Clara A. Sava-Segal

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Education

2020-Present	**Dartmouth College** Ph.D. in Cognitive Neuroscience, Department of Psychological and Brain Sciences *Advisor: Emily S. Finn, Ph.D.*
2014-2018	**The University of Chicago** *Bachelor's in Psychology & Comparative Human Development | Minor: Biology* *General Honors & Honors in Psychology* *Thesis Advisor: Daniel Casasanto, Ph.D.* *Thesis: Unconscious Processing of Approximate Number in the Human Visual System*

Grants, Fellowships & Funding

2024-2026	**F31 Ruth L. Kirschstein Predoctoral Individual NRSA (Role: PI)** "Neural mechanisms of interpretation shifting and memory formation in ambiguous social contexts" *National Institutes of Mental Health (NIMH)*
2021-2024	**Graduate Research Fellowship (NSF GRFP)** *National Science Foundation*
2016-2017	**Jeff Metcalf Scholar** *University of Chicago*
2014-2018	**Presidential Scholar** *University of Chicago*

Awards & Travel Funding

2024	**Marie A. Center 1982 Award for Excellence in Teaching** *Dartmouth College, Department of Psychological and Brain Sciences*
2024	**Outstanding Graduate Student Teacher** *Dartmouth Center for Advancement of Learning*
2024	**Travel Grant | $350** *Psychological and Brain Sciences Department, Dartmouth College*
2023	**Outstanding Graduate Student Teacher** *Dartmouth Center for Advancement of Learning*
2022	**Citation for Meritorious Performance** *Psychological and Brain Sciences Department, Dartmouth College*
2022	**Graduate Student Award Winner** *Cognitive Neuroscience Society*
2022,2023,2024	**Neukom Travel Grant | $1000** *Neukom Institute for Computational Science, Dartmouth College*
2018	**Psi Chi Research Award Winner**
2018	**Milgrom Education Impact Fellowship**
2017	**Crerar Science Writing Prize - 3rd Place** *Insight into the Evolutionary Purpose of Memory: Pairing Behavioral and Neurobiological Data*
2014-2018	**Dean's List, University of Chicago**

Peer-Reviewed Publications

* Denotes shared authorship; <u>underline</u> indicates trainee

1. Salehi, S., Schrouff, J., Dehaqani, M.R.A., **Sava-Segal, C.**, Raccah, O., Baek, S. (2024) Spatiotemporal dynamics of face subcategory information in the human temporal cortex. *Scientific Reports.*

2. Pinheiro-Chagas, P., **Sava-Segal, C.***, Akkol, S.*, Daitch, A., Parvizi, J. (2024). Spatiotemporal dynamics of successive activations across the human brain during a simple cognitive task. *Journal of Neuroscience.*

3. **Sava-Segal, C.**, Richards, C., <u>Leung, M.</u>, Finn, E.S. (2023). Individual variability in neural event segmentation reflects stimulus content and interpretation. *Cerebral Cortex.*

4. Liu, N.*, Pinheiro-Chagas, P.*, **Sava-Segal, C.**, Kastner, S., Chen, Q., Parvizi, J. (2021). Overlapping Neuronal Population Responses in the Human Parietal Cortex during Visuospatial Attention and Arithmetic Processing. *Journal of Cognitive Neuroscience.*

5. Veit, M.J., Kucyi, A., Hu, W., Zhang, C., Zhao, B., Guo, Z., Yang, B., **Sava-Segal, C.**, Perry, C., Zhang, J., Zhang, K., Parvizi, J. (2021). Temporal order of signal propagation within and across intrinsic brain networks. *Proceedings of the National Academy of Sciences (PNAS).*

6. Brookshire, G., Mangelsdorf, H., **Sava-Segal, C.**, Perry, C., Zhang, J., Zhang, K., Parvizi, J. (2021). Reis, K., Nusbaum, H., Goldin-Meadow, S., Casasanto, D. (2021). Expertise modulates neural stimulus-tracking in frontal but not occipital cortex. *eNeuro.*

7. Parvizi, J., Braga, R., Kucyi, A., Veit, M.J., Pinheiro-Chagas, P., Perry, C.M., **Sava-Segal, C.**, Zeineh, M.M., van Staalduinen, E.K., Henderson, J.M., Markert, M. (2021). Altered Sense of Self During Seizures in the Posteromedial Cortex. *Proceeding of the National Academy of Sciences (PNAS).*

8. Akkol, S., Kucyi, A., Hu, W.H., Zhao, B., Zhang, C., **Sava-Segal, C.**, Liu, S., Razavi, B., Zhang, J., Zhang, K., Parvizi, J. (2021). Intracranial electroencephalography reveals selective task-evoked responses and resting state connectivity of periventricular heterotopias. *Journal of Neuroscience.*

9. Vesuna, S.*, Kauvar, I.*, Gore, F., Oskotsky, T., **Sava-Segal, C.**, Henderson, J.M., Nuyujukian, P., Parvizi, J., Deisseroth, K. (2020). Deep posteromedial cortical rhythm underlying dissociation. *Nature*, 586, 87-94.

