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 EDUCATION

PhD in Biopsychology , University of Michigan Thesis title: Striatal Amplifiers of Incentive Saliency	2013
MS in Psychology , University of Michigan	2010
BS in Psychology and Spanish , Sweet Briar College	2008

 RESEARCH EXPERIENCE

Associate Research Scientist Yale University School of Medicine, Psychiatry Modern Diet and Physiology Research Center at Yale, Dana M Small	Jun. 2018-Present (Concurrent)
Visiting Post-Doctoral Fellow Max Planck Institute for Metabolism Research Translational Neurocircuitry Group, Marc Tittgemeyer	Nov. 2013-Present (Concurrent)
Post-Doctoral Fellow Icahn School of Medicine at Mount Sinai The Kenny Laboratory, Paul Kenny	March 2017 – Present (Concurrent)
Post-Doctoral Fellow John B. Pierce Laboratory at Yale University Department of Psychiatry, Yale School of Medicine Neuropsychology of Flavor and Feeding, Dana M Small	Nov. 2013-2018
Graduate Student University of Michigan Affective Neuroscience Laboratory, Kent Berridge	2008-2013

Technical Proficiencies: fMRI: BOLD and ASL, PET, fsl, SPM, Matlab, UNIX, Bash, some C++, calcium imaging (photometry and single cell), rodent cranial surgery, microdialysis, microinjections, histology, immunohistochemistry, optogenetics, taste reactivity, MedAssociates (programming + physical set up and implementation), and behavioral assays

 PUBLICATIONS

Published, accepted, and pending publications:

Small DM, **DiFeliceantonio AG**. Processed food and food reward, *in press. Science*.

Howe, WM*, Gritton, HJ*, Romano, MF*, **DiFeliceantonio, AG**, Zemel, D., Bucklin, M., Han, X. Unique contributions of cholinergic and parvalbumin interneurons in organizing striatal networks during movement, *in press, Nature Neuroscience*. *equal contribution

DiFeliceantonio AG, Small DM. (2019) Dopamine and diet-induced obesity: 10 years later. *Nature Neuroscience*. 22(1):1-2.

Edwin Thanarajah, S*, Backes, H*, **DiFeliceantonio AG**, Albus, K, Cremer AL, Hanssen, R, Lippert, RN, Cornely, OA, Small, DM., Brüning, JC, Tittgemeyer, M. (2018) Food intake recruits segregated orosensory and post-ingestive dopaminergic neural circuitries to affect eating desire, *Cell Metabolism*. S1550-4131(18)30743-5 *equal contribution

DiFeliceantonio AG, Kenny PJ (2018) Melanocortin 4 receptors switch reward to aversion. *Journal of Clinical Investigation*. 128: 2757-2759

DiFeliceantonio, AG, Coppin, G, Rigoux, L, Edwin Thanarajah, S, Dahger, A, Tittgemeyer, M, Small DM (2018). Supra-additive effects of combining fat and carbohydrate on food reward, *Cell Metabolism*. 28(1):33-44.

DiFeliceantonio AG and Berridge, KC (2016). Dorsolateral neostriatum contribution to incentive salience: Opioid or dopamine stimulation makes one reward cue more motivationally attractive than another. *European Journal of Neuroscience*. 43: 1203–1218.

Richard JM, Castro DC, **DiFeliceantonio AG**, Robinson MJ, Berridge KC (2013) Mapping brain circuits of reward and motivation: in the footsteps of Ann Kelley. *Neuroscience and Biobehavioral Reviews* 37:1919-1931.

DiFeliceantonio AG, Mabrouk OS, Kennedy RT, Berridge KC (2012) Enkephalin surges in dorsal neostriatum as a signal to eat. *Current Biology* 22:1918-1924.

DiFeliceantonio AG, Berridge KC (2012) Which cue to 'want'? Opioid stimulation of central amygdala makes goal-trackers show stronger goal-tracking, just as sign-trackers show stronger sign-tracking. *Behavioral Brain Research* 230:399-408.

