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Discovering translational biomarkers in neurodevelopmental disorders

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- Charlie Schroeder, Columbia University Medical Center, New York, New York, USA
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- Craig Tenke (deceased) Columbia University Medical Center, New York, New York, USA
- Brian Theyel, Brown University and Alpert Medical School, Providence, Rhode Island, USA
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Supplementary Box 2 | Competing interests statement

- Mustafa Sahin reports grant support from Novartis, Roche, Pfizer, Ipsen, LAM Therapeutics and Quadrant Biosciences. He has served on scientific advisory boards for Sage, Roche and Takeda.
- · Elizabeth Berry-Kravis has been a consultant for Seaside Therapeutics, Novartis, Roche, Alcobra, Neuren, Cydan, Fulcrum, GW, Neurotrope, Marinus, Zynerba, BioMarin and Ovid Pharmaceuticals; a consultant for Novartis, Roche and Neurotrope regarding the conduct of clinical trials in fragile X syndrome (FXS) and other rare neurological diseases; on the scientific advisory board for Vteese/Mallinckrodt to provide guidance on clinical trials in Niemann-Pick type C (NP-C) disease; and has received research funding to conduct clinical trials in FXS and/or other neurodevelopmental disorders from Novartis, Roche, Seaside Therapeutics, Alcobra and Neuren, from Ovid and Zynerba to conduct a clinical trial in NP-C, from Vtesse/Mallinckrodt and from Asuragen to develop fragile X mental retardation 1 testing standards.
- William Z. Potter has served on advisory boards to Eli Lilly, Takeda, Astellas, Praxis and Noven and holds Merck & Co. stock.

- Arthur Combs is an employee and officer of MC10.
- Lauren Ethridge has served as a consultant to Ovid, Fulcrum and Novartis for work in FXS and Phelan McDermid syndrome.
- André Fenton is a founder of Bio-Signal Group Corp.
- Flavio Frohlich is the lead inventor of intellectual property (IP) filed by the University of North Carolina. The clinical studies performed in the Frohlich Lab have originally received a designation as conflict of interest with administrative considerations that was subsequently removed. Frohlich is the founder, chief scientific officer and majority owner of Pulvinar Neuro LLC. The company played no role in this workshop. Flavio Frohlich is also an author with Elsevier and receives royalty payments.
- David R. Hessl has served as a consultant to Ovid and Zynerba regarding FXS clinical trials.
- Shafali S. Jeste has served as a consultant to Roche.
- Darcy A. Krueger has received consulting fees from Novartis and Upsher-Smith and additional research support from Novartis.

- Gregory Light has been a consultant to Astellas, Boehringer Ingelheim, Dart NeuroScience, Heptares, Lundbeck, Merck & Co., NeuroSig and Takeda.
- Eric Marsh has been a site principal investigator for studies from GW Pharma, Neuren, Zogenix, Ovid and Marinus.
- Matthew W. Mosconi has served as a consultant on an investigator-initiated study of Phelan McDermid syndrome supported by Novartis.
- Declan Murphy has served on an advisory board to Roche.
- Gahan Pandina is an employee of Janssen Research & Development and is a Johnson & Johnson stockholder.
- Joseph Piven is the editor of the Journal of Neurodevelopmental Disorders, Springer Nature.
- Alexander Rotenberg has received research support from Brainsway, CREmedical, Nexstim, Neuroelectrics, Roche, Sage and Takeda.
- Timothy Roberts has been on consulting and /or advisory board positions with CTF, Ricoh and Spago, has IP licensing arrangements with MEGIN and has stock options in Prism Clinical Imaging