10. Lucero, C., Brookshire, G., **Sava-Segal, C.**, Bottini, R., Goldin-Meadow, S., Vogel, E.K., Casasanto, D. (2020). Unconscious Number Discrimination in the Human Visual System. *Cerebral Cortex*, 30(11), 5821-5829.

11. Sun, Y., Liu, X., Li, B., **Sava-Segal, C.**, Wang, A., Zhang, M. (2020). Effects of Repetition Suppression on Sound Induced Flash Illusion with Aging. *Frontiers in Psychology*, 11, 216.

12. Wang, A., Sang, H., He, J., **Sava-Segal, C.**, Tang, X., Zhang, M. (2019). The Effects of Cognitive Expectation on Sound-induced Flash Illusion. *Perception*, 48(12), 1214–1234.

13. Wang, C.-Z., Hou, L., Wan, J.Y., Yao, H., Yuan, J., Zeng, J., Park, C.-W., Kim, S.H., Seo, D.-B., Shin, K.-S., Zhang, C.-F., Chen, L., Zhang, Q.-H., Liu, Z., **Sava-Segal, C.**, Yuan, C.S. (2018). Ginseng berry polysaccharides on inflammation-associated colon cancer: Inhibiting T cell differentiation, promoting apoptosis, and enhancing the effects of 5-fluorouracil. *Journal of Ginseng Research*, 44(2), 282-290.

14. Yao, H., Wan, J.Y., Zeng, J., Huang, W.-H., **Sava-Segal, C.**, Li, L., Niu, X., Wang, Q., Wang, C.-Z., Yuan, C.S. (2018). Effects of compound K, an enteric microbiome metabolite of ginseng, in the treatment of inflammation associated colon cancer. *Oncology Letters*, 15(6), 8339-8348.

15. Wang, C.-Z., Yao, H., Zhang, C.-F., Chen, L., Wan, J.Y., Huang, W.-H., Zeng, J., Zhang, Q.-H., Liu, Z., Yuan, J., Bi, Y., **Sava-Segal, C.**, Du, W., Xu, M., Yuan, C.S., (2018). American ginseng microbial metabolites attenuate DSS-induced colitis and abdominal pain. *International Immunopharmacology*, 64:246-251.

16. Wan, J.Y., Huang, W.-H., Zheng, W., Park, C.W., Kim, S.H., Seo, D.B., Shin, K.S., Zeng, J., Yao, H., **Sava-Segal, C.**, Wang, C.-Z., Yuan, C.S. (2017). Multiple Effects of Ginseng Berry Polysaccharides: Plasma CholesterolLevel Reduction and Enteric Neoplasm Prevention. *American Journal of Chinese Medicine.* 45(06), 1293–1307.

Conference Proceedings

* Denotes shared authorship; <u>underline</u> indicates trainee

1. **Sava-Segal, C.**, Finn, E.S. (2024). Self- Versus Other-Generated Interpretations of Ambiguous Social Stimuli are Asymmetrically Remembered. Presented at *Proceedings of the 8th Annual Conference on Cognitive Computational Neuroscience.*

2. <u>Benson, T.</u>, **Sava-Segal, C.**, Finn, E.S. (2024). Valence, but Not Content, of Narrative Interpretations of Naturalistic Stimuli are Predicted by Personality Traits. Presented at *Proceedings of the 8th Annual Conference on Cognitive Computational Neuroscience.*

Invited and Conference Talks

1. **Sava-Segal, C.***, <u>Benson, T.</u>, Finn, E.S. (Oct. 2024). Nanosymposium on Neural Bases of Human Social Cognition and Connection, Society for Neuroscience (SfN). *Real-world social inputs trigger shifts in neural activity patterns and reinterpretations of ambiguous stimuli.*

2. **Sava-Segal, C.*** (April. 2024). Invited Lab Meeting, Section on Learning and Plasticity (PI – Chris Baker) NIH. *Cognitive and neural mechanisms underlying the subjective interpretations of complex experiences.*