McGinty VB, Hayden BY, Heilbronner SR, Dumont EC, Graves SM, Mirrione MM, du Hoffmann J, Sartor GC, Espana RA, Millan EZ, **DiFeliceantonio AG**, Marchant NJ, Napier TC, Root DH, Borgland SL, Treadway MT, Floresco SB, McGinty JF, Haber S (2011) Emerging, reemerging, and forgotten brain areas of the reward circuit: Notes from the 2010 Motivational Neural Networks conference. *Behavioral Brain Research* 225:348-357.

Berridge KC, Ho CY, Richard JM, **DiFeliceantonio AG** (2010) The tempted brain eats: pleasure and desire circuits in obesity and eating disorders. *Brain Research* 1350:43-64.

Schramm-Sapyta NL, **DiFeliceantonio AG**, Foscue E, Glowacz S, Haseeb N, Wang N, Zhou C, Kuhn CM (2010) Aversive effects of ethanol in adolescent versus adult rats: potential causes and implication for future drinking. *Alcohol: Clinical and Experimental Research* 34:2061-2069.

Manuscripts in preparation:

Smith, ACW*, Jonkman, S*, **DiFeliceantonio, AG**, O'Connor, RM, Romano, MF, Everitt, BJ, Kenny, PJ. Dorsolateral striatum regulates new learning, in preparation. *equal contribution

Burke, MV, Sun, X, Coppin, G, **DiFeliceantonio, AG**, Geha, P, Small, DM. Dopamine-dependent cognition across body weight categories conforms to an inverted U and depends on genetically determined basal dopamine levels, submitted, *Appetite*.

DiFeliceantonio, AG, Nakamura YN, Qiu, M, Geha P, Small DM. Body weight is related to striatal response to predicted, but not unpredicted milkshake, in preparation.

Nakamura YN, **DiFeliceantonio, AG**, Qiu, M, Geha P, Small DM. The influence of TAQ1 genotype on avoidance of negative outcomes, in preparation.

CONFERENCE PRESENTATIONS

Oral Presentations

DiFeliceantonio, AG*, Coppin, G, Rigoux, L, Edwin Thanarajah, S, Dahger, A, Bruening, JC, Tittgemeyer, M, Small DM. (2018) When a calorie is not a calorie: fat and carbohydrate combinations potentiate measures of reinforcement independently of caloric load. Society for Neuroscience Annual Meeting, San Diego, CA

DiFeliceantonio, AG*, Edwin Thanarajah, S, Hess, M, Albus, K, Small DM, Tittgemeyer, M (2018). The effect of a 12-week high-fat diet on brain and behavior in healthy humans. Society for Ingestive Behavior Annual Meeting, Fort Meyers, Florida.

DiFeliceantonio, AG*, Coppin, G, Rigoux, L, Edwin Thanarajah, S, Dahger, A, Bruening, JC, Tittgemeyer, M, Small DM. (2016) When a calorie is not a calorie: fat and carbohydrate combinations potentiate measures of reinforcement independently of caloric load. Society for Ingestive Behavior Annual Meeting, Porto, Portugal.

DiFeliceantonio, AG* and Berridge KC (2013) Opioid codes and causes of intense motivation in the dorsomedial neostriatum. Eastern Psychological Association Annual Meeting, NYC.

Gottlieb, DA*, **DiFeliceantonio, AG** (2012) Comparing habit learning and goal directed behavior in adult and adolescent rat. Eastern Psychological Association Annual Meeting, NYC.

DiFeliceantonio, AG* and Berridge, KC (2011) The dorsolateral neostriatum as a generator of incentive salience. European Behavioral Pharmacology Society meeting, Amsterdam.

*Speaker

Poster Presentations

DiFeliceantonio, AG, Edwin Thanarajah, S, Hess, M, Albus, K, Small DM, Tittgemeyer, M (2018). The effect of a 12-week high-fat diet on brain and behavior in healthy humans. New York Regional Obesity Forum, NYC.

DiFeliceantonio, AG, Coppin, G, Rigoux, L, Edwin Thanarajah, S, Dahger, A, Bruening, JC, Tittgemeyer, M, Small DM. (2016) Fat and carbohydrate interact to potentiate reinforcement independently of calories. On Human Brain Mapping Annual Meeting, Geneva.

