

NELSON A. ROQUE

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CURRENT EMPLOYMENT

Assistant Professor, Psychology Department, Human Factors and Cognitive Psychology Program

University of Central Florida, Orlando, FL

Start: August 8th, 2020

EDUCATION

PhD, Cognitive Psychology

Florida State University, Tallahassee, FL

Graduated: May 2018

Dissertation: "Reliably Measuring Attention Capture: Challenges and New Approaches."

Dissertation Advisor: Walter R. Boot, PhD

MS, Cognitive Psychology

Florida State University, Tallahassee, FL

Graduated: August 2015

BS, Psychology

Florida State University, Tallahassee, FL

Graduated: April 2012, with Honors

Thesis: "Driving Donating Behavior: Using Visual Salience to Increase Attention to Donation Related Information on the Web"

Thesis Advisor: Walter R. Boot, PhD

POSTDOCTORAL TRAINING

National Institute on Aging (NIA) T32 Postdoctoral Fellow, July 2018 – June 2020

Pathways T32 Training Program. Center for Healthy Aging, Pennsylvania State University

Postdoctoral mentors: Martin J. Sliwinski, PhD; Nilam Ram, PhD

HONORS & AWARDS

#	Year	Honor / Award
7	2022	UCF College of Sciences Excellence in Research and Creative Activities Celebration Award Recipient
6	2017	2017 Mark & Gloria Charness Cognitive Science Award: <u>April 2017</u>
5	2017	2017 Florida State University, Leslie N. Wilson-Delores Auzenne Assistantship
4	2016	2016 ASAP (Accessibility and Safety for an Aging Population) Doctoral Fellow Award: <u>November 2016</u>
3	2016	2016 Florida State University, Leslie N. Wilson-Delores Auzenne Assistantship
2	2015	2015 Florida State University, Leslie N. Wilson-Delores Auzenne Assistantship
1	2014	2014 NIMH Summer Institute in Cognitive Neuroscience Fellowship, University of California at Santa Barbara: <u>June 23rd - July 4th, 2014</u>

GRANTS & OTHER RESEARCH SUPPORT

Awarded

#	Title	Role	UCF Credit	Agency	Time Period	Proposal / Award ID	Proposal Amount
5	Einstein Aging Study (as part of renewal of NIA-5P01AG003949). Project, "Air Pollution and Cognitive Function"	co-PI (Albert Einstein College of Medicine, co-PI: Dr. Charles B. Hall)	100%	NIH / National Institute on Aging (NIA)	2022-2027	FP00002568	\$911,768 (35%) *
4	Einstein Aging Study (as part of renewal of NIA-5P01AG003949). Core, "Technology and Data Management Core"	Core Leader; PI of subaward	100%	NIH / National Institute on Aging (NIA)	2022-2027	FP00002572	\$1,696,559 (19%) *
3	Mobile Monitoring of Cognitive Change (M2C2; NIA-1U2CAG060408-01)	PI (subaward)	100%	NIH / National Institute on Aging (NIA)	2022-2023	FP00003633	\$50,000
2	5R44AG056250-04: A non-pharmacological multi-modal therapy to improve sleep and cognition and reduce mild cognitive impairment risk	PI (subaward)	100%	Proactive Life, Inc	2021-2022	FP00004212 AWD00001437	\$14,685
1	Investigating Medication Errors in Daily Life: Discovering Person-specific and Situation-specific Risk Factors (NIA-1R03AG067009-01)	PI	100%	NIH / National Institute on Aging (NIA)	July 2020 – May 2022 (requesting no-cost extension)	FP00001451 AWD00000503	\$149,000

* Amounts noted refer to UCF subaward proposal amount. Percentage denotes % of total proposal amount allocated towards UCF subaward. **Total federal funds requested as part of renewal of P01AG003949 (all cores, projects): \$32,795,068**

JIT Received

#	Title	Role	UCF Credit	Agency	Time Period	Proposal ID	Proposal Amount
2	"Validation of the Remote Cognitive Aging and Alzheimer's Disease REsearch (R-CARE) Toolbox for Diverse Populations (resubmission #1).	PI of subaward (Prime: Albert Einstein College of Medicine)	100%	NIH / National Institute on Aging (NIA)	2023-2028	FP00006313	\$868,564
1	Perceived Ethnic Discrimination and Cognitive Function in Mexican-origin Adults (resubmission #1; Impact score: 17; Percentile 2)	PI of subaward (Prime: UT Austin, PI: Dr. Liz Muñoz)	100%	NIH / National Institute on Aging (NIA)	2022-2024	FP00005888	\$90,232

Pending Review

#	Title	Role	UCF Credit	Agency	Time Period	Proposal ID	Proposal Amount
2	Assessing Awareness and Perceptions of Pollution Impact on a Sarasota Community	PI	100%	Gulf Coast Community Foundation	2022-2023	FP00005631	\$20,000
1	Health Outcomes from Air and Water Pollution after a Toxic Chemical Disaster: In Response to the East Palestine, OH Train Derailment	PI	100%	NIH / National Institute on Environmental Health Sciences (NIEHS)	2023-2025	FP00006920	\$434,174

