

CURRICULUM VITAE

Constanza Inez C. de Dios

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PRESENT TITLE

2019-Present Postdoctoral Research Fellow
Center for Neurobehavioral Research on Addiction
Louis A. Faillace, MD, Department of Psychiatry and Behavioral Sciences
UTHealth McGovern Medical School
University of Texas Health Science Center
Houston, TX

EDUCATION

2016-2019 Ph.D. Psychology
University of South Florida, Tampa, FL
Concentration: Cognition, Neuroscience, and Social Psychology

2013-2016 M.A. Psychology
University of South Florida, Tampa, FL
Concentration: Cognition, Neuroscience, and Social Psychology

2008-2012 B.S. Psychology
Saint Mary's College of California, Moraga, CA
Concentration: Experimental/Neuroscience Psychology
Summa Cum Laude

PUBLICATIONS

Peer-Reviewed Original Journal Articles

In Press

Leung, E. *, Lau, E. W. *, Liang A. *, **de Dios, C.**, Suchting, R., Ostlundh, L., Masdeu, J. C., Fujita, M., Sanches, M., Soares, J. C., & Selvaraj, S. (2022). Alterations in brain synaptic proteins and mRNAs in mood disorders: A systematic review and meta-analysis of postmortem brain studies. *Molecular Psychiatry*, 27(3), 1362-1372. DOI: 10.1038/s41380-021-01410-9.

de Dios, C., Fernandes, B. S., Whalen, K., Bandewar, S., Suchting, R., Weaver, M., & Selvaraj, S. (2021). Prescription fill patterns for benzodiazepines and opioid drugs during the COVID-19 pandemic in the United States. *Drug and Alcohol Dependence*, 229, 109176. PMID: 34808468. PMCID: PMC8595244. DOI: 10.1016/j.drugalcdep.2021.109176.

- Suchting, R., Green, C.E., **de Dios, C.**, Vincent, J., Moeller, F.G., Lane, S.D., & Schmitz, J.M. (2021). Citalopram for treatment of cocaine use disorder: A Bayesian drop-the-loser randomized clinical trial. *Drug and Alcohol Dependence*, 228, 109054. PMID: 34600245. PMCID: PMC8595787. DOI: 10.1016/j.drugalcdep.2021.109054
- Yoon, J., Suchting, R., **de Dios, C.**, Vincent, J., McKay, S., Lane, S., & Schmitz, J. (2021). Decreased cocaine demand following contingency management treatment. *Drug and Alcohol Dependence*, 226, 108883. PMID: 34198136. DOI: 10.1016/j.drugalcdep.2021.108883
- Yammine, L., Green, C. E., Kosten, T. R., **de Dios, C.**, Suchting, R., Lane, S. D., Verrico, C. D., & Schmitz, J.M. (2021). Exenatide adjunct to nicotine patch facilitates smoking cessation and may reduce post-cessation weight gain: a pilot randomized controlled trial. *Nicotine and Tobacco Research*, 23(10), 1682-1690. PMID: 33831213. PMCID: PMC8517504. DOI: 10.1093/ntr/ntab066
- Nakano, H., Rosario, M-A. M, & **de Dios, C.** (2021). Experience affects EEG event-related synchronization in dancers and nondancers while listening to preferred music. *Frontiers in Psychology*, 12, 611355. PMID: 33912101. PMCID: 8071982. DOI: 10.3389/fpsyg.2021.611355
- de Dios, C.**, Suchting, R., Webber, H. E., Yoon, J. H., Yammine, L., Vincent, J., Weaver, M. F., Stotts, A. L., Schmitz, J. M., & Lane, S. D. (2021). Cocaine-specific speed-accuracy trade-off during anti-saccade testing differentiates patients with cocaine use disorder who achieve initial abstinence during treatment. *Journal of Psychopharmacology*, 35(5), 611-614. PMID: 33586502. PMCID: 8480541. DOI: 10.1177/0269881121991566
- Webber, H. E., **de Dios, C.**, Wardle M. C, Suchting R., Green C. E., Schmitz, J. M., Lane, S. D., & Versace, F. (2021). Electrophysiological responses to emotional and cocaine cues reveal individual neuroaffective profiles in cocaine users. *Experimental and Clinical Psychopharmacology*, XX, xx-xx. PMID: 33630644. PMCID: 8406778. DOI: 10.1037/pha0000450.
- Suchting, R., Tirumalajaru, V., Gareeb, R. M., Bockmann, T., **de Dios, C.**, Aickareth, J., Pinjari, O., Soares, J. C., Cowen P. J., & Selvaraj, S. (2021). Revisiting monoamine oxidase inhibitors for the treatment of depressive disorders: A systematic review and network meta-analysis. *Journal of Affective Disorders*, 282, 1153-1160. PMID: 33601690. DOI: 10.1016/j.jad.2021.01.021
- Yoon, J. H., **de Dios, C.**, Suchting R., Vincent J. N., McKay S. A., Lane S. D., & Schmitz J. M. (2020). Initial development of a brief assessment of cocaine demand. *Behavioral Pharmacology*, 32(4), 351-355. PMID: 33394690. PMCID: 8119298. DOI:10.1097/fbp.0000000000000617
- Hunt, C., Macedo, T., Suchting, R., **de Dios, C.**, Cuellar Leal, V. A., Soares, J. C., Dantzer, R., & Teixeira, A. (2020). Effect of immune activation on the kynurenine pathway and depression symptoms – a systematic review and meta-analysis. *Neuroscience and Biobehavioral Reviews*, 118, 514-523. PMID: 32853625. PMCID: 8087452. DOI: 10.1016/j.neubiorev.2020.08.010
- Soder, H. E., **de Dios, C.**, & Potts, G. F. (2016). The role of the neural reward system in attention selection. *NeuroReport*, 27(10), 787-790. PMID: 27232519. DOI: 10.1097/wnr.0000000000000617

