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Educational History

Degree	Years	Institution	Advisor(s)	Field of Study
Postdoc Fellow	2004-2006	Wadsworth Center, NY State Department of Health	Jonathan R. Wolpaw, MD; Dennis J. McFarland, PhD	Brain-Computer Interface
PhD	2004	University of South Florida	Emanuel Donchin, PhD	Cognitive and Neural Sciences
MA	1999	University of South Florida	Thomas Sanocki, PhD	Cognitive and Neural Sciences
BA	1994	University of South Florida		Psychology

Research Experience/Employment History

Years	Position	Institution	Department
2017 –	Professor	East Tennessee State University	Psychology
2015 –	WOC Employee	Mountain Home VA	Audiology
2011 – 2017	Associate Professor	East Tennessee State University	Psychology
2008 – 2011	Assistant Professor	East Tennessee State University	Psychology
2006 – 2008	Research Scientist (tenure-track)	Wadsworth Center, NY State Dept of Health	Laboratory of Nervous System Disorders
2004 – 2006	Postdoctoral Research Fellow	Wadsworth Center, NY State Dept of Health	Laboratory of Nervous System Disorders
2001 – 2004	Graduate Research Asst.	University of South Florida	Psychology
1997 – 2002	Graduate Research Asst.	University of South Florida	Nursing

Grants and Awards

Sponsor	Role	Title	Amount
<u>Active</u>			
None			
<u>Completed</u>			
NIH/NIDCD R01 July 2017	ETSU PI	Optimizing a multi-input BCI system for longitudinal use during ALS disease progression	\$\$2,688,169 (submitted)

NIH/NIDCD R01 October 2016	ETSU PI	Optimizing a multi-input BCI system for longitudinal use during ALS disease progression	\$2,311,196 (not discussed)
The goal is to test novel BCI presentation paradigms in the homes of severely disabled people and provide P300-based BCI systems to people who can derive benefit from the technology.			
ETSU RDC Major Grant 7/15 – 6/16	PI	P300 Event-Related Brain-Computer Interface for People with Severe Communication Disorders.	\$10,000
NIH/NIDCD R21/R33 09/09 – 08/15	Co-I	Towards clinical acceptability: Enhancing performance of the P300-based brain computer interface via improved stimulus selection and signal processing	\$2,375,800 (total) EW Sellers \$900,000
The goal is to investigate novel signal processing methods and novel presentation methods for a P300-based brain-computer interface in the R21 phase. In the R33 phase the goal is to test the most promising techniques with individuals severely disabled by amyotrophic lateral sclerosis (ALS).			
NIH/NIBIB- NINDS 09/08 – 08/13	Partner	General Purpose Brain-Computer Interface (BCI) System	\$5,310,000 (total) EW Sellers \$171,000
The goal of this BRP is to continue development and comprehensive evaluation of a general-purpose BCI.			
ETSU – RDC Major Grant 7/10 – 6/11	PI	A Longitudinal Study Investigating the Benefit of P300-Based Brain-Computer Interface in an ALS Population	\$10,000 (total)
The goal is to follow a cohort of ALS patients for up to one year measuring the relationship between disease progression, EEG activity, BCI performance, and quality of life.			
NIH/NIDCD R15 05/10 – 10/11	PI	Paradigm and attentional manipulations to improve P300-based BCI	\$323,000 (total)
The goal is to enhance P300-based brain-computer interface performance through paradigm manipulations and meditative and mindfulness induction training.			
NIH/NINDS	PI	Improving P300 Brain-Computer Interface using Novel Data-Analytic Techniques	\$1,250,000 (not discussed)
ETSU RDC Interdisciplinary Grant	PI	Using electrical brain activity to predict the presence and severity of Alzheimer's disease through advanced statistical techniques	\$ 50,000 (unfunded)
ETSU – RDC Interdisciplinary Grant	PI	Early Detection of Alzheimer's Disease Through Cognitive Event-Related Potentials (ERPs) and Sensory-driven Flash Visual Evoked Responses (FVERs)	\$40,000 (unfunded)
NIH/NIDCD R21 12/07 – 11/09	Co-I	Utility of the P300 Brain-Computer Interface for Patients in Acute Care Settings	\$275,000 (direct costs) EW Sellers \$96,000
The goal is to examine if BCI is a practical communication option for patients who are in acute care settings and have no means of verbal communication.			
NIH/NINDS SBIR	Co-I	A Practical Dry Electrode Headset for BCI Applications	\$100,000 (direct costs – scored unfunded)
The goal is to develop a dry-electrode system and mounting device that performs better, is easier to use, and is more comfortable than traditional wet-electrodes for long-term daily BCI use.			

NIH/NINDS SBIR – Phase I &II	Co-PI	Next Generation Dry Electrode Headset for BCI	\$850,000 (direct costs – scored unfunded)
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The goal is to compare a novel “dry” EEG sensor technology to standard “wet” electrodes in a brain-computer interface paradigm.

NIH/NINDS SBIR 12/07 – 11/08	PI	Hybrid EEG Sensor Array for Brain-Computer Interfaces	\$151,000 (total)
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The goal is to compare a novel “dry” EEG sensor technology to standard “wet” electrodes in a brain-computer interface paradigm.

Helen Hayes Hospital 08/07 – 08/08	Co-I	Home Use of a Brain-Computer Interface	\$200,000 (total) EW Sellers \$25,000
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The goal of this project is to provide severely disabled individuals with BCI system to be used in their home environment.

Teaching Experience

Course	Level
Broad and General Foundations	Graduate
Visual Attention and Neuroimaging	Graduate
Sensation and Perception	Grad/Undergrad
Behavioral Neuroscience	Undergrad
Cognition	Undergrad
Cognitive Psychology	Undergrad
Introduction to Psychology	Undergrad
Research Methods Lab Instructor	Undergrad
Grant Writing	Graduate

Student Advising

Level/Year	Student	Role
<u>Post Doctoral</u>		
2010 – 2011	Nathan Gates	Major Advisor
<u>Doctoral</u>		
2016 – 2018	Curtis Bradley	Committee Member
2016 – 2018	Jaima Price	Committee Member
2016	Daniel Peterson	Committee Member
2015 – Present	Marissa Jones	Major Advisor/Committee Chair
2015	Kathleen Klik	Committee Member
2015	Bret Eschman	Committee Member
2015	Elizabeth Freeman	Committee Member
2014	Lyndsay Nelson	Committee Member
2014	Ashley Brianna Sheppard	Committee Member
2012 – 2016	Samantha Sprague	Major Advisor/Committee Chair
2009 – 2014	David Ryan	Major Advisor/Committee Chair

Masters

2018 – 2019	Chelsea Robertson	Committee Member
2015 – 2016	Marissa R. Jones	Major Advisor/Committee Chair
2015	Bridget Jeter	Committee Member
2012	Wanze Xie	Committee Member
2009 – 2012	Daniel Berry	Co-Major Advisor
2008 – 2010	Nicholas Schwartz	Major Advisor
2007	Daniela Klobassa	Co-Major Advisor

Undergraduate Honors Students

2018 – 2019	Mariacristina Canini	Major Advisor
2014 – 2016	Ethan Ashworth	Major Advisor
2013	Stacey Laughlin	Major Advisor
2009 – 2012	Juliane Armstrong	Major Advisor
2008 –2012	Christopher Hauser	Major Advisor
2005	Guy Ohringer	Major Advisor

University and other Professional Service

Semester(s)	Committee/Position	Institution/Meeting
Summer 2019	Research and Innovation Working Group	East Tennessee State University
Summer 2019	Asst. Prof. Search Committee Member	East Tennessee State University
Spring 2018	Abstract Reviewer	Brain-Computer Interface Society
Spring 2018 –	Advisory Council – NIDILRR Grant #90IFDV0002-01-00;	University of Michigan, Medicine
Spring 2015 – Spring 2016	Stipend Task Force	East Tennessee State University
Fall 2015 – Present	ETSU Faculty Senate – Secretary	East Tennessee State University
Spring 2015 – Present	ETSU Faculty Senate – Executive Committee Member	East Tennessee State University
Fall 2014 – Present	ETSU Faculty Senate	East Tennessee State University
Spring 2014	Administrative Review Committee: Facilities Subcommittee Member	East Tennessee State University
Spring 2014 – Spring 2017	ITGC :Research Subcommittee; Chair	East Tennessee State University
Spring 2014 – Spring 2017	ITGC: Committee Member	East Tennessee State University
Spring 2013 - Present	Dr. James S. Perry First Year Student Award, selection committee	East Tennessee State University
Spring 2013 – Fall 2016	Associate Editor	<i>Clinical EEG and Neuroscience</i>
Spring 2013 – Spring 2015	ETSU Basler Chair Search Committee	East Tennessee State University
Fall 2012 – Fall 2017	Editorial Board Member	<i>Rehabilitation Research and Practice</i>
Fall 2012 – Present	Editorial Board Member	<i>ISRN – Neuroscience</i>
Fall 2012 – Spring 2016	Faculty Council	East Tennessee State University