RESEARCH: PEER-REVIEWED PUBLICATIONS

Published

#	Year	Citation
30	2023	Hakun, J. G., Roque, N. A. , Gerver, C. R., & Cerino, E. S. (2023). Ultra-brief Assessment of Working Memory Capacity: Ambulatory Assessment Study Using Smartphones. <i>JMIR Formative Research</i> , 7, e40188.
29	2022	Harrington, K. D., Roque, N. A. , Strenger, J., Correia, S., Salloway, S. P., Sliwinski, M. J., & Thompson, L. I. (2022). Loneliness and subjective cognitive impairment in preclinical Alzheimer's disease and healthy aging. <i>Alzheimer's & Dementia</i> , 18, e069279.
28	2022	Nicosia J., Wang B., Aschenbrenner A.J., Sliwinski, M.J., Yabiku, S., Roque, N.A. , Germine, L.T., Bateman, R.J., Morris, J.C., Hassenstab, J. (2022). To BYOD or not: Are device latencies important for bring-your-own-device (BYOD) smartphone cognitive testing? <i>Behavior Research Methods</i> . DOI: 10.3758/s13428-022-01925-1. PMID: 35953659.
27	2022	Johnston, E. A., Roque, N. A. , Cole, B. H., Flanagan, M. P., Kris-Etherton, P. M., & Petersen, K. S. (2022). A Pilot Study of the Effect of Evening Almond Butter Consumption on Overnight and Fasting Interstitial Glucose. <i>Diabetology</i> , 3(4), 502-513. [**Premier Diabetes Journal - Chosen for Cover Story**]
26	2022	Hoogendoorn, C. J., Qin, J., Wang, C., Roque, N. , Laurenceau, J. P., Katz, M. J., ... & Gonzalez, J. S. (2022). Depressive symptoms mediate the relationship between diabetes and cognitive performance in a community-based sample of older adults. <i>Journal of Diabetes and its Complications</i> , 36(7), 108183.
25	2022	Thompson, L. I., Harrington, K. D., Roque, N. , Strenger, J., Correia, S., Jones, R. N., ... & Sliwinski, M. J. (2022). A highly feasible, reliable, and fully remote protocol for mobile app-based cognitive assessment in cognitively healthy older adults. <i>Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring</i> , 14(1), e12283.
24	2022	Pasquini, G., Ferguson, G., Bouklas, I., Vu, H., Zamani, M., Zhaoyang, R., Harrington, K.D., Roque, N.A. , Mogle, J., Schwartz, H.A., & Scott, S. B. (2022). The where and when of COVID-19: Using ecological and Twitter-based assessments to examine impacts in a temporal and community context. <i>PloS one</i> , 17(2), e0264280. [**Premier Open Access Journal; IF = 3.75 **]
23	2022	He, Z., Tian, S., Singh, A., Chakraborty, S., Zhang, S., Lustria, M. L. A., Charness, N., Roque, N.A. , Harrell, E. & Boot, W. R. (2022). A Machine-Learning Based Approach for Predicting Older Adults' Adherence to Technology-Based Cognitive Training. <i>Information Processing & Management</i> , 59(5), 103034. [**Premier International Journal of Information Sciences; IF = 6.222**]
22	2021	Harrell, E. R., Roque, N. A. , Boot, W. R., & Charness, N. (2021). Investigating message framing to improve adherence to technology-based cognitive interventions. <i>Psychology and aging</i> . [**Premier Adult Development And Aging Journal; IF = 3.34 **]
21	2021	Yang, C. H., Hakun, J. G., Roque, N. , Sliwinski, M. J., & Conroy, D. E. (2021). Mindful walking and cognition in older adults: A proof of concept study using in-lab and ambulatory cognitive measures. <i>Preventive Medicine Reports</i> , 23, 101490.
20	2021	Gray, N., Yoon, J. S., Charness, N., Boot, W. R., Roque, N. A. , Andringa, R., ... & Vitale, T. (2021). Relative effectiveness of general versus specific cognitive training for aging adults. <i>Psychology and aging</i> . [**Premier Adult Development And Aging Journal; IF = 3.34 **]
19	2021	Cerino, E.S., Katz, M.J., Wang, C., Qin, J., Gao, Q., Hyun, J., Hakun, J.G., Roque, N.A. , Derby, C.A., Lipton, R.B., & Sliwinski, M.J. (2021). Variability in cognitive performance on mobile devices is sensitive to

		mild cognitive impairment: Results from the Einstein Aging Study. <i>Frontiers in Digital Health</i> , 3, 758031. Doi: 10.3389/fdgth.2021.758031
18	2020	Roque, N. A. , & Boot, W. R. (2020). A New Tool for Assessing Older Adults' Wireless Network Proficiency: The Wireless Network Proficiency Questionnaire. <i>Journal of Applied Gerontology</i> , 0733464820935000.
17	2020	Emihovich, B., Roque, N.A. , & Mason, J. (2020). Can Video Gameplay Improve Undergraduates' Problem-Solving Skills?. <i>International Journal of Game-Based Learning (IJGBL)</i> , 10(2), 21-38.
16	2020	Lebeau, J.-C., Mason, J. R., Roque, N.A. , Tenenbaum, G. (2020). The effects of acute exercise on driving and executive functions in healthy older adults. <i>International Journal of Sport and Exercise Psychology</i> .
15	2020	Mason, J. R., Tenenbaum, G., Jaime, S., Roque, N.A. , Maharaj, A., Figueroa, A. (2020). Arterial Stiffness and Cardiorespiratory Fitness Are Associated With Cognitive Function in Older Adults. <i>Behavioral Medicine</i> : 1-12.
14	2020	Boot, W., Andringa, R., Harrell, E., Dieciuc, M.A., Roque, N.A. (2020). Older Adults and Video Gaming for Leisure: Lessons from the Center for Research and Education on Aging and Technology Enhancement (CREATE). <i>Gerontechnology</i> , 19(2), 138-136. https://doi.org/10.4017/qt.2020.19.2.006.00
13	2019	Roque, N.A. , Ram, N. (2019). tsfeaturex: An R Package for Automating Time Series Feature Extraction. <i>Journal of Open Source Software</i> , 4(37), 1279, https://doi.org/10.21105/joss.01279
12	2019	Yoon, J. S., Roque, N.A. , Andringa, R., Harrell, E. R., Lewis, K. G., Vitale, T., ... & Boot, W. R. (2019). Intervention comparative effectiveness for adult cognitive training (ICE-ACT) trial: rationale, design, and baseline characteristics. <i>Contemporary Clinical Trials</i> , 78, 76-87. [**Premier International Clinical Trials Journal; IF=2.226**]
11	2019	Dieciuc, M., Roque, N.A. , Boot, W.R. (2019). The spatial dynamics of mouse-tracking reveal that attention capture is stimulus-driven rather than contingent upon top-down goals. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 45(10), 1285.
10	2019	Souders, D. J., Charness, N., Roque, N.A. , & Pham, H. (2019). Aging: Older Adults' Driving Behavior Using Longitudinal and Lateral Warning Systems. <i>Human Factors</i> , 0018720819864510. [**Premier Human Factors Journal; IF=3.165**]
9	2018	Tinker, A., Fozard, J., Kearns, W., Mihailidis, A., Atoyebi, O., Bailey, A., Bet, P., Lapiere, N., Neubauer, N., Roque, N.A. , Vermeer, Y., Taipale, V. (2018). Twelve years of ISG masterclasses: Training the Future Leaders in Gerontechnology. <i>Gerontechnology</i> . – Note, author list for junior scientists organized alphabetically.
8	2018	Wright, T. J., Roque, N. A. , Boot, W. R., & Stothart, C. (2018). Attention capture, processing speed, and inattentive blindness. <i>Acta Psychologica</i> , 190, 72-77.
7	2018	Andringa, R., Boot, W.R., Roque, N.A. , & Ponnaluri, S. (2018). Hand proximity effects are fragile: a useful null result. <i>Cognitive Research: Principles and Implications</i> , 3(1), 7.
6	2018	Boot, W.R., Moxley, J.H., Roque, N.A. , Andringa, R., Charness, N., Czaja, S. J., ... & Rogers, W.A. (2018). Exploring Older Adults' Video Game Use in the PRISM Computer System. <i>Innovation in Aging</i> , 2(1), igy009.
5	2018	Multilab Direct Replication Team, including Boot, W.R., Andringa, R., Roque, N.A. , & Harrell, E.R. (2018). Registered replication report: Dijksterhuis & van Knippenberg (1998). <i>Perspectives on Psychological Science</i> , 1-38.
4	2017	Dieciuc, M., Roque, N. A. , & Folstein, J. R. (2017). Changing similarity: Stable and flexible modulations of psychological dimensions. <i>Brain Research</i> , 1670, 208-219.
3	2017	Souders, D. J., Boot, W. R., Blocker, K., Vitale, T., Roque, N. A. , & Charness, N. (2017). Evidence for narrow transfer after short-term cognitive training in older adults. <i>Frontiers in Aging Neuroscience</i> , 9, 41.
2	2016	Roque, N.A. , Boot, W.R. (2016). A new tool for assessing mobile device proficiency in older adults: The Mobile Device Proficiency Questionnaire. <i>Journal of Applied Gerontology</i> . doi: 10.1177/0733464816642582.
1	2015	Roque, N.A. , & Boot, W. R. (2015). Exploring the relationship between object realism and object-based attention effects. <i>Acta Psychologica</i> , 160, 178-183. doi: 10.1016/j.actpsy.2015.07.014. [**International Journal of Psychonomics; IF=1.380**]