Under Review

Selvaraj, S., Aggarwal, S., **de Dios, C.**, Sharrief, A.Z., Beauchamp, J., & Savitz, S.I. (Under review). Predictors of early post-stroke depression and suicidal ideation among acute stroke survivors.

Webber, H.E., **de Dios, C.**, White, K., & Potts, G.F. (Under review). Effects of valence, prediction, and delivery of emotional images on the feedback-related negativity/reward positivity.

Webber, H., **de Dios, C.**, Kessler, D.A., Schmitz, J.M., Lane, S.D., & Suchting, R. (Under review). Late positive potential as a biomarker of motivational relevance in substance use: Evidence from a meta-analysis.

Book Chapters

Soder HE, Hoffman JL, **de Dios C**, Webber TA (2021). Best practices for studying addiction. In D. F. Ragin & J. P. Keenan (Eds.), *Handbook of research methods in health psychology* (73-86). New York NY & Abingdon, Oxon: Routledge.

MyBibliography: ncbi.nlm.nih.gov/myncbi/constanza%20inez.de%20dios.1/bibliography/public/

ORCID: orcid.org/0000-0003-0230-5222

PRESENTATIONS

Conference Presentations

(Presenter/s underlined)

de Dios, C., Suchting, R., Green, C., Klugh, J.M., Harvin, J.A., Webber, H.E., Schmitz, J.M., Lane, S.D., Yoon, J.H., Heads, A., Motley, K., & Stotts, A. (2022, September). *Reducing opioid exposure and pain in trauma patients at high risk for opioid misuse* [Poster session]. 81st Annual Meeting of the American Association for the Surgery of Trauma and Clinical Congress for Acute Care Surgery, Chicago, IL, USA.

Hong, J.H., **de Dios, C.**, Balderas, J.C., Tonkin, S.S., Suchting, R., Walss-Bass, C., & Meyer, T.D. (2022, June). *Types of traumatic experiences in drug overdose-related deaths: an exploratory latent class analysis* [Poster session]. College on Problems of Drug Dependence 84th Annual Meeting, Minneapolis, MN, USA.

Hong, J.H., **de Dios, C.**, Gilmore-Thomas, A., Lathan, E., Hamilton, J.E., & Heads, A.M. (2022, June). *The association between potentially-traumatic events and cocaine, cannabis, and alcohol use differs by race* [Poster session]. College on Problems of Drug Dependence 84th Annual Meeting, Minneapolis, MN, USA.

Webber, H.E., Yoon, J.H., **de Dios, C.**, Suchting, R., Green, C.E., Lane, S.D., Vincent, J., Dang, V., Wardle, M.C., Kyriotakis, G., Versace, F., & Schmitz, J.M. (2022, June). Brain reactivity bias toward drug versus pleasant cues is associated with drug demand in individuals with cocaine use disorder. In J.H. Yoon & G. Naudé (Chairs), *Behavioral Economics* [Symposium]. College on Problems of Drug Dependence 84th Annual Meeting, Minneapolis, MN, USA.

de Dios, C., Schmitz, J.M., Lane, S.D., Suchting, R., Green, C.E., Kosten, T.R., Leidy, H.J., Verrico, C.D., & Yammine, L (2022, March). A pilot trial of exenatide once-weekly adjunct to nicotine

patch for smoking cessation and mitigation of post-cessation weight gain. In E. Herrmann (Chair), *Promising New Smoking Cessation Pharmacotherapies* [Symposium]. Society for Research on Nicotine and Tobacco 28th Annual Meeting, Baltimore, MD, USA.