Spring 2012 – Fall 2012	2012 Annual Meeting Scientific Review Committee, Chair	EEG and Clinical Neuroscience Society
Spring 2012 – Fall 2012	Annual Meeting Organizer, Chair	EEG and Clinical Neuroscience Society
Spring 2012; 2014; 2017	Psychology Representative, Spring Open House	East Tennessee State University
Spring 2011 – 2015	University/Midway Honors Scholar Application Reviewer	East Tennessee State University
Fall 2011	Faculty Senate – Ad Hoc IRB Committee	East Tennessee State University
Fall 2011 – Present	Experimental PhD Committee	East Tennessee State University
Fall 2011 – March 2013	Editorial Board Member	<i>Clinical EEG and Neuroscience</i>
Fall 2011– Fall 2014	Treasurer	EEG and Clinical Neuroscience Society
Summer 2011 – Fall 2011	Guest Editor	<i>Clinical EEG and Neuroscience</i>
Spring 2011; Spring 2012; Spring 2017	Research and Development Committee – Major Grant Reviewer	East Tennessee State University
Fall 2010 – Fall 2012	Editorial Board Member	<i>Neural Regeneration Research</i>
Fall 2010 – Spring 2012	Faculty Senate	East Tennessee State University
Summer 2010 – Fall 2011	Assistant Treasurer	EEG and Clinical Neuroscience Society
Summer 2010 – Summer 2012	Editorial Board Member	<i>ACM Transactions on Accessible Computing</i>
Summer 2010	“Jury Member” (Judge)	g.tec Annual BCI Award
Summer 2010	Outstanding Student Poster Committee	4 th International BCI Meeting
Summer 2010	Workshop Leader	4 th International BCI Meeting
Spring 2010	Capstone Thesis Award Judge	East Tennessee State University
Spring 2010	Program Committee	4 th International BCI Meeting
Spring 2009	Hayward Grant Selection	East Tennessee State University
Spring 2000 – Fall 2000	Graduate Student Research Grant	Univ. of South Florida, Dept. of Psychology
Spring 1999 – Fall 1999	Technology Committee	Univ. of South Florida, College of Nursing
Spring 1998 – Fall 1998	Research Committee	Univ. of South Florida, College of Nursing

Honors and Awards

Year	Honor/Award	Institution/Journal/Meeting
2014	Presidential Service Award	EEG and Clinical Neuroscience Society
2012	Young Investigator Award (\$500)	EEG and Clinical Neuroscience Society
2011	College of Arts and Sciences Distinguished Research Award (\$500)	East Tennessee State University
2010 - 2012	Hayward Memorial Psychology Faculty of Excellence Endowment Award (\$1000)	East Tennessee State University
2010	Student (D.R. Berry) Poster Award Honorable Mention	4th International BCI Meeting
2010	Annual BCI Research Innovation Award – Top 10 Finalist	4th International BCI Meeting

2009	Top 10 Cited Papers Award 2006 – 2008 (3 rd most cited)	<i>Clinical Neurophysiology</i>
2008	Saatchi & Saatchi Award for World Changing Ideas – Finalist	Saatchi & Saatchi
2007	Poster selected for a SfN Press Conference (~50 of 16,000 presentations/posters selected)	Society for Neuroscience
2006	Poster selected for the SfN Press Book (less than 4.5% of posters selected)	Society for Neuroscience
2006	Poster selected to represent the Wadsworth Center BCI Laboratory	New York State Department of Health
2006	Commissioner's Recognition Award for brain-computer interface research	New York State Department of Health
2005	Vidal Poster Prize, 1 st place	3rd International BCI Meeting
2003	Outstanding Student Poster Award	Society for Psychophysiological Research

Professional Affiliations

Years(s)	Society
2010 – 2016	EEG and Clinical Neuroscience Society (ECNS)
2008 – 2016	Association for Psychological Science
2005 –	Society for Neuroscience
2003 – 2005; 2019 –	Society for Psychophysiological Research

Ad Hoc Journal/Conference Review

<i>5th International Brain-Computer Interface Conference</i>	<i>International Journal of Computers and Applications</i>
<i>Applied Psychophysiology and Biofeedback</i>	<i>International Journal of Human-Computer Interaction</i>
<i>Artificial Intelligence in Medicine</i>	<i>International Journal of Psychophysiology</i>
<i>Biological Psychology</i>	<i>Journal of Neural Engineering</i>
<i>BioMedical Central Neuroscience</i>	<i>Neuroscience Letters</i>
<i>Clinical EEG and Neuroscience</i>	<i>New England Journal of Medicine</i>
<i>Clinical Neurophysiology</i>	<i>Neural Regeneration Research</i>
<i>Cognitive Neurodynamics</i>	<i>NeuroImage</i>
<i>Ergonomics</i>	<i>Neuroprosthetics</i>
<i>EURASIP Journal on Advances in Signal Processing</i>	<i>Neuroscience</i>
<i>Frontiers in Neuroscience</i>	<i>Psychophysiology</i>
<i>Frontiers in Human Neuroscience</i>	<i>Science Translational Medicine</i>
<i>Human-Computer Interaction International (HCII)</i>	<i>Transactions on Accessible Computing</i>
<i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i>	<i>Transactions on Biomedical Engineering</i>
<i>International Conference on Field and Service Robotics (FSR)</i>	

Ad Hoc Grant Review

National Institutes of Health (NIH)

National Science Foundation (NSF)

Natural Sciences and Engineering Research Council of
Canada

Research Foundation Flanders (FWO)

Peer-Reviewed Work**Journal Articles:**

- 45) Jones, M.R., **Sellers, E.W.** (2019). Faces, Locations, and Tools: A Proposed Two-Stimulus P300 Brain Computer Interface. *Journal of Neural Engineering*, 16(3). doi:10.1088/1741-2552/aaff22
- 44) Abiri R., Borhani S, **Sellers, E.W.**, Jiang, Y., Zhao, X (2019). A comprehensive review of EEG-based brain-computer interface paradigms. *Journal of Neural Engineering*, 16(1). doi: 10.1088/1741-2552/aaf12e.
- 43) Wolpaw J.R., Bedlack R.S., Reda D.J., et. al. (2018). Independent home use of a brain-computer interface by people with amyotrophic lateral sclerosis. *Neurology*. doi: 10.1212/WNL.0000000000005812. PMID: 29950436
- 42) Kellicut-Jones M.R., **Sellers E.W.** (2018). P300 Brain-Computer Interface: Comparing Faces to Size Matched Non-Face Stimuli. *Brain Computer Interfaces*, 5(1), 30-39. doi: 10.1080/2326263X.2018.1433776
- 41) Ryan D.B., Colwell K.A., Throckmorton C.S., Collins L.M., Caves K.E., **Sellers E.W.** (2018). Evaluating Brain-Computer Interface Performance in an ALS population: Checkerboard and Color paradigms. *Clinical EEG and Neuroscience*, 49(2):114-121. doi: 10.1177/1550059417737443. PMID: 29076357
- 40) Ryan D.B., Townsend G., Gates N.A., Colwell K.A., **Sellers, E.W.** (2017). Improving Brain-Computer Interface Performance: Giving the P300 Speller Some Color. *Clinical Neurophysiology*, 128(10):2050-2057. doi: 10.1016/j.clinph.2017.07.397. PMID: 28863361
- 39) Clements J.M., **Sellers E.W.**, Ryan D.B., Caves K., Collins L.M., Throckmorton C.S. (2016). Applying dynamic data collection to improve dry electrode system performance for a P300-based brain-computer interface. *Journal of Neural Engineering*, 13(6):066018. doi: 10.1088/1741-2560/13/6/066018. PMID: 27819250
- 38) Sprague S.A., McBee M., **Sellers E.W.** (2016). The Effects of Working Memory on Brain-Computer Interface Performance. *Clinical Neurophysiology*, 127(2):1331-41. doi: 10.1016/j.clinph.2015.10.038. PMID: 26620822
- 37) Jin J., **Sellers E.W.**, Sijie Z., Zhang Y., Wang X., Cichocki, A. (2015). A P300 Brain Computer Interface Based on a Modification fo the Mismatch Negativity Paradigm. *International Journal of Neural Systems*, 25(3):1550011. doi: 10.1142/S0129065715500112
- 36) McCane L.M., Heckman S.M., McFarland D.J., Townsend G., Mak J.N., **Sellers E.W.**, Zeitlin D., Tenteromano L.M., Wolpaw J.R., Vaughan T.M. (2015). P300-based Brain-Computer Interface (BCI) Event-Related Potentials (ERPs): People with Amyotrophic Lateral Sclerosis (ALS) vs. Age-Matched Controls, *Clinical Neurophysiology*, doi: http://dx.doi.org/10.1016/j.clinph.2015.01.013
- 35) Mainsah B., Collins L.M., Colwell K.A., **Sellers E.W.**, Ryan D.B., Caves K.E., Throckmorton C.S. (2015). Increasing BCI Communication Rates with Dynamic Data Collection Towards More Practical Use: An ALS Study. *Journal of Neural Engineering*, 12, doi:10.1088/1741-2560/12/1/016013.
- 34) Mainsah B.O., Morton, K.D. Collins, L.M., **Sellers, E.W.** Throckmorton, C.S. (2015). Moving away from error-related potentials to achieve spelling correction in P300 spellers. *IEEE Transactions on Neural System and Rehabilitation Engineering*, 23(5):737-43. doi: 10.1109/TNSRE.2014.2374471