Revise & Resubmit

#	Year	Citation
1	2023	Harrell, E., Roque, N.A. , Boot, W.R. Comparing the Effectiveness of Two Theory-Based Strategies to Promote Cognitive Training Adherence.

In Preparation

#	Year	Citation
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6	-	Roque, N.A. , Hall, C.B., Katz, M., Sliwinski, M.J. Air Pollution Exposure is Associated with Cognitive Performance: Results from the Einstein Aging Study. Target Journal: Journal of Gerontology Medical Sciences [**Premier Journal of Gerontology; IF = 6.053**]
5	-	Roque, N.A. Acceptability of Active and Passive Data Collection Methods for Mobile Health (mHealth) Research. Target Journal: mHealth
4	-	Roque, N.A. , Sliwinski, M., Pincus, A., Conroy, D., Ram, N. Questionnaire-based Everyday Response Time (q*bert): A Low-Cost, Low-Burden Measure of Processing Speed and Cognitive Performance.
3	-	Roque, N.A. , Boot, W.R. Reliably measuring attention capture: Challenges and new approaches.
2	-	Roque, N.A. , Harrell, E., Wright, T.J., Boot, W.R. Proposing visual search as a paradigm to study medication errors.
1	-	Harrell, E., Roque, N.A. , Boot, W.R. Comparing the Effectiveness of Two Theory-Based Strategies to Promote Cognitive Training Adherence

RESEARCH: OTHER PUBLICATIONS

Book Chapters

#	Year	Citation
3	2021	Sliwinski, M.J., Roque, N.A. , Harrington, K. (accepted; in press as of February 2023). Cognition on the go: Opportunities and Challenges for Mobile Cognitive Health Research. <i>Mobile Sensing in Psychology: Methods and Applications</i> .
2	2018	Roque, N. A. , & Boot, W. R. (2018). Action video games DO NOT promote visual attention. In <i>Video game influences on aggression, cognition, and attention</i> (pp. 105-118). Springer, Cham.
1	2017	Roque, N.A. , Boot, W.R. (2017). Cognitive Aging. <i>International Handbook of Positive Aging</i> . London and New York: Routledge.

Technical Reports

#	Year	Citation
3	2017	Charness, N., Boot, W.R., Kaschak, M., Arpan, L., Cortese, J., Clayton, R., Stothart, C., Roque, N.A. , Paedae, B., & Barajas, K. (2017). Human Factors Guidelines to Develop Educational Tip Cards for Aging Road Users. Florida Dept. of Transportation Technical Report. https://rosap.ntl.bts.gov/view/dot/37111/dot_37111_DS1.pdf
2	2015	Boot, W.R., Charness, N., Mitchum, A., Roque, N.A. , Stothart, C., & Barajas, K. (2015). Driving Simulator Studies of the Effectiveness of Countermeasures to Prevent Wrong-Way Crashes. Florida Dept. of Transportation Technical Report. https://rosap.ntl.bts.gov/view/dot/39272/dot_39272_DS1.pdf
1	2015	Boot, W.R., Charness, N., Roque, N.A. , Barajas, K., Dirghalli, J., & Mitchum, A. (2015). The Flashing Right Turn Signal with Pedestrian Indication: Human Factors Studies to Understand the Potential of a New Signal to Increase Awareness of and Attention to Crossing Pedestrians. Florida Dept. of Transportation Technical Report. https://rosap.ntl.bts.gov/view/dot/29644/dot_29644_DS1.pdf

Conference Proceedings

#	Year	Citation
2	2016	Boot, W. R., Souders, D., Charness, N., Blocker, K., Roque, N. A. , & Vitale, T. (2016). The gamification of cognitive training: Older adults' perceptions of and attitudes toward digital game-based interventions. In <i>Human Aspects of IT for the Aged Population. Design for Aging</i> (pp. 290-300). Springer International Publishing.
1	2016	Roque, N. A. , Boot, W. R., Charness, N., Barajas, K., Dirghalli, J., & Mitchum, A. (2016). The Flashing Right Turn Signal with Pedestrian Indication: A human factors study to assess driver comprehension. In <i>Human Aspects of IT for the Aged Population. Healthy and Active Aging</i> (pp. 417-427). Springer International Publisher.

