I. Introduction
   a. Gerdin Business College Neuro-Lab and Behavioral Lab

   b. Gerdin Business Building, 2167 Union Dr. Room 0169 Ames, IA 50011-2027. See contact information below.

   c. Under the supervision of the Neuro-Lab Committee and the direction of a lab manager the Neuro-Lab is dedicated to conducting EEG and eye tracking research. The lab’s presence has recently been reestablished after being out of commission for a couple of years and is currently open for in and out of house researchers to use with the permission of the Neuro-Lab Committee.

   d. The Business College also has a separate mass testing behavioral laboratory with 15 desktop computer stations including headphones in the room.

   e. The labs are able to operate on an as needed basis during the academic year as long as the scheduling allows. During the academic summer months, it is also possible to conduct research with the permission of the Neuro-Lab Committee and under the supervision of the lab manager. For scheduling contact the lab manager whose contact information is listed below.

II. Background
   a. In 2009 former Dean’s Chair in Marketing, Dr. Terry Childers came to Iowa State University and built the first neuroscience laboratory in the nation to be located in a business college. Dr. Childers was interested in decision-making and specifically how the brain responded to products and advertising. When Dr. Childers retired in 2012 the lab continued to do research for a couple of years following, but due to lack of interest and expertise in the college the lab unfortunately went out of commission. In the spring semester of 2016, an ambitious group of faculty, a Ph.D. candidate, and undergraduate students worked diligently to re-establish the Neuro-Lab’s presence within the college and on Iowa State's campus.

   b. The Neuro-Lab Committee is currently head by Dr. Joey George (Chair of the Neuro-Lab Committee, Interim Faculty Administrator, and Professor of Information Systems), Dr. Samantha Cross (Assistant Professor of Marketing), and Dr. Todd Thornock (Assistant Professor of Accounting). The Neuro-Lab Committee is under the direction of Dr. Russell Lacziak (Interim Associate Dean for Graduate Programs and Research). The lab manager, Akmal Mirsadikov (Ph.D. Student of Information Systems) is in charge of operations and currently supervises two undergraduate research assistants.
III. Technology- Hardware EEG
   a. 5 adult sized electrode EEG caps (72 electrode) by Sands Research with EKG recording ability (1 large, 3 medium, 1 small)
   b. 2 Sensorium Digital Bio-Potential Amplifiers (DBPA)-1 24 channel portable Electroencephalography (EEG) recording system ((16 bits) (event related potential)) with eye-tracking and EKG recording ability

IV. Technology- Software EEG
   a. 2 computers with Windows XP 2002 with E-Prime 2.0 to collect ERP data
   b. 2 computers with Windows 7 64-bit with EMSE (5.4 Beta) and Matlab (version R2015b) to clean and average ERP data

V. Technology- Hardware Eye Tracking
   a. 1 SMI Computer with Windows 7 professional (32-bit), 8GM RAM, and i7-4770 CPU @ 3.40 GHz

VI. Technology- Software Eye Tracking
   a. 2 Windows 7 Professional computers
      i. One with Sensorium (Acquire) (version 0.2.10c) and Camtasia Studio 6
      b. One SMI Computer with BeGaze, Experiment Center 3.5, IDF Converter, IDF Event Detector, iViewX, iViewXRED, Remote Console

VII. Behavioral Lab- Hardware and Software
   a. 15 desktop computer stations with Window XP Pro 2002, with Intel Atom CPU D525 Processors

VIII. Other Lab Amenities
   a. Oversized sink with removable sprayer, shampoo and conditioner, hair dryer, and towels, for participants to wash their hair after a study
   b. In-house washer and dryer for participant used towels

IX. Cost
   a. Within the college rate
   b. Within the university rate
   c. Outside of the university rate
Neuro-Lab Committee Contact Information

**Joey F. George Ph.D.**  
John D. DeVries Endowed Chair in Business  
Director, PhD Program  
Chair of the Neuro Lab committee  
Interim Faculty Administrator  
Professor of Information Systems  
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**Russell N. Laczniak Ph.D.**  
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Professor of Marketing  
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(515) 294-9692

**Lab Manager**

**Akmal Mirsadikov**  
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College of Business, Iowa State University  
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mirakmal@iastate.edu  
515-294-1473

**INSERT THE GOOGLE CAL LINK HERE OR IF WE GET A WEBSITE FOR LAB**
Appendix A.
(In Chronological Order)

Neuro Lab

Study 1 – Neuro
- Lin, M. H., and Moore, K. A neurobiological investigation of visual and verbal processing.