- 33) Kübler A., Holz E., **Sellers E.W.**, Vaughan T.M. (2015). Toward Independent Home Use of BCI: a decision algorithm for selection of potential end-users, *Archives of Physical Medicine and Rehabilitation*, 96(3 Suppl):S27-32. doi: 10.1016/j.apmr.2014.03.036.
- 32) **Sellers E.W.**, Ryan D.B., Hauser C.H. (2014). Non-Invasive Brain-Computer Interface Enables Communication after Brainstem Stroke. *Science Rehabilitation Medicine*, 6, 257re7. DOI: 10.1126/scitranslmed.3007801.
- 31) Colwell K.A., Ryan D.B., Throckmorton C.S., **Sellers E.W.**, Collins L.M. (2014). Channel selection methods for the P300 speller. *Journal of Neuroscience Methods*, 232: 6-15. PMID: 24797224
- 30) McCane L.M., **Sellers E.W.**, McFarland D.J., Mak J.N., Carmack C.S., Zeitlin D., Wolpaw J.R., Vaughan T.M. (2014). Brain-computer interface (BCI) evaluation in people with amyotrophic lateral sclerosis. *Amyotroph Lateral Scler Frontotemporal Degener*, 15(3-4):207-15. PMID: 24555843
- 29) Throckmorton C.S., Colwell K., Ryan D.B., **Sellers E.W.**, Collins L.M. (2013). Bayesian approach to dynamically controlling data collection in decision-based brain-computer interfaces. *IEEE Transactions on Neural System and Rehabilitation Engineering*, 21(3) 508-517.
- 28) Jin, J., **Sellers, E.W.**, Zhang, Y., Daly, I., Wang, X., Cichocki, A. (2013). Whether generic model works for rapid ERP-based BCI calibration. *J Neurosci Methods*. 212(1): 94-99. PMID 230321
- 27) Townsend, G., Shanahan, J., Ryan, D.B., **Sellers, E.W.** (2012). A general P300 brain-computer interface presentation paradigm based on performance guided constraints. *Neurosci Lett.*, 531(2):63-8. PMID 22960261
- 26) **Sellers, E.W.** (2012). New horizons in brain-computer interface. *Clinical Neurophysiology*, 124(1):2-4. PMID 22902247
- 25) Fazel-Reazi, R., Allison, B.Z., Guger, C., **Sellers, E.W.**, Kleih, S.C., Kübler, A. (2012). P300 brain computer interface: Current challenges and emerging trends. *Front Neuroeng*. 5:14. PMID: 22822397
- 24) Jin, J., **Sellers, E.W.**, Wang W. (2012). Targeting an Efficient Target-to-Target Interval for P300 Speller Brain-Computer Interfaces. *Medical and Biological Engineering and Computing*. PMID 22350331
- 23) Mak, J.N., McFarland, D.J., Vaughan, T.M., McCane, L.M., Tsui, P.Z. **Sellers, E.W.**, Wolpaw, J.R. (2012). EEG correlates of P300-based brain-computer interface (BCI) performance in people with amyotrophic lateral sclerosis. *Journal of Neural Engineering*, 9(2):026014, PMID 22350501
- 22) **Sellers E.W.** (2011). Clinical applications of brain-computer interface technology. *Clinical EEG and Neuroscience*, 42(4), IV. PMID: 22208115
- 21) Jin, J. Allison, B.Z., **Sellers, E.W.**, Clemens, B., Horki, P., Wang, X., Neuper, C. (2011). An adaptive P300 based control system. *Journal of Neural Engineering*, 8(3), PMID 21474877
- 20) Frye, J.E., Hauser, C.K., Townsend, G., **Sellers, E.W.** (2011). Suppressing flashes of items surrounding targets during calibration of a P300-Based Brain-Computer Interface improves performance. *Journal of Neural Engineering*, 8(2), PMID 21436528; NIHMSID 308381
- 19) Lakey, C.E., Berry, D.R., **Sellers, E.W.** (2011). Manipulating attention via mindfulness induction improves P300-based brain-computer interface performance. *J Neural Engineering*, 8(2), PMID 21436516; NIHMSID 308383
- 18) Jin, J., Allison, B.Z., **Sellers, E.W.**, Clemens, B., Horki, P., Wang, X., Neuper, C. (2011). Optimized P300 stimulus presentation pattern for an EEG-based control system. *Medical and Biological Engineering and Computing*, 49(2), 181-191. PMID 21436516; NIHMSID 308383
- 17) Ryan, D.B., Frye, G.E., Townsend, G., Berry, D.R., Mesa-G., S., Gates, N.A., **Sellers, E.W.** (2011). Predictive spelling with a P300-based brain-computer interface: Increasing the rate of communication. *International Journal of Human-Computer Interaction*, 27(1), 69-84. PMID 21278858; NIHMSID 251375
- 16) **Sellers, E.W.**, Vaughan, T.M., Wolpaw, J.R. (2010). A brain-computer interface for long-term independent home use. *Amyotrophic Lateral Sclerosis*, 11(5), 449-455. PMID 20583947
- 15) Sanocki, T., **Sellers, E.**, Mittelstadt, J., Sulman, N. (2010). How high is visual short term memory capacity for object layout? *Attention, Perception, & Psychopsysics*, 72(4), 1097-1109. PMID 20436203

- 14) Townsend, G., LaPallo, B.K., Boulay, C., Krusienski, D.J., Frye, G.E., Hauser, C.K., Schwartz, N.E., Vaughan, T.M., Wolpaw, J.R., **Sellers, E.W.** (2010). A novel P300-based brain-computer interface stimulus presentation paradigm: moving beyond rows and columns. *Clinical Neurophysiology*, 121, 1109-1120. PMID 20347387; NIHMSID 192939
- 13) Guger, C., Daban, S., **Sellers, E.**, Holzner, C., Krausz, G., Carabalona, R., Gramatica, F, Gunter Edlinger (2009). How many people are able to control a P300-based brain-computer interface (BCI)? *Neuroscience Letters*, 462, 94-98. PMID 19545601
- 12) Klobassa, D.S., Vaughan, T.M., Brunner, P., Schwartz, N.E., Wolpaw, J.R., Neuper, C., **Sellers E.W.** (2009). Toward a high-throughput auditory P300-based brain-computer interface. *Clinical Neurophysiology*, 120, 1252-1261. PMID 19574091
- 11) Nijboer, F., **Sellers, E.W.**, Mellinger, J., Jordan, M.A., Matuz, T., Furdea, A., Mochty, U., Krusienski, D.J., Vaughan, T.M., Wolpaw, J.R., Birbaumer, N., Kübler, A. (2008). A brain-computer interface for people with amyotrophic lateral sclerosis. *Clinical Neurophysiology*, 119 (8), 1909-1916. PMID 18571984
- 10) Krusienski, D.J., **Sellers, E.W.**, McFarland, D.J., Vaughan, T.M., Wolpaw, J.R. (2008). Toward Enhanced P300 Speller Performance. *Journal of Neuroscience Methods*, 167, 15-21. PMID 17822777
- 9) Krusienski, D.J., **Sellers, E.W.**, Cabestaing, F., Bayouh, S., McFarland, D.J., Vaughan, T.M., Wolpaw, J.R. (2006). A Comparison of Classification Techniques for the P300 Speller. *The Journal of Neural Engineering*, 3, 299-305. PMID 17124334
- 8) **Sellers, E.W.**, Krusienski, D.J., McFarland, D.J., Vaughan, T.M., Wolpaw, J.R. (2006). A P300 Event-Related Potential Brain-Computer Interface (BCI): The Effects of Matrix Size and Inter Stimulus Interval on Performance. *Biological Psychology*, 73, 242-252. PMID 16860920
- 7) Sanocki, T., Michelet, K., **Sellers, E.**, Reynolds, J. (2006). Representations of scene layout can consist of independent, functional pieces. *Perception & Psychophysics*, 68(3), 415-427.
- 6) **Sellers, E.W.**, Kübler, A., Donchin, E. (2006). Brain-computer interface research at the University of South Florida cognitive psychophysiology laboratory: The P300 speller. *IEEE Transactions on Neural System and Rehabilitation Engineering*, 14 (2), 221-224. PMID 16792299
- 5) Vaughan, T.M. McFarland, D.J., Schalk, G., Sarnacki, W.A., Krusienski, D.J., **Sellers, E.W.**, Wolpaw J.R. (2006). The Wadsworth BCI research and development program: At home with BCI. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 14 (2), 229-234. PMID 16792301
- 4) **Sellers, E.W.**, Donchin, E. (2006). A P300-based brain-computer interface: Initial tests by ALS patients. *Clinical Neurophysiology*, 117 (3), 538-548. PMID 16461003
- 3) Gonzalez, L. O., **Sellers, E.** (2002). The effects of a stress-management program on self-concept, locus of control, and the acquisition of coping skills in school-aged children diagnosed with attention deficit hyperactivity disorder. *Journal of Child and Adolescent Psychiatric Nursing*, 15 (1), 5-15.
- 2) Sanocki, T., **Sellers, E.** (2001). Shifting resources to recognize a forming object: Dependencies involving object properties. *Visual Cognition*, 8 (2), 197-235.
- 1) Berarducci, A., Burns, P.A., Lengacher, C.A., **Sellers, E.** (2000). Osteoporosis-related health promoting educational practices of primary care providers. *Advanced Nurse Practitioner*, 13(4), 173-180.

