




# James Kent

## Curriculum Vitae

University of Iowa  
Neuroscience Program  
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### Education

- 2014 – **PhD. Neuroscience**, *University of Iowa*, Iowa City, IA.  
Research Focus: Neural basis of cognitive control.  
Advisor: Dr. Michelle W. Voss
- 2014 **B.A. Major: Psychology & Concentration: Neuroscience**, *Grinnell College*, Grinnell, IA.

### Additional Research Experience

- Spring 2015 **Graduate Research Assistant**, *University of Iowa*, Iowa City, IA.  
Neuroimaging of reward sensitivity in adolescents. Advisor: Dr. Jatin Vaidya
- Winter 2014 **Graduate Research Assistant**, *University of Iowa*, Iowa City, IA.  
Spatial memory in rats; programming reinforcement contingencies. Advisor: Dr. Ryan Lalumiere
- Summer 2013 **Undergraduate Research Assistant**, *Duke University*, Durham, NC.  
Investigating mild cognitive impairment with diffusion tensor imaging. Advisor: Dr. Guy Potter
- Summer 2012 **Undergraduate Research Assistant**, *Grinnell College*, Grinnell, IA.  
Physiological and affective experience of simulated outdoor exercise. Advisor: Dr. Elizabeth Queathem

### Teaching Experience

- 2018 **Teaching Assistant**, *University of Iowa*, Iowa City, IA.  
PSY:6280:0001 Structural Functional MRI Methods/Applic. Professor: Michelle Voss
- 2016 **Teaching Lab Assistant**, *University of Iowa*, Iowa City, IA.  
ACB:6252:0001 Functional Neuroanatomy. Professor: Justin Sipla

### Awards and Fellowships

- 2016 Post Comprehensive Research Award
- 2015 University of Iowa Training Grant T-32
- 2013 Grinnellink Grant Fund
- 2012 Grinnell Summer Research Grant
- 2012 – 2014 Student-Athlete Academic All Conference (Swimming)

### Technical Expertise

Analysis of functional magnetic imaging data, data management, coding, rat husbandry

#### Technologies

- Scientific FSL, AFNI, Freesurfer/FsFast, NiPype, PsychoPy, E-Prime
- Cluster Oracle/Sun Grid Engine (SGE), Docker, Singularity
- computing

Version git (GitHub, git-annex)  
control

### Programming Languages

Proficient Born Again SHell (BASH)  
Competent Python 2/3  
Familiar R, MATLAB, L<sup>A</sup>T<sub>E</sub>X

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## Publications

### Peer Reviewed Journals

- [1] DuBose LE, Voss MW, Weng TB, **Kent JD**, Dubishar KM, Lane-Cordova A, Sigurdsson G, Schmid P, Barlow PB, and Pierce GL (2017). Carotid Beta-stiffness index is associated with slower processing speed but not working memory or white matter integrity in healthy middle-aged/older adults. *Journal of Applied Physiology*, 122(4):868–876. doi:10.1152/jappphysiol.00769.2016. PMID: 28126907.

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## Presentations

### Talks

- [2] **Kent J** and Voss M. Synchrony is Key for Aging and Cognitive Control. University of Iowa Neuroscience Program, Iowa City, IA, October 2017. (Oral).
- [3] **Kent J** and Voss M. Midbrain Activity during Task and Rest: Two Sides of the Same Coin? University of Iowa Neuroscience Program, Iowa City, IA, May 2016. (Oral).
- [4] **Kent J** and Queathem E. Affective and Psychological effects of simulated outdoor exercise. Midwestern Psychological Association, Chicago, IL, May 2015. (Oral).
- [5] **Kent J** and Vaidya J. Reward Sensitivity and Attentional Control in Adolescents. University of Iowa Neuroscience Program, Iowa City, IA, May 2015. (Oral).
- [6] **Kent J** and Voss M. Brain Stripping Algorithms, Betcha can't use just one. University of Iowa Neuroscience Program, Iowa City, IA, June 2015. (Oral).

### Poster Presentations

- [7] **Kent J**, Lee K, Schultz E, Foster E, Wolinsky F, Merzenich M, and Voss M. Can adaptive cognitive training improve efficiency of attentional control in the aging brain? Society for Neuroscience, San Diego, CA, November 2016. (Poster).

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## Software

### Contributions to Open Source Scientific Software

- [8] Esteban O, Blair R, Markiewicz CJ, Berleant SL, Moodie C, Ma F, Isik AI, Erramuzpe A, **Kent JD**, Goncalves M, DuPre E, Poldrack RA, and Gorgolewski KJ (January 2018). poldracklab/fmriprep: 1.0.5. doi:10.5281/zenodo.1156273.
- [9] Gorgolewski KJ, Esteban O, Ziegler E, Notter MP, Burns C, Ellis DG, Johnson H, Manhães-Savio A, Hamalainen C, Jarecka D, Yvernault B, Markiewicz CJ, Salo T, Waskom M, Clark D, Wong J, Loney F, Madison C, Modat M, Goncalves M, Dewey BE, Clark MG, Dayan M, Keshavan A, Clark D, Pinsard B, Gramfort A, Berleant S, Nielson DM, Varoquaux G, Cipollini B, Nielson DM, Markello R, Rokem A, Wassermann D, Halchenko YO, Visconti di Oleggio Castello M, Kaczmarzyk J, Moloney B, Hanke M, Horea C, Bougacha S, de Hollander G, Mordom D, Buchanan C, Tungaraza R, Mancini M, Pauli WM, Iqbal S, Sikka S, Schwartz Y, Malone IB,

DuPre E, Frohlich C, Welch D, Forbes J, Watanabe A, Cumba C, Huntenburg JM, Eshaghi A, Kastman E, Ginsburg D, Schaefer A, Acland B, **Kent J**, Perez-Guevara M, Gillman A, Bougacha S, Forbes J, DuPre E, Nichols BN, Giavasis S, Jordan K, Kleesiek J, Erickson D, Küttner R, Haselgrove C, Correa C, Ghayoor A, Millman J, Haehn D, Lampe L, Lai J, Zhou D, Blair R, Glatard T, Renfro M, Liu S, Kahn AE, Triplett W, Jordan K, Stadler J, Kong XZ, Hallquist M, McDermottroe C, Chetverikov A, Salvatore J, Mertz F, Park A, Poldrack R, Jordan K, Craddock RC, Inati S, Hinds O, Cooper G, Perkins LN, Tambini A, Marina A, Mattfeld A, Noel M, Snoek L, Matsubara K, Cheung B, Gerhard S, Rothmei S, Urchs S, Pannetier N, Durnez J, Geisler D, Floren A, Sharp P, Mancini M, Weinstein A, Broderick W, Saase V, Andberg SK, Harms R, Khanuja R, Schlamp K, Arias J, Visconti di Oleggio Castello M, Papadopoulos Orfanos D, Tarbert C, De La Vega A, Nickson T, Brett M, Dubois M, Falkiewicz M, Podranski K, Pellman J, Linkersdörfer J, Varada J, Schwabacher I, Flandin G, Liem F, Pérez-García F, Shachnev D, McNamee D, Davison A, and Ghosh S (January 2018). nipy/nipype: Nipype - v1.0.0. doi:10.5281/zenodo.1160610.

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## Service/Leadership

- 2015 – 2018 **Committee Member**, *Eastern Iowa Brain Bee*, Iowa City, IA.
- 2015 **Student Member**, *YOU@UI Neuroscience Outreach*, University of Iowa, Iowa City. IA
- 2015 **Demonstrator**, *Brain Awareness Week Outreach*, University of Iowa, Iowa City. IA