Conference Abstracts (asterisks indicate students)

#	Year	Citation
12	2022	Roque, N.A. , Ferguson, I.*, Saulnier, E.T., Anderson-Hanley, C. Trail Making for electronic touchscreen self-administration (eTrails) as used in the remote iPACES neuro-exergaming trial for Mild Cognitive

		Impairment (MCI): An initial validation report. <i>Submitted to Alzheimer's Association International Conference 2022. Presented Virtually. [**Premier International Alzheimer's Conference**]</i>
11	2022	Roque, N.A. , Ferguson, I.*, Saulnier, E.T., Anderson-Hanley, C. Stroop for electronic touchscreen self-administration (eStroop) as used in the remote iPACES neuro-exergaming trial for Mild Cognitive Impairment (MCI): An initial validation report. <i>Submitted to Alzheimer's Association International Conference 2022. Presented Virtually. [**Premier International Alzheimer's Conference**]</i>
10	2021	Roque, N. A. , Hall, C. B., Katz, M., & Sliwinski, M. J. (2021). Air Pollution Exposure is Associated with Cognitive Performance: Results from the Einstein Aging Study. In <i>ISEE Conference Abstracts</i> (Vol. 2021, No. 1). [**Premier International Environmental Epidemiology Conference**]
9	2021	Roque, N. , Hall, C., Katz, M., & Sliwinski, M. (2021). Air Pollution Exposure Is Associated With Cognitive Performance: Results From the Einstein Aging Study. <i>Innovation in Aging</i> , 5(Suppl 1), 138-138. [**Premier Gerontology Conference**]
8	2021	Harrell, E., Roque, N. , Boot, W., & Charness, N. (2021). Exploring Factors that Shape Adherence to Technology-Based Cognitive Interventions. <i>Innovation in Aging</i> , 5(Suppl 1), 843-843. [**Premier Gerontology Conference**]
7	2020	Boot, W., Roque, N. , Harrell, E., & Charness, N. (2020). Older Adults' Adherence to Technology-Based Intervention: The Role of Messaging and Individual Differences. <i>Innovation in Aging</i> , 4(Suppl 1), 555.
6	2020	Charness, N., Souders, D., Best, R., Roque, N. , Yoon, J., & Stothart, C. (2020). Acceptance of Transportation Technologies by Aging Adults. <i>Innovation in Aging</i> , 4(Supplement 1), 555-555.
5	2020	Harrington, K., Roque, N. , Zhaoyang, R., Mogle, J., & Sliwinski, M. (2020). Loneliness and Profiles of Objective and Subjective Memory During Midlife. <i>Innovation in Aging</i> , 4(Suppl 1), 565.
4	2020	Cerino, E. S., Hyun, J., Hakun, J. G., Roque, N. A. , Lipton, R. B., & Sliwinski, M. J. (2020). Variability in working memory performance on mobile devices is sensitive to mild cognitive impairment: Results from the Einstein Aging Study: Neuropsychology/early detection of cognitive decline with neuropsychological tests. <i>Alzheimer's & Dementia</i> , 16, e039960.
3	2019	Sliwinski, M. J., Hakun, J. G., Roque, N. , Katz, M. J., Zhaoyang, R., & Lipton, R. B. (2019). Intensive ambulatory cognitive assessments in older adults: sensitivity to cognitive risk status in the Einstein Aging Study (EAS). <i>Alzheimer's & Dementia</i> , 15(7), P355-P356.
2	2019	Roque, N. , Ram, N., & Ong, A. (2019). Predicting health outcomes from time series features of affect dynamics: a machine learning approach. In <i>Psychotherapy and Psychosomatics</i> (vol. 88, pp. 110-110). Allschwilerstrasse 10, CH-4009 Basel, Switzerland: Karger. https://www.karger.com/Article/Pdf/502467
1	2019	Ong, A., Roque, N. , & Ram, N. (2019). Fragile positive affect and systemic inflammation. In <i>Psychotherapy and Psychosomatics</i> (Vol. 88, pp. 100-100). Allschwilerstrasse 10, CH-4009 Basel, Switzerland: Karger. https://www.karger.com/Article/Pdf/502467

RESEARCH: PRESENTATIONS

Invited Talks

#	Year	Citation
3	2022	Roque, N.A. (2022, October 20th). Cognitive Assessment in the Cloud: Approaches & Lessons Learned. Virtual presentation as part of Amazon Web Services (AWS) Education Research Seminar Series.
2	2022	Roque, N.A. (2022, October 6th). Cognitive Assessment in the Cloud: Approaches & Lessons Learned. In-person presentation at Union College. Schenectady, New York.
1	2020	Roque N.A. (2020, August 20th). Leveraging Air Quality Sensors to Detect Smoking Behaviors. Virtual presentation at Pennsylvania State University x Monash University: Intersection of Health and the Environment.

Conferences: Organized Symposia

#	Year	Citation
3	2020	Harrington, K., Roque, N. , & Mogle, J. (2020, November). Approaches for Modeling of Intensive Longitudinal Data to Understand Cognitive Aging. <i>Innovation in Aging</i> , 4(Suppl 1), 565. Gerontological Society of America, 2020 Annual Meeting. – <i>Symposium Co-Chair</i> .
2	2020	Roque, N.A. , Sliwinski, M.J. (2020, April). Increasing the Precision of Measuring Cognitive Function in Older Adults using Mobile Technologies. Cognitive Aging Conference, 2020 Annual Meeting. – <i>Symposium Organizer; accepted; conference cancelled due to COVID-19</i> .
1	2019	Roque, NA. , Hyun, J., Scott, S. (2019, November). Using Mobile Technology to Elucidate Psychosocial and Cognitive Function in Older Adults. <i>Innovation in Aging</i> , 3(Supplement_1), S809-S810. Gerontological Society of America, 2019 Annual Meeting. – <i>Symposium Chair</i> .