Peer-Reviewed Work

Conference Proceedings:

- 7) Shahriari, Y., **Sellers, E.W.**, McCane, L.M., Vaughan, T.M., Krusienski, D.J. (2015). Directional Brain Functional Interaction Analysis in Patients with Amyotrophic Lateral Sclerosis. *Proceedings of the 7th International IEEE EMBS Conference on Neural Engineering*, 972-975.
- 6) K E Brown, S Mesa, **E W Sellers**. The Effect of Task Based Motivation on BCI Performance: a Preliminary Outlook. Fifth International Brain-Computer Interface Meeting 2013; 06/2013
- 5) S A Sprague, D B Ryan, **E W Sellers**. The Effects of Motivation on Task Performance Using a Brain-Computer Interface. Fifth International Brain-Computer Interface Meeting 2013, Asilomar, CA; 06/2013

- 4) D B Ryan, K Colwell, S Throckmorton, L Collins, **E W Sellers**. Enhancing Brain-Computer Interface Performance in an ALS Population: Checkerboard and Color Paradigms. Fifth International Brain-Computer Interface Meeting 2013; 06/2013
- 3) **Sellers, E.W.**, Turner, P., Sarnacki, W.A., McManus, T., Vaughan, T.M., Matthews, R. (2009). A novel dry electrode for brain-computer interface. *Proceedings of HCI International 2009*, 623-631.
- 2) Krusienski, D.J., Townsend, G., **Sellers, E.W.** (2009). Amplitude Quantization of Event Related Potentials. *Proceedings of the 4th International IEEE EMBS Conference on Neural Engineering*, 605-608.
- 1) Krusienski, D.J., **Sellers, E.W.**, Vaughan, T.M. (2007). Common Spatio-Temporal Patterns for the P300 Speller. *Proceedings of the 3rd International IEEE EMBS Conference on Neural Engineering*, 421-424.

Peer-Reviewed Work

Book Chapters:

- 8) Mainsah, B., Collins, L., Colwell, K., **Sellers, E.**, Ryan, D., Caves, K., & Throckmorton, C. (2015) Brain-Computer Interface Research. In Guger C., et al. (Eds.). Springer Briefs in Electrical and Computer Engineering.
- 7) Vaughan, T.M., **Sellers, E.W.**, Wolpaw, J.R. (2012). Clinical Evaluation of BCIs. In J.R. Wolpaw and E.W. Winter Wolpaw (Eds.). Oxford University Press Inc. NY. (pp. 325-336).
- 6) **Sellers, E.W.**, Arbel, Y., Donchin, E. (2012). P300 event-related potentials and related activity in the EEG. In J.R. Wolpaw and E.W. Winter Wolpaw (Eds.). Oxford University Press Inc. NY. (pp. 215-226).
- 5) Gates, N.A., Hauser, C.K, **Sellers, E.W.** (2011). A Longitudinal Study of P300 Brain-Computer Interface and Progression of Amyotrophic Lateral Sclerosis. In D.D. Schmorow and C.M. Fidopiastis (Eds.): *FAC 2011, HCII 2011, LNAI 6780*, (pp. 475–483). Springer-Verlag Berlin Heidelberg.
- 4) Christoph Guger et al. (2011). State-of-the-Art in BCI Research: BCI Award 2010, *Recent Advances in Brain-Computer Interface Systems*, Reza Fazel (Ed.), ISBN: 978-953-307-175-6, InTech, Available from: <http://www.intechopen.com/articles/show/title/state-of-the-art-in-bci-research-bci-award-2010>.
- 3) **Sellers, E.W.**, McFarland, D.J., Vaughan, T.M., Wolpaw, J.R. (2010). The Wadsworth Noninvasive brain-computer interface research program. In B. Graimann, G. Pfurtscheller (Eds.), *Brain-Computer Interfaces*. The Frontiers Collection. Verlag Berlin Heidelberg: Springer, pp 97-111.
- 2) **Sellers, E.W.**, Krusienski, D.J., McFarland, D.J., Wolpaw, J.R. (2007). Non-Invasive Brain-Computer Interface Research at the Wadsworth Center. In G. Dornhege, J. Millan, T. Hinterberger, D. McFarland, K. Müller (Eds.), *Toward Brain-Computer Interfacing*, (pp. 31-42). Cambridge, MA: The MIT Press.
- 1) Lengacher, C.A., **Sellers, E.** (2002). The Women's Role Strain Inventory. In O. Strickland, and C. Dilorio (Eds.), *Measurement of Nursing Outcomes 2nd Edition, Volume 3: Self Care and Coping* (pp. 109-127). New York: Springer.

Invited Lectures

- 36) November 2018 Brain-Computer Interface for People with Severe Speech and Physical Impairments. ETSU Quillen College of Medicine, Psychiatry Grand Rounds.
- 35) April 2016 Brain-Computer Interface Technology: Clinical and Practical Issues. ETSU Quillen College of Medicine, Department of Biomedical Sciences.
- 34) April 2015 Non-Invasive P300 BCI: Success and Challenges. Amyotrophic Lateral Sclerosis Association Round Table Discussion: Assistive Technology for ALS
- 33) May 2014 An Introduction to Brain-Computer Interface. Tennessee Psychological Association.
- 32) September 2013 The Challenge of Communication in Complete Paralysis. International Conference on Basic and Clinical Multimodal Imaging.
- 31) June 2013 Improving Speed, Accuracy, and Reliability of P300 Brain-Computer Interface Performance. International Brain-Computer Interface Meeting.

30)	September 2012	P300-based BCI Performance: Examining the effects of Paradigm Manipulations. EEG and Clinical Neuroscience Young Investigator Award, ECNS Annual Meeting.
29)	February 2012	Brain-computer interface: Purpose, Paradigms, and Progress. ETSU Association for Computing Machinery.
28)	November 2011	The Road to Success for P300 Brain-Computer Interface. Korea National Rehabilitation Research Institute, Third International Symposium on Rehabilitation Research
27)	September 2011	Practical Application of P300 Brain-Computer Interface: What are we doing? East Tennessee State University, Institute for Quantitative Biology.
26)	August 2011	Practical Application of P300 Brain-Computer Interface: What are we doing? Technical University of Graz, Institute of Knowledge Discovery.
25)	July 2011	A Longitudinal Study of P300 Brain-Computer Interface and Progression of Amyotrophic Lateral Sclerosis. Human Computer Interaction International Conference, Orlando, FL.
24)	July 2011	The Barriers of Moving Brain-Computer Interface Technology from Bench to Bedside. Human Computer Interaction International Conference, Orlando, FL.
23)	May 2010	Current and Potential Applications of Brain-Computer Interface Technology. American Spinal Injury Association Annual Meeting, Nashville, TN.
22)	May 2010	P300-based Brain-Computer Interface (BCI): Potential Commercial Applications. Tennessee Innovation Conference, Nashville, TN.
21)	April 2010	P300-based BCI Performance: Examining the effects of Paradigm Manipulations. Wadsworth Center, Albany, NY.
20)	September 2009	The P300 Brain-Computer Interface: Moving from Bench to Bedside. Psychiatry Grand Rounds, East Tennessee State University, Johnson City, TN.
19)	May 2009	Moving the Brain-Computer Interface from the Laboratory to the Home. Center for Neural Communication Technology, University of Michigan, Ann Arbor, MI.
18)	January 2009	A Novel Communication Method: The P300 Brain-Computer Interface. Department of Physics and Astronomy, East Tennessee State University, Spring 2009 Seminar Series, Johnson City, TN.
17)	September 2008	The P300 Brain-Computer Interface: A Novel Communication Method. Psychology Speaker Series, East Tennessee State University, Johnson City, TN.
16)	March 2008	Brain Computer Interface using the P300 Event Related Potential: Moving out of the Laboratory and into the Home. Clinical Neuroscience Grand Rounds, Duke University, Durham, NC.
15)	January 2008	Brain Computer Interface using the P300 Event Related Potential: Moving out of the Laboratory and into the Home. Psychology Department Colloquium, East Tennessee State University, Johnson City, TN.
14)	January 2008	Brain Computer Interface using the P300 Event Related Potential: Moving out of the Laboratory and into the Home. Psychology Department Colloquium, Clarkson University, Potsdam, NY.
13)	July 2007	A P300-based Speller using BCI2000. The 2 nd BCI2000 Workshop: Beijing, China.
12)	July 2007	Brain-Computer Interface via the P300 Event-Related Potential. International Workshop on Brain-Computer Interface Technology – HCI2007 12 th International Conference on Human-Computer Interaction: Beijing, China.
11)	June 2006	Brain-Computer Interface: Current and Potential Applications. Interagency Committee on Disability Research, Interagency Subcommittee on Technology Workshop: Washington, DC.
10)	January 2006	Brain-Computer Interface Using the P300 Event-Related Potential: The Past, Present, and Future. University of Tübingen, Institute of Medical Psychology and Behavioural Neurobiology: Tübingen, Germany.
9)	June 2005	BCI2000 and the P300 Event-Related Potential. The 1 st BCI2000 Workshop: Albany, NY.

8)	February 2005	Brain-computer interface using the P300 event-related potential. Rensselaer Polytechnic Institute, Department of Mathematical Sciences: Troy, NY.
7)	December 2004	The P300 event-related potential: A brain-computer interface application. New York State Department of Health, Neuroscience Lecture Series: Albany, NY.
6)	March 2003	An introduction to brain-computer interface devices. University of South Florida, Department of Psychology: Tampa, FL.
5)	May 2002	The P300 ERP as a typing tool. University of Tampa, Department of Psychology: Tampa, FL.
4)	August 2000	Inattentive blindness and change blindness: Why do we miss the change? University of South Florida, Department of Psychology: Tampa, FL.
3)	February 1999	Operationalization and measurement. University of South Florida, College of Nursing: Tampa, FL.
2)	October 1998	An introduction to correlation and regression. University of South Florida, College of Nursing: Tampa, FL.
1)	June 1996	How to teach t-tests in undergraduate research methods. University of South Florida, Department of Psychology Graduate Training Program: Tampa, FL.