Hong, J.H., de Dios, C., Gilmore-Thomas, A., Lathan-Powell E.C., Hamilton, J.E., & Heads, A.M. (2021, July). *The association between potentially-traumatic events and cocaine, cannabis, and alcohol use differs by race* [Poster session]. 11th Annual Postdoctoral Science Symposium, Houston, TX.

Webber, H. E., de Dios, C., Kessler, D. A., Lane, S. D., Schmitz, J. M., & Suchting, R. (2021, October). *Error and reward processing in substance use disorders: evidence from a meta-analysis on event-related potentials* [Poster session]. 61st Meeting of the Society for Psychophysiological Research, Virtual.

Schmitz, J., Green, C., Suchting, R., **de Dios C.,** Vincent, J., Lane, S., & Moeller, F. G. (2021, June). Citalopram for treatment of cocaine use disorder: A Bayesian drop-the-loser randomized clinical trial. In *Stimulant Med Development* [Symposium]. College on Problems of Drug Dependence 83rd Annual Meeting, Virtual.

Cohen, A., Jeong, J., Hinojosa, E., Schmitz, J., Spellman, M., Lane, S.D., Stotts, A., Walss-Bass, C., **de Dios, C.,** Savitz, S., & Sharrief, A. (2021, June). *Assessing illicit drug use in the follow-up care of stroke survivors* [Poster session]. College on Problems of Drug Dependence 83rd Annual Meeting, Virtual.

de Dios, C., Suchting, R., Soder, H., Yoon, J.H., Kessler, D., Kapoor, S., Stotts, A. L., Heads, A. M., Harvin, J. A., Green, C. E., Lane, S. D., Schmitz, J. M. (2020). *Identifying predictors of opioid misuse in adult trauma patients using a Bayesian data science approach*. Oral presentation given at University of Texas MD Anderson Cancer Center PostDoctoral Association, "10th Annual Postdoctoral Science Symposium" (first place, Applied Science). DigitalCommons@TMC, MD Anderson Cancer Center Postdoctoral Association, MD Anderson Cancer Center Postdoctoral Association Annual Postdoctoral Science Symposium Abstracts. Paper 3. https://digitalcommons.library.tmc.edu/mda_postdoc_symabs/3

Yammine, L., Green, C., Kosten, T. R., Suchting, R., **de Dios, C.,** Verrico, D, & Schmitz J. (2020, June). Pilot randomized controlled trial of exenatide combined with nicotine patch to promote smoking cessation and prevent weight gain. In *Late Breaking Presentation* [Talk]. College on Problems of Drug Dependence 82nd Annual Meeting, Virtual.

Soder H. E., Kessler, D. A., McKay, S. A., Wardle, M. C., Suchting, R., **de Dios, C,** Green, C. E., Lane, S. D., Schmitz, J. M., & Versace, F. (2020, October). *Electrophysiological individual differences to cocaine-related and other emotional stimuli in individuals with cocaine addiction* [Poster session]. 60th Meeting of the Society for Psychophysiological Research, Virtual.

de Dios, C., Ford, S., & Potts, G. F. (2019, September). *Comparing reward and instructional relevance in target detection* [Poster session]. 59th Meeting of the Society for Psychophysiological Research in Washington DC, USA.

Soder, H. E., de Dios, C., Akula, V. K., McDonald, R. V., & Potts, G. F. (2019, September). *Feedback-related negativity reflects unexpected presence or absence of emotional images* [Poster session]. 59th Meeting of the Society for Psychophysiological Research in Washington DC, USA.

