Wanze Xie

CONTACT INFORMATION

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EDUCATION & TRAINING BACKGROUND

Dates	*Degree/Position and Institution*	*Supervisor(s)*
Oct. 2017 –	Postdoc, Boston Children's Hospital, Harvard Medical School	Charles A. Nelson
2012 – 2017	Ph.D., Experimental Psychology, University of South Carolina	John E. Richards
2008 – 2012	BS, General Psychology, East Tennessee State University	Wallace Dixon
2006 – 2008	BS, Applied Psychology, Shandong Normal University, CN	

PROFESSIONAL POSITIONS & APPOINTMENTS

Dates	*Title and Institution*
2012 – 2017	RA and TA, Institute for Mind and Brain, Department of Psychology, University of South Carolina
2013	Visiting Research Associate, Huaxi MR research Center (HMRRC) Department of Radiology, West China Hospital of Sichuan University

HONORS AND AWARD

Dates	*Name of Award*
2012 – 2016	Presidential Fellowship, University of South Carolina
2015 – 2016	Student Travel Award, Graduate School, University of South Carolina
2015	Early Career Research Excellence Award, Department of Psychology, University of South Carolina
2015	SRCD Student Travel Award
2018 – 2010	Dean's List, East Tennessee State University

BIBLIOGRAPHY

Peer-reviewed Publications:

1. Jensen, S.K.G., Kumar, S., **Xie, W.**, Tofail, F., Haque, R., Petri, W.A., & Nelson, C.A. (2019). Neural correlates of early adversity among Bangladeshi infants. *Scientific Reports*, 9:3507, DOI: 10.1038/s41598-019-39242-x.
2. Gao, C, Stefania, C., Richards, J. **Xie, W.**, & Hanylak, T. (2019). The Neural sources of N170: Understanding timing of activation in face-selective areas. *Psychophysiology*, e13336.

3. **Xie, W.**, McCormick. S.A., Westerlund, A., Bowman, L.C., & Nelson, C. A. (2019). Neural correlates of facial emotion processing in infancy. *Developmental Science*, e12758, DOI: 10.1111/desc.12758.
4. **Xie, W.**, Mallin, B., & Richards, J. E. (2019). Development of brain functional connectivity and its relation to infant sustained attention in the first year of life. *Developmental Science*, e12702. DOI: 10.1111/desc.12703.
5. **Xie, W.**, Mallin, & Richards, J. E. (2018). Development of infant sustained attention and its relation to EEG oscillations: An EEG and cortical source analysis study. *Developmental Science,* e12562. DOI: 10.1111/desc.12562.
6. **Xie, W.**, & Richards, J. E. (2017). The relation between infant covert orienting, Sustained Attention and Brain Activity. *Brain Topography*, *30*(2), 198-219.
7. Richards, J. E., Sanchez, C., Phillips-Meek, M., & **Xie, W.** (2016). A database of age-appropriate average MRI templates. *NeuroImage*, *124*, 1254-1259.
8. **Xie, W.**, & Richards, J. E. (2016). Effects of interstimulus intervals on behavioral, heart rate, and event-related potential indices of infant engagement and sustained attention. *Psychophysiology*, 53, 1128-1142.
9. **Xie, W.**, Richards, J. E., Lei, D., Zhu, H., Lee, K., & Gong, Q. (2015b). The construction of MRI brain/head templates for Chinese children from 7 to 16 years of age. *Developmental Cognitive Neuroscience*, *15*, 94-105.
10. **Xie, W**., Richards, J. E., Lei, D., Lee, K., & Gong, Q. (2015a). Comparison of the brain development trajectory between Chinese and US children and adolescents. *Frontiers in Systems Neuroscience*, *8*, 249.

Manuscripts Under Revision/Under Review/In Preparation:

1. Ding, X., Richards, J., **Xie, W.**, Fu, G., & Lee, K. (Submitted). The Neural Spontaneous deception: A functional near-infrared spectroscopy (fNIRS) study.
2. **Xie, W.**, Jensen, S.K.G., Wade, M., Kumar, S. Westerlund, A., Kakon, S.H., Haque, R., Petri, W.A., & Nelson, C.A. (Under review). Growth measures predict brain functional connectivity and cognitive outcomes in urban Bangladeshi children exposed to early adversities. http://biorxiv.org/cgi/content/short/447722v1
3. Richards, J., Guy., M., Zieber, N., **Xie, W.**, & Roberts, J. (In preparation). Cortical sources of infant face-sensitive ERP components in the first year of life.
4. **Xie, W.**, Kumar, S. Westerlund, A., Kakon, S.H., Haque, R., Petri, W.A., & Nelson, C.A. (In Preparation). ERP and cortical source responses to faces in urban Bangladeshi children exposed to early adversities.
5. *Vincent, K., **Xie., W.**, Wade, M., & Nelson, C.A. (In preparation). The effects of parental stress on 3-year-old children's baseline EEG alpha activity and internalizing symptoms.
6. **Xie, W.**, Bathelt, J., & Nelson, C. A. (In preparation). Data-driven subtyping of large-scale network dynamics associated with child temperament and socioemotional behaviors.

* Students I am advising

Book Chapters:

1. **Xie, W.** & Nelson, C.A. (In preparation). The state-of-the-art pediatric EEG and MRI-compatible EEG. In Huang, H. & Roberts, T. (Ed.), *Handbook of Paediatric brain imaging: Methods, Modalities and Applications.* Elsevier, under the imprint of Academic Press: Cambridge, MA.