Published Abstracts

- 47) Kellicut, M.R., Coffman, C.M., Ryan, D.B., **Sellers, E.W.** (October, 2015). P300 brain-computer interface: comparing faces and size-matched non-face stimuli. Program No. 807.14. 2015 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2015. Online.
- 46) Ryan, D., Morton, M.L., **Sellers, E.W.** (October, 2015). Utilizing visual attention and inclination to facilitate brain-computer interface design in an amyotrophic lateral sclerosis and college age sample. Program No. 807.13. 2015 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2015. Online.
- 45) Sprague, S., Ryan D.B., Kellicut-Jones, M.R., Street, T.L., **Sellers, E.W.** (October, 2015). Performance comparison of color and grey-white paradigms in undergraduates and older adults using the brain-computer interface. Program No. 807.12. 2015 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2015. Online.
- 44) Sprague, S. A., Ryan, D. B., & **Sellers, E. W.** (2014, September). In Müller-Putz, G., Bauernfeind, G., Brunner, C., Steyrl, D., Wriessnegger, S., & Scherer, R. (Eds.). *The Effects of motivation on Task Performance Using a Brain-Computer Interface*. Poster presented at the Sixth International Brain-Computer Interface Meeting 2014, Graz, Austria. doi:10.3217/978-3-85125-375-8-101
- 43) Sprague, S. A., & Sellers, E. W. (2013, June). In Jane Huggins (Chair). *The Effects of Motivation on Task Performance Using a Brain-Computer Interface*. Poster presented at the Fifth International Brain-Computer Interface Meeting 2013, Pacific Grove, CA. doi:10.3217/978-3-85125-260-6-85
- 42) Berry, D.R., Colwell, K.A., **Sellers, E.W.** (2012). Optimizing P300-based brain-computer interface communication speed via error potentials. Program No. 892.01 2012 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 41) Ryan, D.B., Throckmorton, S., Collins, L.M., Caves, K.M., **Sellers, E.W.** (2012). Enhancing brain-computer interface performance in an ALS population: Checkerboard and color paradigms. Program No. 892.05 2012 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 40) Brown, K.E., Ryan, D.B., Armstrong, J.A., **Sellers, E.W.** (2012). Program No. 892.06 2012 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 39) Brown, K.E., Ryan, D.B., Armstrong, J.A., **Sellers, E.W.** (2012). A longitudinal investigation of non-invasive P300-based brain-computer interface. *Clin EEG and Neuroscience* 44: pp#
- 38) Ryan, D.B., **Sellers, E.W.** (2012). Visual Attention's Past Shapes The Future of BCI. *Clin EEG and Neuroscience* 44: pp#

- 37) **Sellers, E.W.** (2012). P300-based BCI Performance: Examining the effects of Paradigm Manipulations EEG and Clinical Neuroscience Young Investigator Award. Clin EEG and Neuroscience 44: pp#
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- 36) McCane, L., Vaughan, T. M., **Sellers, E. W.**, Zeitlin, D., Mak, J. Wolpaw, J.R. (2011). Factors correlating with P300-based BCI performance in people with and without ALS. Program No. 593.18 2011 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 35) Scull, L. A., Feldman, S.M., Vaughan, T. M., **Sellers, E. W.**, McCane, L., Zeitlin, D., Townsend, G., Heiman-Patterson, T., Wolpaw, J. R. (2011). P300-based brain-computer interface (BCI) use by people with ALS: Effects of different stimulus types and user strategies. Program No. 593.15 2011 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 34) Colwell, K., Ryan D.B., Throckmorton, S., **Sellers, E. W.**, K., Collins, L. M. (2011). Jumpwise regression for channel selection in BCI: Longitudinal consistency and simulations. Program No. 593.04 2011 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 33) Berry, D.R., Lakey, C.E., Lewis, T.L., **Sellers E.W.** (2011). Mindfulness meditation training program improves p300-based bci performance by affording reliable target responses. Program No. 593.03 2011 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 32) Colwell, K., Throckmorton, S., Ryan D.B., Morton, K. D., **Sellers, E. W.**, Caves, K., Collins, L. M. (2011). Improving p300 speller speed and accuracy with dynamic stopping. Program No. 593.02 2011 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 31) Ryan D.B., Gates, N. A., Colwell, K., Throckmorton, S., Collins, L. Winnen, K. A. M., Brown, R.W., **Sellers, E. W.** (2011) Improving brain-computer interface performance: Giving the p300 speller some color. Program No. 593.01 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 30) **Sellers, E. W.** Non-Invasive P300-Based Brain-Computer Interface Use for Brain Stem Stroke: A Case Report (2011). 593.07 2011 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 29) Frye, G.E., Townsend, G., Hauser, C.K., **Sellers, E.W.** (2010). Suppressing surrounding characters during calibration may improve P300-based BCI performance. Program No. 688.2 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 28) Throckmorton, S., Ryan D.B., Hamner, B., Caves, K., Colwell, K., **Sellers, E.**, Collins, L. (2010). Towards clinically acceptable bci spellers: Preliminary results for different stimulus selection patterns and pattern recognition techniques. Program No. 688.3 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 27) McCane, L., Tsui, P., Vaughan, T.M., McFarland, D.J., Zeitlan, D., Tenteromano. L., Mak, J., **Sellers, E.W.**, Townsend, G., Carmack, C.S., Wolpaw, J.R. (2010). Event related potentials produced by a P300-based brain-computer interface in people with ALS and healthy volunteers. Program No. 688.5 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 26) Ryan D.B., Townsend, G., Winnen, K.A.M., Brown, R.W., **Sellers, E.W.** (2010). Giving the P300 speller some color: A color spelling matrix. Program No. 688.6 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 25) Hauser, C.K., Frye, G.E., Mesa J, S., Gates, N.A., **Sellers, E.W.** (2010). A longitudinal study of P300-based BCI: Examining the effects of disease progression and classification Program No. 688.7 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 24) Berry, D.R., Lakey, C.E., Lewis, T.L., **Sellers E.W.** (2010). Mindfulness meditation induction improves P300-based BCI performance Program No. 688.8 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 23) Gates, N.A., Schwartz, N.E., Mesa J, S., **Sellers, E.W.** (2010). Is the P300-based BCI really a P300-based BCI? Program No. 688.9 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 22) Mesa J, S., Gates, N.A., **Sellers, E.W.** (2010). Stimulus presentation manipulations in P300-BCI: Improving comfort without compromising performance Program No. 688.11 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.

- 21) Armstrong, J.A., Frye, G.E., Berry, D.R., Gates, N.A., **Sellers, E.W.** (2010). P300-based BCI using a random interstimulus interval increases signal-to-noise ratio. Program No. 688.12 2010 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 20) Schwartz, N.E., Krusienski, D.J., Frye, G.E., Hauser, C.K., Vaughan, T.M., Johnson, G.D., **Sellers, E.W.** (2009). The P300 Brain-Computer Interface: Prediction of Success Through Waveform Analysis. Program No. 664.2. 2009 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 19) McCane, L., Vaughan, T.M., McFarland, D.J., Zeitlin, D., Tenteromano, L., Mak, J., **Sellers, E.W.**, Townsend, G., Carmak, C.S., Wolpaw, J.R. (2009). Evaluation of Individuals with ALS for In Home Use of a P300 Brain Computer Interface. Program No. 664.7. 2009 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 18) Mak, J., Vaughan, T.M., McFarland, D.J., McCane, L.M., Carmack, C.S., Zeitlin, D.J., **Sellers, E.W.**, Townsend, G., Wolpaw, J.R. (2009). Independent use of P300 brain-computer interface (BCI) system by people with amyotrophic lateral sclerosis (ALS): optimizing the classification algorithm. Program No. 664.8. 2009 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 17) **Sellers, E.W.**, Townsend, G., Boulay, C., LaPallo, B.K., Vaughan, T.M., Wolpaw, J.R. (2008). The P300 brain-computer interface: A new stimulus presentation paradigm. 778.21. 2008 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 16) Cormier, J., Cash, S.S., **Sellers, E.W.**, Jennings, T., Townsend, L.M., DiPietro, A., Vaughan, T.M., Wolpaw, J.R., Hochberg, L.R. (2008) Feasibility of a P300-based brain-computer interface in an acute care setting. 778.11. 2008 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 15) **Sellers, E.W.**, Vaughan, T.M., McFarland, D.J., Carmack, C.S., Schalk, G., Cardillo, R.A., Mackler, S.A., Braun, E.M., Halder, S., Lee, S.S., Fudrea, A., Kübler, A., Wolpaw, J.R. (2007). Brain-Computer Interface for people with ALS: long-term daily use in the home environment. Program No. 414.5. 2007 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 14) Vaughan, T.M., **Sellers, E.W.**, McFarland, D.J., Carmack, C.S., Brunner, P., Fudrea, A., Braun, E.M., Lee, S.S., Kübler, A., Mackle, S.A., Krusienski, D.J., Miller, R.N., Wolpaw, J.R. (2007). Daily use of an EEG-based brain-computer interface by people with ALS: technical requirements and caretaker training. Program No. 414.6. 2007 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 13) Klobassa, D.S., Vaughan, T.M., Brunner, P., Wolpaw, J.R., Neuper, C., **Sellers, E.W.** (2007). A high-throughput auditory P300-based brain-computer interface (BCI). Program No. 414.7. 2007 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 12) **Sellers, E.W.**, Vaughan, T.M., McFarland, D.J., Krusienski, D.J., Mackler, S.A., Cardillo, R.A., Schalk, G., Binder-Macleod, S.A., Wolpaw, J.R. (2006). Daily use of a brain-computer interface by a man with ALS. Program No. 256.1. 2006 Abstract Viewer/Itinerary Planner. A, DC: Society for Neuroscience. Online.
- 11) Vaughan, T.M., Krusienski, D.J., **Sellers, E.W.**, McFarland, D.J., Wolpaw, J.R. (2006). Assessing the spatio-temporal relationships elicited by the P300 speller matrix for a brain-computer interface. Program No. 256.4. 2006 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 10) Nijboer, F., **Sellers, E.W.**, Matuz, T., Mellinger, J., Jordan, M., Mochty, U., Furdea, A., Kaiser, J., Wolpaw, J.R., Birbaumer, N., Kübler, A. (2006). Communication for people with amyotrophic lateral sclerosis (ALS): A P300 brain-computer interface (BCI). Program No. 256.2. 2006 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 9) **Sellers, E.W.**, Krusienski, D.J., McFarland, D.J., & Wolpaw, J.R. (2005). P300-based brain-computer interface (BCI) performance: effects of matrix size and presentation rate. Program No. 520.11. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
- 8) **Sellers, E.W.**, Donchin E., Nijboer, F., Kübler, A., & Wolpaw, J.R. (2005). Brain Computer Interface (BCI) using the P300 Event-Related Potential. *Psychophysiology*, 42 (S1), S29.
- 7) **Sellers, E.**, Schalk, G., & Donchin, E. (2004). A P300 based brain-computer interface (BCI): Moving toward a communication system for the locked-in. *Psychophysiology*, 41 (S1), S76.
- 6) Sanocki, T., Michelet, K., & **Sellers, E.** (2003). How are elements of a scenic layout bound together? *Journal of Vision*, 3(9), 642a.