- de Dios C.** & Potts, G. F. (2018, October). *Learning to associate reward values with cues* [Poster session]. 58th Meeting of the Society for Psychophysiological Research in Quebec City, Quebec, Canada.
- de Dios, C.** & Potts, G. F. (2017, October). *Reward's impact on attention: Cue-like or target-like?* [Poster session]. 57th Meeting of the Society for Psychophysiological Research in Vienna, Austria.
- Dell, J., **de Dios C.**, Horner, C., Martinez, R., & O'Brien, J. (2017, October). *Value learning and early visual processing* [Poster session]. 57th Meeting of the Society for Psychophysiological Research in Vienna, Austria.
- de Dios, C.**, & Potts, G. F. (2016, September). *Does incentive salience direct early attention? An ERP investigation* [Poster session]. 56th Meeting of the Society for Psychophysiological Research in Minneapolis, MN, USA.
- de Dios, C.**, Horner, C., Martinez, R., & O'Brien, J. (2016). Can value learning modulate early visual processing? [Abstract] *Journal of Vision*, 16(89), DOI:10.1167/16.12.89.
- de Dios, C.** & Potts, G. F. (2016, April). *Incentive salience produces early attention allocation: An ERP investigation* [Poster session]. 23rd Cognitive Neuroscience Society Meeting in New York, NY, USA.
- de Dios, C.** & Potts, G. (2014, September). *The effect of error monitoring systems on spatial attention* [Poster session]. 54th Meeting of the Society for Psychophysiological Research in Atlanta, GA, USA.
- Rosario, M.-A., Nakano, H., & **de Dios, C.** (2014, April). *Identifying an EEG spectral response to preferred music* [Poster session]. 21st Cognitive Neuroscience Society Meeting in Boston, MA, USA.
- de Dios, C.**, Wan, N. J. A., Rosario, M.-A. M., & Nakano, H. (2012, March). *Music processing in experienced dancers and non-dancers: An EEG spectral analysis* [Poster session]. 19th Cognitive Neuroscience Society Meeting in Chicago, IL, USA.
- de Dios, C.**, Wan, N. J. A., Rosario, M.-A. M., & Nakano, H. (2011, April). *Music processing in dancers and non-dancers: A preliminary EEG frequency analysis* [Poster session]. 41st Western Psychology Conference for Undergraduate Research at Saint Mary's College of California, Moraga, CA, USA.

CURRENT GRANT AND CONTRACT SUPPORT

2021-2023	A randomized, phase 2 clinical trial of HIF activator vadadustat for prevention or treatment of ARDS in hospitalized COVID-19 patients U.S. Department of Defense W81XWH-21-10032 PI: Holger Eltzschig, PhD, & Bentley Bobrow, PhD Role: Co-Investigator 0.86 cal \$2,994,147 direct/year
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2021-2022	<p>Removing Barriers to Effective HIV Prevention Strategies for Individuals with Problematic Substance Use Disorders NIH Texas Developmental Center for AIDS Research Pilot Project for NIH P30AI161943 PI: Angela Heads, PhD Role: Co-Investigator 2.4 cal \$50,000 direct/year</p>
2021-2023	<p>Assessment of pioglitazone to address stress reactivity and alcohol use disorder National Institute on Alcohol Abuse and Alcoholism NIAAA R21 AA027274 PI: Jin Yoon, PhD Role: Co-investigator 0.24 cal \$143,750 direct/year</p>
2020-2024	<p>Pioglitazone as an adjunct to CBT for cocaine relapse prevention National Institute on Drug Abuse NIDA R01 DA048026 PIs: Joy Schmitz, PhD & Scott Lane, PhD Role: Co-investigator 0.29 cal \$449,353 direct/year</p>
2021-2024	<p>Development and pilot testing of a mental health clinic-based PrEP uptake and adherence intervention for women in treatment for trauma-related conditions National Institute on Drug Abuse NIDA R34 DA55496 PI: Angela Heads, PhD Role: Co-investigator 0.17 cal \$150,000 direct/year</p>
2021-2025	<p>Development and pilot testing of an addiction clinic-based PrEP adherence intervention for women with substance use disorders Centers for Disease Control and Prevention CDC U01 PS005209 PI: Angela Heads, PhD Role: Co-investigator 0.29 cal \$220,573 direct/year</p>
2022-2023	<p>Hope Biosciences (Contract) PI: Constanza de Dios, PhD Role: Statistical Design and Analysis Consultant 1.98 cal \$12,000 direct/year</p>

AWARDS

2020	<p>First Place, Oral Competition, Applied Science Division, 10th Annual Postdoctoral Science Symposium hosted by University of Texas MD Anderson Cancer Center Postdoctoral Association (Title: <i>Identifying predictors of opioid misuse in adult trauma patients using a Bayesian data science approach.</i>)</p>
2014-2018	<p>Conference Presentation Grant, University of South Florida (Grant to fund travel and presentation expenses in CNS and SPR conferences)</p>