Conferences: Oral Presentations

#	Year	Citation
15	2023	Roque, N.A. , Sliwinski, M.J., Katz, M., & Lipton, R.B. (2023). Unlock the Potential of Digital Biomarkers: Assessing Cognitive Change via Ecologically Sensitive Approaches. <i>Submitted to Alzheimer's Association International Conference 2023 as part of Team Science Symposium. To be presented in-person in Amsterdam. [**Premier International Alzheimer's Conference**]</i>
14	2023	Katz, M.J., De La Garza, A., Roque, N.A. , Derby, C.A., Sliwinski, M.J., Lipton, R.B., Wang, C. (2023). Feasibility, reliability and predictive validity of digital cognitive assessments in a diverse cohort of community-residing older adults. <i>Submitted to Alzheimer's Association International Conference 2023. To be presented in-person in Amsterdam. [**Premier International Alzheimer's Conference**]</i>
13	2023	Harrington, E., Graham-Engeland, J.E., Lipton, R.B., Roque, N.A. , Sliwinski, M.J., Engeland, C.G. (2023). Inflammation and working memory performance in everyday life: Gender differences among older adults with and without cognitive impairment. <i>Submitted to Alzheimer's Association International Conference 2023. To be presented in-person in Amsterdam. [**Premier International Alzheimer's Conference**]</i>
12	2022	Roque, N.A. (2022, August). Exploring Model-based Profiles of Adherence to a Technology-Based Cognitive Intervention. Presented in-person at the American Psychological Association Annual Conference.
11	2022	Roque, N.A. , Adamo, S.*, Lago, M., Barufaldi, B. (2022, July). Modeling Quit-time Behavior in a Satisfaction of Search (SOS) Experimental Framework: The Role of Context and Experience. Presented virtually at the Medical Image Perception Society Annual Conference.
10	2022	Roque, N.A. (2022, April). Implementation of Web-based Experiments: Considerations for a Live Study. Presented virtually at the Cognitive Aging Conference.
9	2021	Roque, N. A. , Hall, C. B., Katz, M., & Sliwinski, M. J. (2021, November). Air Pollution Exposure is Associated with Cognitive Performance: Results from the Einstein Aging Study. Virtual presentation by lead-author at the 2021 Annual Scientific Meeting of the Gerontological Society of America (GSA) conference.
8	2021	Roque, N. A. , Hall, C. B., Katz, M., & Sliwinski, M. J. (2021, August). Air Pollution Exposure is Associated with Cognitive Performance: Results from the Einstein Aging Study. Virtual presentation by lead-author at the 2021 International Society for Environmental Epidemiology (ISEE) conference.
7	2020	Oravec, Z., Roque, N. , & Sliwinski, M. (2020, November). Bayesian Modeling of Cognitive Impairment in the Presence of Retest Effects. <i>Innovation in Aging</i> , 4(Suppl 1), 566. Virtual presentation presented by lead-author at the Annual Scientific Meeting of the Gerontological Society of America (GSA). Virtual
6	2020	Roque, N. , Sliwinski, M., & Ram, N. (2020, November). Questionnaire-Based Everyday Reaction Time: Reliable, Valid, and Unobtrusive Measure of Cognition. <i>Innovation in Aging</i> , 4(Suppl 1), 599. Virtual presentation by lead-author at Annual Scientific Meeting of the Gerontological Society of America (GSA).
5	2019	Roque, N. , Ram, N., & Ong, A. (2019, January). Predicting health outcomes from time series features of affect dynamics: a machine learning approach. Presented by lead-author at the Bi-Annual World Congress Meeting of the International College of Psychosomatic Medicine (ICPM). Florence, Italy.
4	2019	Mason, J., Jaime, S., Roque, N.A. , Maharaj, A., Tenenbaum, G., & Figueroa, A. (2019, May). The effects of an acute bout of aerobic exercise on cognitive function in older adults. Presented by lead-author at the Annual Meeting of the American College of Sports Medicine (ACSM). Orlando, FL.
3	2018	Roque, N.A. , Boot, W.R. (2018, May). The Development and Validation of the Mobile Device Proficiency Questionnaire in U.S. Samples. Presented at the 2018 Annual Meeting of the International Society for Gerontechnology. St. Petersburg, FL.
2	2018	Souders, D.J., Charness, N., Roque, N.A. , Pham, H. (2018, April). Do Advanced Driver Assistance Systems (ADAS) improve older driver performance? Presented by lead-author at SUNY Stony Brook, Smart and Connected Community Conference. New York.
1	2016	Roque, N.A. , Boot, W.R., Charness, N., Barajas, K., Dirghalli, J., Mitchum, A. (2016, July). Exploring the Comprehension of a New Traffic Signal to Promote the Safety and Awareness of Pedestrians. Presented at Human Computer Interaction International (HCII). Toronto.

Conferences: Posters

#	Year	Citation
19	2021	Roque, N.A. , Anderson-Hanley, C. Saulnier, E.T. (2021, October). Translating the Paper Stroop Task for Repeated Administration as an Electronic Stroop (eStroop) Task on Mobile Devices for a Remote Exercise Intervention for Mild Cognitive Impairment (MCI). (virtual) 11th edition of the International Conference on Frailty and Sarcopenia Research (ICFSR 2021).
18	2021	Dalterio, C.*, Ferguson, I.*, Nath, K., Roque, N.A. , Arciero, P., Anderson-Hanley, C. (2021, October). Biomarker and cognitive effects of single bouts of moderate-intensity neuro-exergaming, high-intensity