- 5) **Sellers, E.**, Schalk, G., & Donchin, E. (2003). The P300 as a typing tool: Tests of brain computer interface with an ALS patient. *Psychophysiology*, 40 (S1), S77.
- 4) Sanocki, T., Swartz, K., & **Sellers, E.** (2002). Priming layout of mixed scenes: Evidence of non-semantic, locally organized layout representations? *Journal of Vision*, 2(7), 496a.
- 3) Sanocki, T., **Sellers, E.**, & Mittelstadt, J. (2001). High-capacity visual short term memory for layout. *Journal of Vision*, 1(3), 124a.
- 2) **Sellers, E.** & Sanocki, T. (1999). Localizing objects within scenes: Testing predictions of space-based and object-based models of attentional selection. *Investigative Ophthalmology & Visual Science*, 40, S414.
- 1) Sanocki, T. & **Sellers, E.** (1998). Shifting resources to recognize a forming object: Dependencies involving object properties. *Investigative Ophthalmology & Visual Science*, 39, S859.

Conference Presentations/Posters

- 94) **Sellers, E.W.** (September, 2019). From the P300 event-related potential to the P300-based brain-computer interface. Society for Psychophysiological Research, Washington, D.C.
- 93) Ridley, E.A., Jones, M.R., Ashworth, E.C., **Sellers, E.W.** (September, 2019). Error-Related Negativity on a Reinforcement Learning Task. Society for Psychophysiological Research, Washington, D.C.
- 92) Canini, M., Jones, M.R., Sawyer, B., Ashworth, E., **Sellers, E.W.** (September, 2019). Investigating the EEG Error-Related Negativity in College Students with ADHD, Anxiety, and Depression. Society for Psychophysiological Research, Washington, D.C.
- 91) Canini, M., Jones, M.R., Sawyer, B., Ashworth, E., **Sellers, E.W.** (April, 2019). Error-related Negativity and Feedback-related Negativity on a Reinforcement Learning Task. Appalachian Student Research Forum, Johnson City, TN.
- 90) Gardner, A. J., Kellicut-Jones, M.R., **Sellers, E.W.** (April, 2018). An Examination of ERPs Produced by Images of Locations and Graspable Objects in an Oddball Task. Appalachian Student Research Forum, Johnson City, TN.
- 89) Wheeler, K. M., Shubert, K. N., Kellicut-Jones, M. R., Ryan, D. B., & **Sellers, E. W.** (April, 2018). Simulating random eye-movement in a P300- based brain-computer interface. Appalachian Student Research Forum, Johnson City, TN.
- 88) Ryan, D.B. Smith, S. L., **Sellers, E.W.**, Eckert, M., Schairer, K. (November, 2017). Objective Measurement of Cognitive Systems During Effortful Listening. Poster presentation at the Annual Society for Neuroscience Conference, Washington, D.C., USA.
- 87) Ryan, D.B. Smith, S. L., **Sellers, E.W.**, Eckert, M., Schairer, K. (June, 2017). Objective Measurement of Cognitive Systems During Effortful Listening. Poster presented at the 24th Annual Appalachian Spring Conference, Johnson City, TN, USA.
- 86) Ryan, D.B. Smith, S. L., **Sellers, E.W.**, Eckert, M., Schairer, K. (March, 2017). Objective Measurement of Cognitive Systems During Effortful Listening. Poster presented at the Annual Meeting of American Audiology Society, Scottsdale, AZ, USA.
- 85) Chambers, S.A., Kellicut-Jones, M. R., Robasciotti, C. A., Millard, R. M., Ryan, D. B., **Sellers, E. W.** (April, 2017), BCI performance impacted by the removal of inter-stimulus interval. Appalachian Research Forum, Johnson City, TN.
- 84) Gardner, A., Kellicut-Jones, M. R., Kazmark, A., **Sellers, E. W.** (April, 2017), P300 Brain-Computer Interface: Two-Stimulus Presentation Paradigm. Appalachian Research Forum, Johnson City, TN.
- 83) Shubert, K. N., Kellicut-Jones, M. R., Swymer, C.N., Wiley, T. J., Ryan, D. B., **Sellers, E. W.** (April, 2017), P300 BCI: A simulation of random eye movement. Appalachian Research Forum, Johnson City, TN.
- 82) Chambers, S.A., Kellicut-Jones, M. R., Roasciotti, C. A., Millard, R. M., Ryan, D. B., **Sellers, E. W.** (October, 2016), The Influence of Inter-stimulus-interval on BCI Performance. SoCon Undergraduate Research Forum.

- 81) Swymer, C.N., Kellicut-Jones, M. R., Shubert, K. N., Wiley, T. J., Ryan, D. B., **Sellers, E. W.** (October, 2016), P300 event related potential brain-computer interface: A simulation of random eye movements. SoCon Undergraduate Research Forum.
- 80) Millard, R.B., Kellicut-Jones, M.R., Coffman, C.M., Ryan, D.B., **Sellers, E.W.** (April, 2016), The effect of the size of facial stimuli on using a P300 Brain Computer-Interface. Appalachian Research Forum, Johnson City, TN.
- 79) Kellicut, M.R., Coffman, C.M., Ryan, D.B., **Sellers, E.W.** (October, 2015). P300 brain-computer interface: comparing faces and size-matched non-face stimuli. Poster presented at the Society for Neuroscience annual meeting, Chicago, IL.
- 78) Ryan, D., Morton, M.L., **Sellers, E.W.** (October, 2015). Utilizing visual attention and inclination to facilitate brain-computer interface design in an amyotrophic lateral sclerosis and college age sample. Poster presented at the Society for Neuroscience annual meeting, Chicago, IL.
- 77) Sprague, S.A., Ryan, D.B., Kellicut-Jones, M.R., Street, T.L., **Sellers, E. W.** (October, 2015). Performance comparison of color-blink and grey-white paradigms in undergraduates and age-matched controls using the brain-computer interface. Poster presented at the Society for Neuroscience annual meeting, Chicago, IL.
- 76) Street, T. L., Sprague, S. A., **Sellers, E. W.** (April, 2015) A Brain-Computer Interface Study Examining the Performance of Monochromatic and Color Stimuli. Appalachian Student Research Forum. Johnson City, TN.
- 75) Ryan D.B., **Sellers E.W.** (September, 2014). Utilizing visual attention to facilitate BCI design. Poster presented at 6th International BCI Meeting, Graz, Austria.
- 74) Sprague, S. A., Ryan, D. B., **Sellers, E. W.** (September, 2014). The Effects of Motivation on Task Performance Using a Brain-Computer Interface. The 6th International Brain-Computer Interface Meeting. Graz, Austria.
- 73) Ryan, D.B., Colwell K., Throckmorton, S. Collins, L.M. **Sellers, E.W.** (June 2013). Enhancing Brain-Computer Interface Performance in an ALS population: Checkerboard and Color paradigms. Presented at the Fifth International Brain-Computer Interface Meeting, Pacific Grove, CA.
- 72) Brown, K.E., Mesa Guerra. S., **Sellers E.W.** (June, 2013). The Effect of Task Based Motivation on BCI Performance: A Preliminary Outlook. Presented at the Fifth International Brain-Computer Interface Meeting, Pacific Grove, CA.
- 71) Sprague, S., Ryan D.B., **Sellers, E.W.** (June, 2013). The Effects of Motivation on Task Performance using the BCI. Presented at the Fifth International Brain-Computer Interface Meeting, Pacific Grove, CA.
- 70) Berry, D.R., Colwell, K.A., **Sellers, E.W.** (October, 2012). Optimizing P300-based brain-computer interface communication speed via error potentials. Program No. 892.01. Poster presented at the Society for Neuroscience annual meeting, New Orleans, LA.
- 69) Ryan, D.B., Throckmorton, S., Collins, L.M., Caves, K.M., **Sellers, E.W.** (October, 2012). Enhancing train-computer interface performance in an ALS population: Checkerboard and color paradigms. Program No. 892.05 Poster presented at the Society for Neuroscience annual meeting, New Orleans, LA.
- 68) Brown, K.E., Ryan, D.B., Armstrong, J.A., **Sellers, E.W.** (October, 2012). A longitudinal investigation of non-invasive P300-bases brain-computer interface. Program No. 892.06. Poster presented at the Society for Neuroscience annual meeting, New Orleans, LA.
- 67) Ryan, D.B., **Sellers, E.W.** (2012). Visual Attention's Past Shapes The Future of BCI. Poster presented at the EEG and Clinical Neuroscience Annual Meeting, Bristol, VA.
- 66) Brown, K.E., Ryan, D.B., Armstrong, J.A., **Sellers, E.W.** (2012). A longitudinal investigation of non-invasive P300-based brain-computer interface. Poster presented at the EEG and Clinical Neuroscience Annual Meeting, Bristol, VA.
- 65) Sellers, E.W. (September, 2012). ECNS Young Investigator Award, Invited Lecture. Lecture presented at the EEG and Clinical Neuroscience Annual Meeting, Bristol, VA.
- 64) McCane, L., Vaughan, T. M., **Sellers, E. W.**, Zeitlin, D., Mak, J. Wolpaw, J.R. (November, 2011). Factors correlating with P300-based BCI performance in people with and without ALS. Program No. 593.18. Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
- 63) Scull, L. A., Feldman, S.M., Vaughan, T. M., **Sellers, E. W.**, McCane, L., Zeitlin, D., Townsend, G., Heiman-Patterson, T., Wolpaw, J. R. (November, 2011). P300-based brain-computer interface (BCI) use by people with ALS: Effects of