- 2012 Undergraduate Student Research and Professional Development Fund, Saint Mary's College of California
(Grant to support completion and presentation of EEG study on music processing)
- 2012 Frederick Whelan Psychology Department Award, Saint Mary's College of California
(Given to a graduating senior with an outstanding scholastic record as a psychology major)
- 2011 Summer Research Award
School of Science Summer Research Program, Saint Mary's College of California
(Stipend and award to conduct own research under mentor's supervision)

TEACHING

- 2018-2019 *Cognitive Psychology*
Instructor of Record
University of South Florida
- 2016-2017 *Physiological Psychology*
Instructor of Record
University of South Florida
- 2013-2018 *Research Methods in Psychology*
Lab Instructor
Instructors: Marina Bornovalova, Ph.D., William Sacco, Ph.D., Michael Brannick, Ph.D.
University of South Florida
- 2014-2016 *Introduction to Psychological Science*
Lab Instructor
Instructors: Jane Noll, Ph.D., Jennifer Bosson, Ph.D., Alaina Talboy, M.A.
(Online)
University of South Florida
- 2015, 2018 *Cognitive Psychology*
Teaching Assistant
Instructor: Kenneth Malmberg, Ph.D. (Online)
University of South Florida

MENTORING ACTIVITIES

Graduate Students

- 2021-current Sarah Tonkin, MA, Clinical Psychology Intern
HIV testing barriers among Black and Latina Women: An examination of medical mistrust, discrimination, and substance use

Role: Statistics Mentor
UTHealth Faillace Department of Psychiatry and Behavioral Sciences

- 2021-current Jessica Balderas, MA, Clinical Psychology Intern
Types of traumatic experiences in drug overdose-related deaths
Role: Statistics Mentor
UTHealth Faillace Department of Psychiatry and Behavioral Sciences
- 2021-current Danielle Kessler, BS
Late positive potential as a biomarker of motivational relevance in substance use: Evidence from a meta-analysis
Role: Statistics Mentor
UTHealth Faillace Department of Psychiatry and Behavioral Sciences
- 2015-2016 Carlene Horner, BS
Masters Thesis: *The effect of value learning on attentional resources during top-down processing: An ERP study*
Role: Dissertation Committee Member (External Reviewer)
University of South Florida

Undergraduate Students

- 2019-2021 Kaitlin White
Feedback-related negativity responds to presence or absence of motivationally salient images regardless of valence
Role: Primary Mentor
University of South Florida
- 2018-2019 Vamshi Akula
Bachelors Thesis: *Medial frontal cortex responses to positive and negative emotion prediction*
Role: Primary Mentor
University of South Florida
- 2018 Joelle Castle
Mark Zimmer
The effects of reward on attention: An investigation of reaction time and accuracy
Role: Primary Mentor
University of South Florida
- 2018-2019 Steven Ford
Bachelors Honors Thesis: *Independent Effects of Reward on Attention*
Role: Primary Mentor
University of South Florida

SERVICE

- 2021- **Ad-hoc Reviewer**
JAMA Network Open, Nicotine and Tobacco Research, Drug and Alcohol Dependence

- 2017-2018 **Graduate Representative to the Executive Committee**
Department of Psychology, University of South Florida
- 2015-2017 **Secretary and United Faculty of Florida Senator (Elected)**
USF Graduate Assistants United, United Faculty of Florida
- 2014-2015 **Brown Bag Lecture Committee Co-Chair**
Department of Psychology, University of South Florida

PAST RESEARCH EXPERIENCE

- 2013-2019 **Graduate Research Assistant**
Cognitive Electrophysiology and Clinical Neuroscience Lab
PI: Geoffrey Potts, Ph.D.
Department of Psychology
University of South Florida
Tampa, FL
- 2012-2013 **Research Assistant**
Affective Cognitive Neuroscience Lab
PI: Sonia Bishop, Ph.D.
Department of Psychology
University of California
Berkeley, CA
- 2010-2012 **Undergraduate Research Assistant**
EEG Lab
PI: Hiroko Nakano, Ph.D.
Department of Psychology
Saint Mary's College of California
Moraga, CA

TECHNICAL SKILLS

Statistical Analyses: R (brms, rstan, lme4, poLCA, multinom, metafor, nnet, mgcv, tidyverse); Python (scikit-learn); SPSS

Signal Processing: EEGLAB (via MATLAB), Net Station

Experiment Design: E-Prime 2.0

Data Management: REDCap

PROFESSIONAL MEMBERSHIPS

Cognitive Neuroscience Society
Society for Psychophysiological Research
Vision Sciences Society
Psi Chi Honor Society
American Psychological Association
Alpha Mu Gamma Foreign Language Honor Society