., B. L. Beattie, L. Bruce, and J. Illes. 2016. When culture informs neuroscience: Considerations for community-based neurogenetics research and clinical care in a First Nation community with early onset familial Alzheimer disease. In *Cultural Neuroscience*, ed. J. Y. Chiao, 171–182. Oxford: Oxford University Press.
- Wexler, A., and L. Specker Sullivan. 2023. Translational neuroethics: A vision for a more integrated, inclusive, and impactful field. *AJOB Neuroscience* 14 (4):388–399. doi:10.1080/21507740.2021.2001078.