- different stimulus types and user strategies. Program No. 593.15 2011. Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
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- 62) Colwell, K., Ryan D.B., Throckmorton, S., **Sellers, E. W.**, K., Collins, L. M. (November, 2011). Jumpwise regression for channel selection in BCI: Longitudinal consistency and simulations. Program No. 593.04 2011. Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
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- 61) Berry, D.R., Lakey, C.E., Lewis, T.L., **Sellers E.W.** (November, 2011). Mindfulness meditation training program improves p300-based bci performance by affording reliable target responses. Program No. 593.03 2011. Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
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- 60) Colwell, K., Throckmorton, S., Ryan D.B., Morton, K. D., **Sellers, E. W.**, Caves, K., Collins, L. M. (November, 2011). Improving p300 speller speed and accuracy with dynamic stopping. Program No. 593.02 2011 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience. Online.
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- 59) Ryan D.B., Gates, N. A., Colwell, K., Throckmorton, S., Collins, L. Winnen, K. A. M., Brown, R.W., **Sellers, E. W.** (November, 2011) Improving brain-computer interface performance: Giving the p300 speller some color. Program No. 593.01 Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
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- 58) **Sellers, E. W.** Non-Invasive P300-Based Brain-Computer Interface Use for Brain Stem Stroke: A Case Report (November, 2011). Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
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- 57) Frye, G.E., Townsend, G., Hauser, C.K., **Sellers, E.W.** (November, 2010). Suppressing surrounding characters during calibration may improve P300-based BCI performance. Program No. 688.2. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 56) Throckmorton, S., Ryan D.B., Hamner, B., Caves, K., Colwell, K., **Sellers, E.**, Collins, L. (November, 2010). Towards clinically acceptable bci spellers: Preliminary results for different stimulus selection patterns and pattern recognition techniques. Program No. 688.3. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 55) McCane, L., Tsui, P., Vaughan, T.M., McFarland, D.J., Zeitlan, D., Tenteromano. L., Mak, J., **Sellers, E.W.**, Townsend, G., Carmack, C.S., Wolpaw, J.R. (November, 2010). Event related potentials produced by a P300-based brain-computer interface in people with ALS and healthy volunteers. Program No. 688.5. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 54) Ryan D.B., Townsend, G., Winnen, K.A.M., Brown, R.W., **Sellers, E.W.** (November, 2010). Giving the P300 speller some color: A color spelling matrix. Program No. 688.6. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 53) Hauser, C.K., Frye, G.E., Mesa J, S., Gates, N.A., **Sellers, E.W.** (November, 2010). A longitudinal study of P300-based BCI: Examining the effects of disease progression and classification Program No. 688.7. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 52) Berry, D.R., Lakey, C.E., Lewis, T.L., **Sellers E.W.** (November, 2010). Mindfulness meditation induction improves P300-based BCI performance Program No. 688.8. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 51) Gates, N.A., Schwartz, N.E., Mesa J, S., **Sellers, E.W.** (November, 2010). Is the p300-based BCI really a P300-based BCI? Program No. 688.9. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 50) Mesa J, S., Gates, N.A., **Sellers, E.W.** (November, 2010). Stimulus presentation manipulations in P300-BCI: Improving comfort without compromising performance Program No. 688.11. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 49) Armstrong, J.A., Frye, G.E., Berry, D.R., Gates, N.A., **Sellers, E.W.** (November, 2010). P300-based BCI using a random interstimulus interval increases signal-to-noise ratio. Program No. 688.12 2010. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 48) Ryan, D.B., **Sellers, E.W.** (June, 2010). Predictive Spelling with the P300-BCI. Lecture presented at the 4th International BCI Meeting, Asilomar, CA, USA.
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- 47) Throckmorton, C.S., Ryan, D.B., Hamner, B., Caves, C., Colwell, K., **Sellers, E.W.**, Collins, L.M. (June, 2010). Towards clinically acceptable BCI spellers: Preliminary results for different stimulus-selection patterns and pattern-recognition techniques. Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.

- 46) Feldman, S., Petaccio, V. **Sellers, E.W.**, Townsend, G., Vaughan, T.M., Hauser, C., Heiman-Patterson, T., Wolpaw, J.R. (June, 2010). Do people with ALS perform better with the checkerboard paradigm than with the standard row/column P300-BCI? Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 45) Lynn McCane, L., Mak, J., Vaughan, T., McFarland, D., Tenteromano, L., Zeitlin, D., Tsui, P. **Sellers, E.**, Townsend, G. Carmack, S., Wolpaw, J. (June, 2010). The P300-based visual speller for people with ALS: Insights from initial evaluations. Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 44) Berry, D.R., Lakey, C.E., **Sellers, E.W.** (June, 2010). Attentional Manipulations can Enhance P300-based BCI Performance. Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 43) Mesa-G, S., Gates, N.A., **Sellers, E.W.** (June, 2010). Stimulus Presentation Manipulation in P300-BCI: Improving Comfort without Compromising Performance. Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 42) Frye, G.E., Hauser, C.K., Townsend, G., **Sellers, E.W.** (June, 2010). Suppressing Surrounding Characters During Calibration May Improve P300-based BCI Performance. Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 41) Townsend, G., Shanahan, J. Frye, G.E., **Sellers, E.W.** (June, 2010). P300-BCI: Disassociating Flash Groups from Physical Organizations Provides Improved Performance. Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 40) Guger, C., Krausz, G., **Sellers, E.**, Mecella, M., Edlinger, G. (June, 2010). How many people are able to control a P300/motor imagery-based brain-computer interface? Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 39) Mak, J., McFarland, D., Vaughan, T., Tsui, P., McCane, L., **Sellers, E.**, Wolpaw, J. (June, 2010). EEG features correlated with performance in P300-based BCI operation: a long-term case study in a home user with amyotrophic lateral sclerosis (ALS). Poster presented at the 4th International BCI Meeting, Asilomar, CA, USA.
- 38) King, J.G., Feldman, S.M., Vaughan, T.M., **Sellers, E.W.**, Heiman-Patterson, T.D. (December, 2009). An examination of the effect of ground and reference electrode placement on the accuracy of the P300-based brain computer interface. Poster presented at the 20th International Symposium on ALS/MND, Berlin, Germany.
- 37) Schwartz, N.E., Krusienski, D.J., Frye, G.E., Hauser, C.K., Vaughan, T.M., Johnson, G.D., **Sellers, E.W.** (2009, October). The P300 Brain-Computer Interface: Prediction of Success Through Waveform Analysis. Program No. 664.2. Poster presented at the Society for Neuroscience annual meeting, Chicago, IL.
- 36) McCane, L., Vaughan, T.M., McFarland, D.J., Zeitlin, D., Tenteromano, L., Mak, J., **Sellers, E.W.**, Townsend, G., Carmack, C.S., Wolpaw, J.R. (2009, October). Evaluation of Individuals with ALS for In Home Use of a P300 Brain Computer Interface. Program No. 664.7. Poster presented at the Society for Neuroscience annual meeting, Chicago, IL.
- 35) Mak, J., Vaughan, T.M., McFarland, D.J., McCane, L.M., Carmack, C.S., Zeitlin, D.J., **Sellers, E.W.**, Townsend, G., Wolpaw, J.R. (2009, October). Independent use of P300 brain-computer interface (BCI) system by people with amyotrophic lateral sclerosis (ALS): optimizing the classification algorithm. Program No. 664.8. Poster presented at the Society for Neuroscience annual meeting, Chicago, IL.
- 34) **Sellers, E.W.**, Townsend, G., Boulay, C., LaPallo, B.K., Vaughan, T.M., Wolpaw, J.R. (2008, November). The P300 brain-computer interface: A new stimulus presentation paradigm. Program No. 778.21. Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
- 33) Cormier, J., Cash, S.S., **Sellers, E.W.**, Jennings, T., Townsend, L.M., DiPietro, A., Vaughan, T.M., Wolpaw, J.R., Hochberg, L.R. (2008, November) Feasibility of a P300-based brain-computer interface in an acute care setting. 778.11. Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
- 32) LaPallo, B.K., **Sellers, E.W.**, Townsend, G., Boulay, C. Vaughan, T.M., Wolpaw, J.R. (2008, October). Novel Stimulus Presentation Pattern in a P300-Based Brain-Computer Interface. Poster presented at the Flexible Electronics for Biological and Life Science Applications (FlexEBio) IGERT External Advisory Board Meeting, Ithaca, NY.
- 31) **Sellers, E.W.**, Vaughan, T.M., McFarland, D.J., Carmack, C.S., Schalk, G., Cardillo, R.A., Mackler, S.A., Braun, E.M., Halder, S., Lee, S.S., Fudrea, A., Kübler, A., Wolpaw, J.R. (2007, November). Brain-Computer Interface for people