2. **Xie, W.** & Richards, J.E. (forthcoming). Cortical source localization of EEG time-frequency activation. In Bernat, E., Miller M., & Gable, P. (Ed.), *Oxford Handbook of EEG Frequency Analyses.* Oxford University Press: New York, NY.

3. Richards, J. E., & **Xie, W.** (2015). Brains for all the ages: Structural neurodevelopment in infants and children from a life-span perspective. In Benson, J. (Ed.), *Advances in Child Development and Behavior*, *48*, 1-52. Elsevier: Philadelphia, PA.

Invited Talks:

1. Development of Social Attention and How It Could be Impacted by Deviations in Early Adversity (May 2019). Invited talk in the Saxelab, Department of Brain and Cognitive Sciences, MIT.

2. The Neural Correlates of Social Attention in Early Development (April 2019). Invited talk in the Department of Cognitive Science, UCSD.

3. The Study of Infant Sustained Attention with EEG and Functional Connectivity Measures (March 2017). Invited talk in the Nelson Laboratory, Laboratories of Cognitive Neuroscience, Boston Children's Hospital and Harvard Medical School.

Conference Presentations:

Talks

1. **Xie, W.** (July 2018). *Development of brain functional connectivity and its relation to infant sustained attention.* Flash talk: ICIS2028: Imagineering the next 10 years of infant research. International Congress on Infant Studies, Philadelphia, PA.

2. Richards, J.E., Guy, M., Zieber., N., **Xie, W.**, & Roberts, J.E. (June 2016). *Brain changes in response to faces in the first year*. International Congress on Infant Studies, Philadelphia, PA.

3. **Xie, W.** & Richards, J.E. (March 2015). *Scalp locations projected to cortical locations for infant NIRS*. Society for Research in Child Development. Philadelphia, PA.

4. Lee, K., Ding, X.P, Richards, J.E., **Xie, W.**, & Fu, G. (October 2014). *Neural correlates of own and other race recognition in preschoolers: A functional near infrared spectocopy (fNIRS) study*. Paper presented at the International fNIRS conference, Toronto, CA.

Posters

1. *Vincent, K., **Xie, W**., Wade, M., & Nelson, C.A. (March 2019). *The effects of parental stress on 3-year-old children's baseline EEG alpha activity and internalizing symptoms.* Society of Affective Science Conference. Boston, MA.

2. **Xie, W.**, McCormick, S., Westerlund, A., Bowman, L., Cataldo, J., Zhou, A., & Nelson, C.A. (July 2018). *The development of cortical responses to emotional expressions in the first year of life*. International Congress on Infant Studies. Philadelphia, PA.

3. **Xie, W.**, Kumar, S., Westerlund, A., Kakon, S.H., Haque, R., Petri., W.A., & Nelson, C.A. (May 2018). *Stunted growth influences brain functional connectivity in urban Bangladeshi children exposed to early adversities*. FLUX satellite conference. Chapel Hill, NC.

4. **Xie, W.,** & Richards, J.E. (March 2017). *The development of infant sustained attention and its relation to EEG oscillations: An EEG and source analysis study*. Society for Research in Child Development. Austin, TX.

5. **Xie, W.,** & Richards, J.E. (May 2016). *The Relation between Infant Covert Orienting, Sustained Attention and Brain Activity.* International Conference on Infant Studies. New Orland, LA.

6. **Xie, W.,** & Richards, J.E. (March 2015). *Comparison of brain development trajectory between Chinese and US children and Adolescents and the construction of age-specific MRI brain/head templates for Chinese children and adolescents*. Society for Research in Child Development. Philadelphia, PA.
7. **Xie, W.,** & Richards, J.E. (March 2015). *Effects of interstimulus intervals on behavioral, heart rate, and event-related potential indices of infant engagement and sustained attention.* Society for Research in Child Development. Philadelphia, PA.
8. **Xie, W.,** & Richards, J.E. (June 2014). *The effects of ISIs on infant sustained attention: An ERPs Study*. International Conference on Infant Studies. Berlin, Germany.
9. **Xie, W.,** Richards, J.E., Lei, D., Lee, K., & Gong, Q. (March 2013). *The Construction of MRI templates for Chinese children and adolescents*. South East Neuroscience Conference & SNAPSE. Columbia, SC.
10. Dixon, W.E., West, A., & **Xie, W** (June 2012). *Effortful control as an information funnel for short-term recall at 21 Months*. International Congress on Infants Studies, Minneapolis, Minnesota
11. **Xie, W**., Ellison J., Polaha, J. (March 2010). *Mental health seeking and related stigma of international students at ETSU.* Appalachian Student Forum. Johnson City, TN.

FUNDING

Submitted grants proposal:

Grant title: Bill & Melinda Gates Foundation, 2018 through 2019.
Role: PI.
Time frequency and functional connectivity analysis of task-related EEG data in the source space and the prediction of cognitive outcomes in children exposed to early adversities. [$ 111,499].

PROFESSIONAL SERVICE

Ad hoc reviewers for journals:
Biological Psychology; *Child Development*; *Developmental Psychobiology*; *Frontiers in Psychology*, *Developmental Psychology*; *Frontiers in Neuroscience*; *Gates Open Research*; *IEEE Transactions on Neural Systems & Rehabilitation Engineering*; *Infancy*; *Neuroimage*; *Psychophysiology*; *Scientific Reports*