3. **Sava-Segal, C.*** (Jan. 2024). Invited Lab Meeting, IMPACT Lab (PI - Chujin Lin), UCSD. *Cognitive and neural mechanisms underlying the subjective appraisal of complex experiences.*

4. **Sava-Segal, C.*** Grall, C., Bartolino, K., Equita, J., Benson, T., Finn, E.S. (July 2023). Oral Presentation at Organization of Human Brain Mapping, Montreal, CA. *Narrative 'twists' shift neural representations.*

5. **Sava-Segal, C.*** (April 2023, May 2023). Cognitive Brown Bag Talk Series and Social Area Talk Series at Dartmouth College, NH. *Shifting interpretations of ambiguous naturalistic images.*

6. **Sava-Segal, C.*** (November 2022). Invited Lab Meeting Baldassano and Aly Lab Meeting at Columbia University, NY. *Individual variability in neural event segmentation reflects stimulus content and interpretation.*

7. **Sava-Segal, C.*** (August 2022). Text Analysis (Natural Language Processing) Meeting at Dartmouth College, Hanover, NH. *(Re)appraisal of ambiguous stimuli.*

8. **Sava-Segal, C.*** (March 2022). Invited Lab Meeting – Whifield-Gabrieli Lab at Northeastern U., Boston, MA. *Individual variability in neural event segmentation reflects stimulus content and interpretation.*

9. **Sava-Segal, C.*** (August 2021). Invited Lab Meeting University of Chicago Psychology Dept., Chicago, IL. *Exploring Idiosyncrasies in the Appraisal of Naturalistic Events.*

Academic Posters

*Denotes presenter; <u>underline</u> indicates trainee

1. **Sava-Segal, C.**, Finn, E.S. (2024). Self- Versus Other-Generated Interpretations of Ambiguous Social Stimuli are Asymmetrically Remembered. Presented at *Proceedings of the 8th Annual Conference on Cognitive Computational Neuroscience.*

2. <u>Benson, T.</u>, **Sava-Segal, C.**, Finn, E.S. (2024). Valence, but Not Content, of Narrative Interpretations of Naturalistic Stimuli are Predicted by Personality Traits. Presented at *Proceedings of the 8th Annual Conference on Cognitive Computational Neuroscience.*

3. **Sava-Segal, C.***, <u>Benson, T.</u>, Finn, E.S. (2024). Multivariate neural pattern changes reflect within-subject shifts in subjective interpretations. Presentation accepted at *Organization for Human Brain Mapping*, Seoul, Korea.

4. **Sava-Segal, C.***, <u>Benson, T.</u>, Finn, E.S. (2024). Multivariate neural pattern changes reflect within-subject shifts in subjective interpretations. Presentation at *Social Affective Neuroscience Society*, Toronto, CA.

5. Benson, T., **Sava-Segal, C.***, Finn, E.S. (2024). Positive or ruminative: How traits shape sentiment and appraisal of ambiguous stimuli. Presentation at *Society for Personality and Social Psychology*, San Diego, CA.

6. Uruñuela, E., **Sava-Segal, C.***, Leung, M., Finn, E.S., Caballero-Gaudes, C. (2023). A Multi-Subject Deconvolution Algorithm for the Analysis of Naturalistic fMRI Data. Presentation at *ISMRM Iberian Chapter 3rd Annual Meeting*.

7. **Sava-Segal, C.***, Grall, C., Bartolino, K., **Bloch, E.**, Equita, J., Benson, T., Finn, E.S. (2023). Narrative 'twists' shift neural representations. Presentation at *Organization of Human Brain Mapping*, Montreal, CA.

8. **Sava-Segal, C.***, Finn, E.S. (2023). Shifting interpretations of multistable, "naturalistic" stimuli. Presentation at *Cognitive Neuroscience Society*, San Francisco, CA.

9. **Sava-Segal, C.***, Finn, E.S. (2022). Individual variability in neural event segmentation reflects stimulus content and interpretation. Presentation at the *Organization of Human Brain Mapping*, Glasgow, UK.

10. **Sava-Segal, C.***, Zhang, C., Zhao, B., Kucyi, A., Tao, A., Ko, H.J., Yih, J., Parvizi, J. (2022). Direct cortical recordings in the human brain during race categorization of faces. Presentation at *Cognitive Neuroscience Society*, San Francisco, CA.