DiFeliceantonio, AG, Nakamura YN, Qiu, M, Geha P, Small DM. (2015) Body weight is related to striatal response to predicted, but not unpredicted milkshake receipt and this relationship is not influenced by baseline cerebral blood flow. Society for Ingestive Behavior Annual Meeting, Denver.

Nakamura, YN, **DiFeliceantonio AG**, Geha P, Small DM. (2015) Decreased dorsal striatal response to a palatable milkshake is associated with impaired negative outcome learning in obese/overweight individuals, but not healthy weight individuals. Society for Ingestive Behavior Annual Meeting, Denver.

- DiFeliceantonio, AG**, Nakamura YN, Geha, P, Bruening JC, Small DM. (2014) The influence of body mass index on striatal responses to milkshake are not influenced by baseline differences in cerebral blood flow. EMBL Translating Diabetes, Heidelberg.
- DiFeliceantonio, AG**, Berridge, KC (2012) Dorsal neostriatum generates incentive motivation. Society for Neuroscience Annual Meeting.
- DiFeliceantonio, AG**, Mabrouk, OS, Kennedy, RT, Berridge, KC (2011) Dorsal neostriatum generates motivation: Opioid causes and correlates of eating. Society for Neuroscience Annual Meeting.
- Anselme, P.A., Robinson, MJF, **DiFeliceantonio, AG**, Berridge KC (2011) Replacement of goal-tracking by sign-tracking under reward uncertainty, and impairment by dopamine antagonism in the rat. Society for Neuroscience Annual Meeting.
- DiFeliceantonio, AG** and Berridge, KC (2010) Neostriatal sites of mu opioid stimulation enhance CS motivational magnets. Society for Neuroscience Annual Meeting.
- DiFeliceantonio, AG** and Berridge, KC (2010) Neostriatal opioids modify motivational magnets. Motivational Neuronal Network Conference
- DiFeliceantonio, AG** and Berridge, KC (2009) Which cue to “want?” Amygdala opioid control of incentive salience on a prepotent sucrose goal-cue. Society for Neuroscience Annual Meeting
- DiFeliceantonio, AG** and Gottlieb, DA (2007) Stress and Sensitivity: Factors Influencing Ethanol Consumption in Adolescent and Adult Rats. Mid-Atlantic Regional Conference of Undergraduate Scholarship.

AWARDS AND HONORS

Promising Young Investigator Travel Award awarded by the Office of Postdoctoral Affairs at Mount Sinai	2018
Recipient of predoctoral training grant T32 DA007267 awarded by University of Michigan Substance Abuse Research Center.	2011-2013
Travel award recipient for the European Behavioral Pharmacology Society meeting	2011
Recipient of travel award for Motivational Neuronal Networks Conference	2010
NIDA predoctoral training grant 5T32DA007281-14	2008-2009
Recipient of the Rackham Graduate School Travel Grant	2009-2011

TEACHING AND MENTORING EXPERIENCE

Teaching Experience:

Guest Lecturer BSR 1707, Behavioral and Cognitive Neuroscience “Incentive Saliency, ‘liking’ vs ‘wanting’”	2018 and 2019
Graduate Student Instructor Psychology 303, Research Methods in Psychology.	2012
Graduate Student Instructor Psychology 203, Introduction to Biopsychology	2010
Graduate Student Mentor Psychology 203, Introduction to Biopsychology	2009

Mentoring Experience:

Mentor for the Llyod Sherman Scholars Program 2018

Purpose: To engage High School young men of color in biomedical science enrichment activities that prepares them with laboratory research skills and fosters an interest in science and the development of a scientist identity.

Ongoing mentorship of students in lab.

Mentored Honors Thesis students at both the University of Michigan and Yale University

REVIEWER

European Journal of Neuroscience, Diabetologia, Cognition and Emotion, Appetite, Journal of Neuroscience (ad hoc), Proceedings of the National Academy of Sciences (ad hoc)

MEDIA APPEARANCES

Scientific American: <http://www.scientificamerican.com/article/simply-irresistible-overeating/>

The List TV: <http://www.thelisttv.com/the-list/3-sweet-ways-to-stop-your-chocolate-addiction>

Scientific American Podcast: <https://www.scientificamerican.com/podcast/episode/fat-carb-combo-is-a-potent-one-two-punch/>