		interval training (HIIT), and fasted exercise for mild cognitive impairment: A case study of serial interventions. Presented by lead author at the (virtual) 11th edition of the International Conference on Frailty and Sarcopenia Research (ICFSR 2021).
17	2021	Harrell, E., Roque, N. , Boot, W., & Charness, N. (2021). Exploring Factors that Shape Adherence to Technology-Based Cognitive Interventions. <i>Innovation in Aging</i> , 5(Suppl 1), 843-843. Presented by the lead author at the (virtual) Annual Scientific Meeting of the Gerontological Society of America (GSA) [**Premier Gerontology Conference**]
16	2020	Roque, N. , & Harrell, E. (2020, November). Give People What They Want, Feedback: Older Adult Perceptions on Cognitive Training Features to Increase Engagement. <i>Innovation in Aging</i> , 4(Suppl 1), 411. Presented at the (virtual) Annual Scientific Meeting of the Gerontological Society of America (GSA). [**Premier Gerontology Conference**]
15	2020	Harrell, E., & Roque, N. (2020, November). I'd Rather Be...: Activities Older Adults Reported Leading to Decreased Engagement With Cognitive Training. <i>Innovation in Aging</i> , 4(Suppl 1), 325. Presented by the lead author at the (virtual) Annual Scientific Meeting of the Gerontological Society of America (GSA). [**Premier Gerontology Conference**]
14	2020	Roque, N. , & Harrell, E. (2020, October). Give the People What they Want, Feedback: Older adult perceptions of cognitive training features. <i>Innovation in Aging</i> , 4(Suppl 1), 411. Presented at the (virtual) Annual Scientific Meeting of the International Society for Gerontechnology (GSA). <i>Gerontechnology</i> , 19(0), 1-1. https://doi.org/10.4017/gt.2020.19.s.70037 [**Premier Gerontology Conference**]
13	2018	Roque N.A. , Boot, W.R., (2018, November). A New Scale for Assessing Older Adults' Wireless Network Proficiency: The Wireless Network Proficiency Questionnaire. Presented at the Annual Scientific Meeting of the Gerontological Society of America (GSA). Boston, MA. [**Premier Gerontology Conference**]
12	2018	Lebeau, J.C., Mason, J., Roque, N.A. , Razon, S., & Tenenbaum, G. (2018, June). The Effects of Acute Exercise on Driving Performance and Executive Functions in Healthy Older Adults. Presented at North American Society for Psychology of Sport and Physical Activity's 51 st Annual Meeting in Denver, Colorado.
11	2018	Mason, J., Roque N.A. , Maharaj A., Salvador, J., Figueroa, A. (2018, June). Exploring the effects of life-long aerobic exercise on cognitive function, driving performance, and cardiovascular health. Posted presented at American College of Sports Medicine's 65 th Annual Meeting in Minneapolis, Minnesota.
10	2018	Roque N.A. , Boot, W.R., (2018, May). Pupillometry as a window into the content and strength of attention sets. Presented at the 18 th Annual Meeting of the Vision Sciences Society. St. Petersburg Beach, FL. https://jov.arvojournals.org/article.aspx?articleid=2700102
9	2018	Andringa, R., Roque N.A. , Boot, W.R., (2018, May). Exploring the Effect of Task Complexity, Presentation, and Input Device on the Near-Hands Advantage. Presented at the 18 th Annual Meeting of the Vision Sciences Society. St. Petersburg Beach, FL. https://jov.arvojournals.org/article.aspx?articleid=2699638
8	2018	Roque N.A. , Harrell, E., Wright, T.J., Boot, W.R., (2018, May). Exploring Visual Search as a Paradigm for Predicting Medication Errors. Presented at Cognitive Aging Conference 2018. Atlanta, GA.
7	2017	Ospina J.*, Yazbec, A., Roque, N.A. , Borovsky, A. (2017, April). Pupillometry measures highlight the timing of cognitive effort during linguistic adaptation. Presented at CUNY 2017 Conference on Human Sentence Processing.
6	2016	Roque N.A. , Wright T.J., Boot W.R. (2016, May) Do different attention capture paradigms measure different types of capture? Presented at the 16 th Annual Meeting of the Vision Sciences Society. St. Petersburg Beach, FL. https://jov.arvojournals.org/article.aspx?articleid=2550984
5	2016	Roque N.A. , Boot W.R. (2016, April) Mobile Device Proficiency Questionnaire (MDPQ): Assessing mobile smart device proficiency among seniors. Presented at Cognitive Aging Conference 2016. Atlanta, GA.
4	2015	Roque N.A. , Boot W.R. (2015, November). Do Different Attention Capture Paradigms Measure Different Types of Capture?. Presented at the 23 rd Object Perception, Attention and Memory (OPAM) Workshop. Chicago, IL.
3	2015	Roque N.A. , Wright T.J., Boot W.R. (2015, May). Exploring Visual Search as a Paradigm to Study Medication Errors. Presented at the 15 th Annual Meeting of the Vision Sciences Society. St. Petersburg Beach, FL. https://jov.arvojournals.org/article.aspx?articleid=2433979
2	2014	Roque N.A. , Boot, W.R. (2014, May). Exploring the Relationship between Object-Based Attention Effects and Object Realism. Poster presented at the 14 th Annual Meeting of the Vision Sciences Society. St. Petersburg Beach, FL. https://jov.arvojournals.org/article.aspx?articleid=2144943
1	2012	Driscoll K.A., Johnson S.B., Gill E., Pizzi A., Roque N.A. , Sorrentino E., ... (2012, August) "Grading" Type 1 Diabetes Knowledge: How Well Do Children and Parents Perform? Presented at the 120 th Annual Convention of the American Psychological Association. Orlando, FL.

University / Department: Oral Presentations

#	Year	Citation
7	2021	Roque N.A. (2021, September). Introduction to Data Wrangling & Visualization in R: Exploring the Google Mobility Dataset. Workshop presentation for UCF HFC Doctoral Program Brown bag series. Workshop materials open-sourced: https://github.com/nelsonroque/contextlab_intro_datascience
6	2019	Roque N.A. (2019, November). Using Model-Based Cluster Analyses of Cognitive Performance to Unpack Differences in Psychosocial Risk Factors. Presentation for Pennsylvania State University's Center for Health Aging, Aging SIG.
5	2018	Roque N.A. (2018, March). tsfeaturex: Automating the Extraction of Time Series Features. Presentation for Pennsylvania State University's QuantDev Brown Bag Lecture Series.
4	2018	Roque N.A. (2018, April). Reliably measuring attention capture: Challenges and new approaches. Presentation for FSU Psychology's Graduate Research Day.
3	2017	Roque N.A. (2017, April). Exploring visual search as a paradigm for predicting medication errors. Presentation for FSU Psychology's Graduate Research Day.
2	2016	Roque N.A. (2016, April). Do different attention capture paradigms measure different types of capture? Presentation for FSU Psychology's Graduate Research Day.
1	2016	Roque N.A. (2016, March). Exploring visual search as a paradigm for studying medication errors. Research sharing luncheon held by the FSU Fellows Society.