11. Pinheiro-Chagas, P., **Sava-Segal, C.**, Akkol, S., Braga, R., Daitch, A., Parvizi, J. (2022). Successive ignition of cortical sites across the human brain during arithmetic processing. Presentation at *Cognitive Neuroscience Society*, San Francisco, CA.

12. **Sava-Segal, C.***, Finn, E.S. (2021). Exploring the role of event boundaries in idiosyncratic memory formation. Presentation at the *Organization of Human Brain Mapping*, virtual.

13. Brookshire, G.*, Mangelsdorf, H.H., **Sava-Segal, C.**, Reis, K., Nusbaum, H., Goldin-Meadow, S., Casasanto, D. (2021). Expertise modulates neural tracking of dance and sign language. Poster presented at *2021 meeting of the Cognitive Science Society*.

14. Rauschecker, A., **Sava-Segal, C.***, Liu, S., Na, R., Raccah, O., Parvizi, J. (2020). (2021). Effects of stimulus properties and task on electrophysiological dynamics in the human visual word form area. Presentation at *Cognitive Neuroscience Society* (virtual), Boston, MA.

15. Pinheiro-Chagas, P.*, **Sava-Segal, C.**, Akkol, S., Daitch, A. L., Parvizi, J. (2019). Spatiotemporal dynamics of arithmetic processing in the human brain. Presentation at *Society for Neuroscience*, Chicago, IL.

16. Braga, R.B.*, **Sava-Segal, C. A.**, Poldrack, R. A., Parvizi, J. (2019). Fast temporal characterization of distributed association networks within the individual using intracranial recording and repeated sampling functional MRI. Presentation at *Society for Neuroscience*, Chicago, IL.

17. **Sava-Segal, C.***, Lucero, C., Casasanto D. (2018). Unconscious Processing of Approximate Number in the Human Visual System. Poster presented at *Ninetieth Annual Midwestern Psychological Association*, Chicago, IL.

18. **Sava-Segal, C.***, Lucero, C., Casasanto D. (2018). Unconscious Processing of Approximate Number in the Human Visual System. Poster presented at *Chicago Area Undergraduate Research Symposium*, Chicago, IL.

19. **Sava-Segal, C.***, Lucero, C., Casasanto D. (2018). Using Steady-State Visually Evoked Potentials to Determine a Neural Basis for the Unconscious Processing of Approximate Number Sense. Poster presented at *UCISTEM Undergraduate Research Symposium*, Chicago, IL.

Relevant Research Training

2020-Present	**Graduate Student | Functional Imaging & Naturalistic Neuroscience Lab** Psych. & Brain Sciences Dept. | Dartmouth College *PI: Emily Finn, PhD*
2018-2020	**Lab Manager/Research Assistant | Lab. of Behavioral & Cognitive Neuroscience** Neurology Dept. | Stanford University *PI: Josef Parvizi, MD, PhD*

2015-2018	**Undergraduate Research Assistant | Experience & Cognition Lab**
	Department of Psychology | University of Chicago
	PI: Daniel Casasanto, PhD
2017-2018	**Undergraduate Research Assistant | Awh Vogel Lab**
	Department of Psychology/ Institute of Mind and Biology | University of Chicago
	PIs: Edward Vogel, PhD & Edward Awh, PhD
2017-2018	**Undergraduate Research Assistant | Parkinsonian & Neurodegenerative Diseases Lab**
	Neurology Dept., University of Chicago
	PI: Christopher Gomez, MD, PhD
2016-2018	**Medical Editor/Research Assistant**
	Department of Anesthesia & Critical Care | University of Chicago
	PIs: Chun-Su Yuan, MD & Chong-Zhi Wang, PhD
Sept-Dec '16	**Research Intern | Perception & Action Group, Institut Neurosciences Cognition**
	Université Paris Descartes
	PI: Véronique Izard, PhD
July-Sept '15	**Summer Research Assistant | Social Perception & Evaluation Lab**
	Psychology Dept | NYU
	PI: Jay Van Bavel, PhD

Additional Research Training

2022	**Neurohackademy** | Seattle, WA
2021	**Neuromatch Academy, Computational Neuroscience Course** | Virtual
2019	**Conte Center for Active Sensing Retreat** | Columbia University, NYC