- with ALS: long-term daily use in the home environment. Program No. 414.5. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 30) Vaughan, T.M., **Sellers, E.W.**, McFarland, D.J., Carmack, C.S., Brunne, P., Fudrea, A., Braun, E.M., Lee, S.S., Kübler, A., Mackler, S.A., Krusienski, D.J., Miller, R.N., Wolpaw, J.R. (2007, November). Daily use of an EEG-based brain-computer interface by people with ALS: technical requirements and caretaker training. Program No. 414.6. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 29) Klobassa, D.S., Vaughan, T.M., Brunner, P., Wolpaw, J.R., Neuper, C., **Sellers, E.W.** (2007, November). A high-throughput auditory P300-based brain-computer interface (BCI). Program No. 414.7. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
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- 28) Boulay, D., Townsend, G., Wolpaw, J.R., **Sellers, E.W.** (2007, October). Comparison of two different presentation methods for a P300-based brain-computer interface. Poster presented at the Universtiy at Albany, Department of Biomedical Sciences Annual Retreat, Rensselaerville, NY.
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- 27) **Sellers, E.W.**, Vaughan, T.M., McFarland, D.J., Krusienski, D.J., Mackler, S.A., Cardillo, R.A., Schalk, G., Binder-Macleod, S.A., Wolpaw, J.R. (2006, October). Daily use of a brain-computer interface by a man with ALS. Program No. 256.1. Poster presented at the Society for Neuroscience annual meeting, Atlanta, GA.
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- 26) Vaughan, T.M., Krusienski, D.J., **Sellers, E.W.**, McFarland, D.J., Wolpaw, J.R. (2006, October). Assessing the spatio-temporal relationships elicited by the P300 speller matrix for a brain-computer interface. Program No. 256.4. Poster presented at the Society for Neuroscience annual meeting, Atlanta, GA.
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- 25) Nijboer, F., **Sellers, E.W.**, Matuz, T., Mellinger, J., Jordan, M., Mochty, U., Furdea, A., Kaiser, J., Wolpaw, J.R., Birbaumer, N., Kübler, A. (2006, October). Communication for people with amyotrophic lateral sclerosis (ALS): A P300 brain-computer interface (BCI). Program No. 256.2. Poster presented at the Society for Neuroscience annual meeting, Atlanta, GA.
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- 24) **Sellers, E.W.**, Krusienski, D.J., McFarland, D.J., & Wolpaw, J.R. (2005, November). P300-based brain-computer interface (BCI) performance: effects of matrix size and presentation rate. Program No. 520.11. Poster presented at the Society for Neuroscience annual meeting, Washington, DC.
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- 23) **Sellers, E.W.**, Donchin E., Nijboer, F., Kübler, A., & Wolpaw, J.R. (2005, September). Brain Computer Interface (BCI) using the P300 Event-Related Potential. Lecture presented at the 45th annual meeting of the Society for Psychophysiological Research, Lisbon, Portugal.
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- 22) Nijboer, F., Mochty, U., Mellinger, J. Matuz, T., Jordan, M., **Sellers, E.**, Vaughan, T.M., McFarland, D.J., Schalk, G., Wolpaw, J.R., Birbaumer, N., & Kubler, A. (2005, June). Comparing Sensorimotor Rhythms, Slow Cortical Potentials, and P300 for Brain-Computer Interface (BCI) use by ALS Patients – A Within Subjects Design. Poster presented at the Brain-Computer Interface Technology Third International Meeting, Rensselaerville, New York.
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- 21) Krusienski, D., **Sellers, E.**, Vaughan, T.M., McFarland, D.J., & Wolpaw, J.R. (2005, June). P300 Matrix Speller Classification via Step-Wise Linear Discriminant Analysis. Poster presented at the Brain-Computer Interface Technology Third International Meeting, Rensselaerville, New York.
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- 20) **Sellers, E.**, & Donchin, M. (2005, June). Brain-Computer Interface (BCI) Research at the University of South Florida Cognitive Psychophysiology Lab: The P300 Event-Related Potential. Lecture presented at the Brain-Computer Interface Technology Third International Meeting, Rensselaerville, New York.
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- 19) Kübler, A., Nijboer, F., Mellinger, J., Matuz, T., Kleber, B., Eitel-Braitsch, Y. **Sellers, E.**, Vaughan, T., Wolpaw, J., & Birbaumer, N. (2005, June). "Brain-computer interfaces" – communication with the P300. Lecture presented at the annual meeting of the Arbeitstagung Psychophysilogische Methoden , Bochum, Germany.
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- 18) **Sellers, E.**, Schalk, G., & Donchin, E. (2004, October). A P300 based brain-computer interface (BCI): Moving toward a communication system for the locked-in. Poster presented at the 44th annual meeting of the Society for Psychophysiological Research, San Diego, CA.
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- 17) **Sellers, E.**, Schalk, G., & Donchin, E. (2004, January). The P300 as a typing tool: Tests of brain computer interface with an ALS patient. Poster presented at the DARPA Augmented Cognition Conference: Improving Warfighter Information Intake Under Stress, Orlando, FL.

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- 16) Vaughan, T.M., McFarland, D.J., Schalk, G., **Sellers, E.**, Goncharova, I., & Wolpaw, J.R. (2003, November). Multichannel data from an EEG-based BCI speller using an oddball paradigm. Poster presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
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- 15) **Sellers, E.**, Schalk, G., & Donchin, E. (2003, October). The P300 as a typing tool: Tests of brain computer interface with an ALS patient. Poster presented at the 43rd annual meeting of the Society for Psychophysiological Research, Chicago, IL.
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- 14) Sanocki, T., Michelet, K., & **Sellers E.** (2003, May). How are elements of a scenic layout bound together? Poster presented at the Vision Sciences Society Annual Meeting, Sarasota, FL.
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- 13) Sanocki, T., Michelet, K., & **Sellers, E.** (2002, November). Priming layout of mixed scenes: Evidence of piecemeal (only?) layout representation. Lecture presented at the Annual Meeting of the Psychonomic Society, Kansas City, MO.
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- 12) Jevitt, C. M., Beckstead, J.W., & **Sellers, E.W.** (2002, May). Education, retirement and employment of Florida certified nurse-midwives: A 2001 survey. Lecture presented at the American College of Nurse-Midwives 47th Annual Meeting, Atlanta, GA.
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- 11) Sanocki, T., Swartz, K., & **Sellers, E.** (2002, May). Priming layout of mixed scenes: Evidence of non-semantic, locally organized layout representations? Poster presented at the Vision Sciences Society Annual Meeting, Sarasota, FL.
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- 10) Schulz, M.F., Peterson, M.A., Sanocki, T., & **Sellers, E.W.** (2001, November). Time course of perceptual grouping: A priming study. Lecture presented at the 9th Annual Workshop on Object Perception and Memory, Orlando, FL.
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- 9) Sanocki, T., **Sellers, E.**, & Mittelstadt, J. (2001, May). High-capacity visual short term memory for layout. Lecture presented at the Vision Sciences Society Annual Meeting, Sarasota, FL.
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- 8) **Sellers, E.** & Sanocki, T. (1999, November). Localizing objects within scenes: Object properties influence the mode of attentional selection. Poster presented at the Annual meeting of Object Perception and Memory (OPAM), Los Angeles, CA.
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- 7) Berarducci, A., Burns, P.A., Lengacher, C.A., & **Sellers, E.** (1999, November). Osteoporosis-related health promoting educational practices of primary care providers. Poster presented at the Biennial meeting of Sigma Theta Tau International Honor Society, San Deigo, CA.
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- 6) **Sellers, E.** & Sanocki, T. (1999, May). Localizing objects within scenes: Testing predictions of space-based and object-based models of attentional selection. Poster presented at the annual meeting of the Association for Research in Vision and Ophthalmology, Ft. Lauderdale, FL.
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- 5) Berarducci, A., Burns, P.A., Lengacher, C.A., & **Sellers, E.** (1999, May). Osteoporosis-related health promoting educational practices of primary care providers. Poster presented at the annual National Conference for Nurse Practitioners, Washington, D.C.
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- 4) Sanocki, T. & **Sellers, E.** (1998, May). Shifting resources to recognize a forming object: Dependencies involving object properties. Lecture presented at the annual meeting of the Association for Research in Vision and Ophthalmology, Ft. Lauderdale, FL.
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- 3) Sanocki, T. & **Sellers, E.** (1996, November). Shifting attention to recognize an object: Dependencies involving initial stimulus information. Lecture presented at the Annual Meeting of the Psychonomic Society, Chicago, IL.
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- 2) Schneider, S.L., Wright, R.C., Caffray, C.M., **Sellers, E.W.**, & Styers, R.D. (1995, June). Mapping cognitive representations of emotions: Asymmetries in relatedness ratings are rare. Lecture presented at the Seventh American Psychological Society Annual Convention, New York, NY.
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- 1) **Sellers, E.**, & Sanocki, T. (1995, March). Shifting resources to recognize an object. Poster presented at the 9th Annual Florida Conference on Cognition, Perception, Sensation, Language, and Action, Orlando, FL.
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