RESEARCH: IN THE MEDIA

In the Media

#	Year	Citation
2	2022	Roque, N.A. provided commentary on the potential impact of fireworks on human health. (2022, December). How do fireworks affect the air we breathe? We answer key questions about the pollution they generate. https://www.univision.com/noticias/fuegos-artificiales-contaminacion-aire-respiramos-preguntas-clave
1	2020	Roque, N.A. provided commentary on the state of detecting cognitive changes. (2019, December). If dementia can't be prevented, can it at least be detected early? https://qz.com/1754544/detecting-dementia-early-could-the-key-to-a-cure/

Podcasts

#	Year	Citation
2	2018	Roque, N.A. provided audio commentary on the state of assessing mobile device proficiency. (2018, December). JAG: A new tool for assessing mobile device proficiency in older adults: The mobile device proficiency questionnaire. Listen: http://sagenursing.sage-publications.libsynpro.com/jag-a-new-tool-for-assessing-mobile-device-proficiency-in-older-adults-the-mobile-device-proficiency-questionnaire-0
1	2018	Roque, N.A. and Boot, W.R., provided audio commentary on the state of assessing mobile device proficiency. (2018, November). JAG: A new tool for assessing mobile device proficiency in older adults: The mobile device proficiency questionnaire. Listen: http://sagenursing.sage-publications.libsynpro.com/jag-a-new-tool-for-assessing-mobile-device-proficiency-in-older-adults-the-mobile-device-proficiency-questionnaire

TEACHING

UNIVERSITY OF CENTRAL FLORIDA

Graduate Supervision, Doctoral Program

Student	Project Title	Period of Supervision
Gabriela Flores-Cruz	1 st Year Project: Exploring Knowledge and Perceptions of Environmental Effects on Health	Summer 2021 - Present
	2 nd Year Project: How self-monitoring may impair Cognitive Performance.	Summer 2022 - Present
Enilda Velasquez	1 st Year Project: Scaling the visual foraging paradigm to leverage real-world stimuli.	Summer 2022 - Present

Undergraduate Supervision, Chair, Honors in the Major

Student	Project Title	Period of Supervision
Caroline Villacis	Predictors of musical performance anxiety during the COVID-19 pandemic	Fall 2021 - Present
Asia Alegre	Predictors of cognitive health throughout the pandemic.	Fall 2022 - Present
Maria Gonzalez	A New Tool for Assessing Bilingualism and Culture in Adults	Fall 2021 - Present

Undergraduate Supervision, Committee Member, Honors in the Major

Student	Project Title	Period of Supervision
Aymen Mazhar	Impact of the COVID-19 pandemic on Work Preferences (Work From Home)	Fall 2022 - Present

Undergraduate Supervision, Directed Independent Research

Student	Project Title	Period of Supervision
Kevin Smith	Predictors of learning in first-person shooters.	Fall 2022 - Present
Oliver Beardsley	Factors Protective of Burnout in College-Aged Students	Fall 2022 - Present
Karishma Christmas	The Influence of Musical Preferences on Distracted and Aggressive Driving	Spring 2023 - Present
Lillie Del Real	Validation of the Social Media Proficiency Questionnaire (SMPQ)	Fall 2022 - Present
Phillip Chase Hollowell	Predictors of Neurological Disease Caregiver Burden.	Fall 2022 - Present
Kyle Hunyh	Influence of Anxiety Symptom Status on Cognitive Performance	Fall 2022 - Present
Samantha Husar	The Influence of Depression and Anxiety Symptomology on Resisting Distraction	Fall 2021 - Present
Ashley Kornya	Influence of Social Media Usage on Body Image in College-aged Students	Spring 2023 - Present
Victor Milanese	Perceptions of Generative AI in the Generation of Misinformation.	Fall 2022 - Present
Andrea Mullin	Religious Self-Control's Influence on Nomophobia.	Fall 2022 - Present
Sabba Omidvar	Perceptions of Employee Monitoring Software Solutions.	Summer 2022 – Summer 2022
John Palmese	Acute and Chronic Effects of Allergy Medication on Cognition	Spring 2021 - Present
Phuoc Thai	Improving Patient-Physician Communication via mHealth Mobile Applications	Fall 2022 - Present
Stephanie Washburn	Personality Predictors of Cognitive Performance.	Fall 2022 - Present

Current Courses

Semester	Course	Class Title	# Students
Spring 2023	EXP6541(P)	Advanced Human-Computer Interaction	5
Spring 2023	PSY4912	Directed Independent Research	12
Spring 2023	PSY4970H	Honors Thesis 1	2
Spring 2023	PSY4971H	Honors Thesis 2	1
Spring 2023	PSY6908	Independent Study	1

Courses Taught

Semester	Course	Class Title	# Students
Fall 2022	EXP3604 (P)	Cognitive Psychology	143
Fall 2022	PSY4903H (P)	Honors Directed Readings 1	2
Fall 2022	PSY4912	Directed Independent Research	8
Fall 2022	PSY4970H	Honors Thesis 1	1
Summer 2023	PSY6908	Independent Study	1
Summer 2023	PSY4904H	Honors Directed Readings 2	1
Summer 2023	PSY4912	Directed Independent Research	3
Spring 2022	EXP6541(P)	Advanced Human-Computer Interaction	4
Spring 2022	PSY4903H (P)	Honors Directed Readings	1

Spring 2022	PSY4912	Directed Independent Research	3
Fall 2021	PSY4912	Directed Independent Research	2
Fall 2021	EXP3604 (P)	Cognitive Psychology	110
Fall 2021	EXP3604 (W)	Cognitive Psychology	140
Spring 2021	EXP3604 (W)	Cognitive Psychology	173
Fall 2020	EXP3604 (V1)	Cognitive Psychology	74

Education & Preparation

Training Course	Completion
ABCs of Diversity	December 2021
Essentials of Online Teaching	Fall 2020
FERPA Training	May 2020

FLORIDA STATE UNIVERSITY _____

Courses Taught

Course	Class Title	Semester	# Students
PSB2000	Brain & Behavior	Fall 2016	220
Summer Workshop	Python Programming + Open-Source Experiment Building Workshop (Co-Lecturer)	June 2014 – July 2014	12

Guest Lectures

Course	Class Title	Date Covered
PSB2000	Brain & Behavior Instructor: Dr. Orenda Johnson	12/1/16
PSB2000	Brain & Behavior Instructor: Dr. Briana Carroll	11/14/16
EXP3202	Research Methods Instructor: Dr. Jonathan Folstein	3/24/16