Academic Teaching Experience

Denotes full course design and lecturing

2024, Spring	**Study Leader | Brain and Behavior 2 – How do we process the world around us?***
	Osher Lifelong Learning Institute, Dartmouth College
2023, Fall	**Teaching Assistant | PSYC 6: Introduction to Neuroscience**
	Guest Lecture: Molecular mechanisms of memory
	Awarded: Outstanding Graduate Student Teacher
2023, Winter	**Teaching Assistant | PSYC 6: Introduction to Neuroscience**
	Guest Lecture: The resting brain, attention, and consciousness
	Awarded: Outstanding Graduate Student Teacher
2023, Winter	**Study Leader | Brain and Behavior – How are they linked?***
	Osher Lifelong Learning Institute, Dartmouth College
2022, Fall	**Study Leader | Brain and Behavior – How are they linked?***
	Osher Lifelong Learning Institute, Dartmouth College
2022, Fall	**Teaching Assistant | PSYC 6: Introduction to Neuroscience**
	Guest Lecture: Memory systems
	Guest Lecture: Molecular mechanisms of Learning and Memory
2022, Spring	**Teaching Assistant | PSYC 11: Experimental Psychology**
	Department of Psychological and Brain Sciences, Dartmouth College
2018	**Teaching Assistant | Core Biology: Neurobiology**
	University of Chicago

Academic Service

2022-Present	**Member |** Survey Committee (Dartmouth PBS)
2022-2024	**Co-organizer |** Cognitive Brown Bag Talk Series (Dartmouth PBS)

External Service & Community Teaching Experience

hover for relevant links

2020-Present	**Mentor** | Project SHORT
2022	**Judge** | New Hampshire Science and Engineering Fair
2021, 2022	**Teacher** | Skype a Scientist (zoom)
2021	**Guest Speaker** | Women in Science Club | Stuyvesant High School, NYC (zoom)
2021	**Guest Speaker** | Global Youth Economics Symposium | Hunter High School, NYC (zoom)
2019-2020	**Teacher** | Chicago and Stanford Splash *Course 1. How do Humans Learn; Course 2: Introduction to the Mind*
2019-2020	**Mentor** | San Jose High School (iMentor Bay Area)
2017-2018	**Milgrom Education Impact Fellow** | Gary Comer College Prep
2015-2018	**Leadership Council Member** | University of Chicago Careers in Education
2015-2016	**Corps Member** | Jumpstart Early Childhood Program

Educational Material Development

2020-2023	**Pre-Grad Resource Development Subcommittee Member** | Project SHORT
2017-2019	**Content Creator** | OCEANA Optimization of the Capabilities to Engage and Acquire, using Neuroscientific methods *Donders Institute for Brain, Cognition and Behavior*
2016-2019*	**App Developer** | iOS Education App Microbiology **sold*

Reviewing

Imaging Neuroscience; Behavioral Neuroscience; Proceedings on Cognitive Computational Neuroscience (CCN)

Mentorship

2024-Present	**Eli Bailit** | Undergraduate Research Assistant *Fellowship(s): Undergraduate Research Assistantship (UGAR; 2 terms)*
2024-Present	**David Igbalajobi** | Undergraduate Research Assistant
2024-Present	**Isaac Wells** | Undergraduate Research Assistant
2022-Present	**Sofia Yawand-Wossen** | Undergraduate Research Assistant (Thesis Student) *Fellowship(s): Undergraduate Research Assistantship (UGAR; 3 terms)*
2022-2024	**Tory Benson** | Full-time Research Assistant/ Lab Manager Project: Valence, but Not Content, of Narrative Interpretations of Naturalistic Stimuli are Predicted by Personality Traits
2022-2024	**Evan Bloch** | Undergraduate Research Assistant (Thesis Student) Project: People with higher depressive tendencies are more idiosyncratic in their event boundaries *Fellowship(s): Undergraduate Research Assistantship (UGAR; 4 terms)*
2021-2024	**Megan Leung** | Undergraduate Research Assistant *Fellowship(s): James O. Freedman Presidential Scholar (3 terms); Undergraduate Research Assistantship (UGAR; 2 terms)*
2023	**Robin Sandell** | Post-Grad Research Assistant
2022	**Payton Weiner** | Undergraduate Research Assistant *Fellowship(s): Undergraduate Research Assistantship (UGAR; 2 terms)*

Technical and language skills

- **Programming:**
  - Extensive experience with Python, MATLAB, R, JsPsych
  - Experience with JavaScript, HTML
- **Neuroscience and Psychology:**
  - Extensive experience with fMRI, iEEG data collection and analysis
  - Experience with intracranial electrical stimulation, scalp EEG, eye tracking
  - Additional: TMS training, wet lab, and animal handling techniques
- **Language:**
  - Bilingual Proficiency: English, Romanian
  - Professional Working Proficiency: Spanish, French
  - Elementary Working Proficiency: German