Study 2 – Neuro

Study 3 – Neuro
- Lin, Meng-Hsien (Jenny), William J. Jones and Terry L. Childers, “Individual differences in Need for Touch”

Study 4 – Neuro (Jenny Dissertation)
- Lin, M. H., Cross, S. N. N., and Childers, T. L. Olfactory imagery and emotions. 3rd Annual Interdisciplinary Symposium on Decision Neuroscience, Philadelphia, PA, 2013. (Received Best Presentation Award)
- Lin, Meng-Hsien (Jenny), Samantha N. N. Cross, William J. Jones and Terry L. Childers, “Using Event Related Potentials to Understand Emotional Reactions to Scent,” (invited for revision, 2nd review, European Journal of Marketing)
- Lin, Meng-Hsien (Jenny), Samantha N. N. Cross and Terry L. Childers, “Smells Too Good to Judge: The "Contagion Effects" of Ambient Scent on Moral Judgment and Food Choices,” (manuscript revision; target journal: Journal of Services Research)

Study 5-Neuro
• Lin, Meng-Hsien (Jenny), Samantha N. N. Cross and William J. Jones, “Online Information Processing Of Scent-Related Words and Implications for Decision Making,” Business Analytics Congress ICIS 2015, Fort Worth, TX, December 2015 [Presented by Meng-Hsien Lin]

Study 6-Neuro (Dissertation)

Study 7-Neuro (Dissertation)
• Lin, Meng-Hsien (Jenny), Samantha N. N. Cross, William J. Jones and Terry L. Childers, “Using Event Related Potentials to Understand Emotional Reactions to Scent,” (invited for revision, 2nd review, European Journal of Marketing)

Study 6-Neuro

Study 7-Neuro

Study 8- Neuro

Study 9- Neuro

Study 10- Neuro
• Mirsadikov, A., George, J. Deception detection cues under varying media using eye-tracking technology. Study in progress.

Study 11- Neuro
• Lamboy-Ruiz, M., Elliot, M. Online accessibility of state data repositories of hospital financial statements. In progress. Study in Progress.
Study 12- Neuro

Study 13- Neuro
- Lamboy-Ruiz, M., Elliot, M. Online accessibility of state data repositories of hospital financial statements. Study in progress.
Behavioral Lab

Study 1
- 2012 ABO Midyear Meeting
- 2012 BYU Accounting Research Symposium
- 2013 MAS Midyear Meeting

Study 2
- Demek, K., Denison, C., and Thornock T. Effect of post-investment audit type and outcome on decision-making. Study in progress -- Data collection phase.

Study 3
- Thornock, T. How the timing of performance feedback impacts individual performance. 3rd round review at Accounting, Organizations & Society.

Study 4
- Holderness, K., Olsen, K., and Thornock, T. Who are you to tell me that?! The moderating effect of performance feedback source and psychological entitlement on individual performance. Under third round review at Journal of Management Accounting Research.
- 2014 AAA Annual Meeting
- 2014 ABO Midyear Meeting
- 2014 BYU Accounting Research Symposium

Study 5
- 2014 BYU Accounting Research Symposium
- 2014 ABO Midyear Meeting
- 2015 MAS Midyear Meeting
- 2015 Global Management Accounting Research Symposium

Study 6
- 2013 BYU Accounting Research Symposium

Study 7

2014 BYU Accounting Research Symposium
2015 MAS Midyear Meeting
2015 AAA Annual Meeting

Study 8
Thomas, T., and Thornock, T. Me versus we: the effect of incomplete peer feedback on effort allocation between individual and team output. Preparing for 1st round review at The Accounting Review.
2014 BYU Accounting Research Symposium
2015 Global Management Accounting Research Symposium
2015 ABO Midyear Meeting
2016 MAS Midyear Meeting

Study 9
Holderness, K., Olsen, K., and Thornock, T. Effect of feedback frequency and choice on performance. Preparing for 2nd round review at Contemporary Accounting Research
2014 BYU Accounting Research Symposium
2014 ABO Midyear Meeting
2015 MAS Midyear Meeting
2015 Global Management Accounting Research Symposium

Study 10
Pereira, B. & Rick, S. Sadness reduces decisiveness (working paper). Study in progress -- Collecting additional data, data analysis, preparing manuscript.
### Lab totals

#### Neuro and Behavioral Lab Usage Summary (2010-2015)

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<th>Year</th>
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#### Neuro Lab Summary

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