Education & Preparation

Training Course	Completion
FSU Psychology Department Teaching Practicum (Supervisors: Dr. Orenda Johnson, Dr. Justin Moss)	January 2016 - May 2016

SERVICE

Service to UCF, Department of Psychology Committees

Dates of Service	Role	Service To:	Service Activities
September 2021 – Fall 2022	Member of Search Committee for I/O Program	Department of Psychology	Participate and provide feedback on candidate screening, assessment and interview activities for two IO tenure-track positions.
April 2021 - Present	Member of Dissertation Committee	Human Factors & Cognitive Psychology (HFC) Doctoral Program	Provide feedback on manuscripts, and proposals. Service on committees for: <ul style="list-style-type: none"> • Xiaoqing Wan (defense: Spring 2022) • Jason Parker (defense: TBD) • Natalie Paquette (defense: TBD) • Jordan Sasser (defense: TBD) • John Duany (defense: TBD) • Alex Arca (defense: TBD)
Spring 2022 - Present	Member of Dissertation Committee	Texts and Technology Doctoral Program	Provide feedback on manuscripts, and proposals. Service on committees for: <ul style="list-style-type: none"> • Francine Sutton (defense: TBD)
Spring 2021, Spring 2022	Second Reader for 1 st /2 nd Year Projects	Human Factors & Cognitive	As part of UCF Psychology's HFC Doctoral Program Requirements. Service on committees for: <ul style="list-style-type: none"> • Briana Sobel (Spring 2021)

		Psychology (HFC) Doctoral Program	<ul style="list-style-type: none"> • Kristen Schmidt (Spring 2022) • Sean Hinkle (Fall 2022) • Yazmin Diaz (Fall 2022)
December 2021 – Present	Social Media Outreach Chair	Human Factors & Cognitive Psychology (HFC) Doctoral Program	Develop social media strategy. Establish and maintain a social media presence for the UCF HFC doctoral program.
December 2021 – Present	Brown Bag Series Chair	Human Factors & Cognitive Psychology (HFC) Doctoral Program	Coordinate Brown Bag series for the HFC doctoral program, including inviting external speakers for presentations.
December 2021 – Present December 2020 – April 2021	Chair of Human Factors & Cognitive Psychology (HFC) Doctoral Program Admissions Sub-committee	Human Factors & Cognitive Psychology (HFC) Doctoral Program	Initiate and implement screening of candidates as per HFC Admissions criteria, selecting potential students for University Fellowship.

Service to UCF, Research

Dates of Service	Role	Service To:	Service Activities
Spring 2022 - Present	Mock NIH Grant Reviewer	UCF Research Development	Serve as mock reviewer and provide feedback on grant applications in preparation for external review <ul style="list-style-type: none"> • Dr. Jean Davis (NIH R03 mechanism) • Dr. Giang Vu (NIH R03 mechanism)

Service to UCF, University Committees

Dates of Service	Role	Service To:	Service Activities
Spring 2022	Member of Research Commons: Technology & Environment Selection Committee	University, Presidential Initiative JumpStart	Participate and provide feedback on Research Commons vision and planning. Meetings occurred 2/9/22, 2/17/22.

Service to Profession, Peer Review

- Applied Ergonomics
- Frontiers in Digital Health
- Journal of Applied Gerontology
- Journal of Medical Internet Research (JMIR)
- Journal of Medical Internet Research (JMIR) Serious Games
- Journal of Experimental Psychology: Applied
- Journal of Gerontology: Psychological Sciences
- International Journal of Psychophysiology
- Journal of Visualized Experiments (JoVE)

Service to Professional Organizations

National Institute of Health (NIH) Early Career Reviewer; Human Complex Mental Function (HCMF) Study Section, January 2022 - February 2022.

- Reviewed grant applications for NIH and provided critiques/scores for further consideration of funding.

Society for Ambulatory Assessments (SAA) Early Career Award Reviewer. February – May 2022.

- Reviewed applications for early career award bestowed on behalf of the Society for Ambulatory Assessment (SAA).

Conference Abstract Reviewer, APA Division 20, December 2018 and December 2019

External Reviewer, The Society for Research in Child Development (SRCD), Student and Early Career Council [SECC], Dissertation Research Funding Awards, July 2019

Student Grant Reviewer, Pennsylvania State University, Kinesiology Department, May 2019

- Assisted in reviewing student grant applications in the context of a mock NIH study section review.

Graduate Student Representative: APA Division 20, September 2014 – February 2016

- Developed: strategies to increase membership, created content for the newsletter (published three times per year), as well as organized social gatherings for Division 20 members at conferences

Poster Judge, APA Division 20 Poster Session, August 6-9th, 2015

- Assisted in judging poster presentations as part of APA's Division 20 (Adult Development & Aging) poster session.

Community Outreach

Guest Lecturer, Pennsylvania (PA) CareerLink, 2018-2019

- "Project Management Tools for Efficiency and Success". Presentation illustrating how to use various project management software in the context of a mock project. February 13, 2019
- "Work from Anywhere: Preparing your Digital Toolbox". Presentation covering software involved to be a successful, well-rounded remote worker. December 19, 2018
- "Work from Anywhere: Tools & Practical Advice". Presentation covering practical advice for remote workers (software, sourcing talent). November 7, 2018

Judge, Capital Regional Science and Engineering Fair, February 13th, 2015 and February 6th, 2018

- Assisted in judging poster presentations for several students from the Capital Region area (Tallahassee, FL and surrounding areas) and deciding on a final winner.

President, Tallahassee Apple Users Group Inc. 501(c)(3) non-profit, December 2017 – May 2018

- Lead of organization, including developing community partnerships, delivering presentations related to technology.

Vice President, Tallahassee Apple Users Group Inc. 501(c)(3) non-profit, December 2016 – December 2017

- Create and deliver presentations related to consumer technology, in addition to organizing and maintaining the website.

PROFESSIONAL SOCIETIES

Member, American Psychological Association - Division 20 (Adult Development and Aging)

Member, American Psychological Association - Division 21 (Applied Experimental and Engineering Psychology)

Member, American Psychological Association - Division 38 (Society for Health Psychology)

Member, Gerontological Society of America

Member, Psi Chi International Honor Society in Psychology