# Natashia L. Swalve, Ph.D.

# **EDUCATION/WORK HISTORY:**

**2023-present Assistant Professor**, Psychology (Behavioral Neuroscience)

Grand Valley State University, Allendale, MI

**2022-2023** Interim Associate Provost, Alma College

**2022-2023 Associate Professor**, Psychology (Neuroscience)

Chair of the Psychology and Sociology Department

Director of the First-Year Seminar program

Director of the Neuroscience program

**2016-2022 Assistant Professor**, Psychology (Neuroscience)

Alma College, Alma, MI

**2014-2016 Postdoctoral Associate,** University of Minnesota

Advisor: Dr. Marilyn Carroll

**2014 Ph.D.**, summa cum laude, Psychology, Neuroscience and Behavior,

University of Nebraska-Lincoln

Dissertation: "The effects of phencyclidine on the reward-

enhancement effect of nicotine"

Committee: Ming Li, Ph.D. (advisor/chair), Rick A. Bevins, Ph.D.

(co-advisor), Daniel Leger, Ph.D., Patricia Sollars, Ph.D.

**2011** M.A., summa cum laude, Psychology, Neuroscience and Behavior,

University of Nebraska-Lincoln

Master's Thesis: "Parametric studies of antipsychotic-induced

sensitization in the conditioned avoidance response model: Roles of

number of drug exposures, drug dose, and test-retest interval" *Committee*: Ming Li, Ph.D. (advisor/chair), Rick A. Bevins, Ph.D.,

Daniel Leger, Ph.D., Patricia Sollars, Ph.D.

**2008 B.A.**, summa cum laude, Psychology, Winona State University

Advisor: Richard Deyo, Ph.D.

#### **TEACHING EXPERIENCE:**

Instructor: Foundations of Behavioral Neuroscience

Psychology and the Law Research Methods Abnormal Psychology Psychopharmacology

Learning Senior Seminar

**Introduction to Psychology** 

Physiological Psychology with Lab

Astrology to Zombies: Pseudoscience in Today's Society

Neuroscience Seminar

Biopsychology

Guest Lecturer: Brain and Behavior. Winona State University (2015)

Behavioral Neuroscience. University of Nebraska-Lincoln (2014) Psychology of Personality. University of Nebraska-Lincoln (2014)

Psychopharmacology. Wesleyan University (2014)

Teaching Assistant: Developmental Biopsychology. University of Nebraska-Lincoln

(2010)

Biopsychology. University of Nebraska-Lincoln (2009-2010)

Aggression. University of Nebraska- Lincoln (2009) Psychology of Gender. Winona State University (2007)

#### **PUBLICATIONS:**

\*denotes undergraduate student

Esser, E.\* & **Swalve**, **N.** (2022) Implicit gender bias in perceptions of financial jobs. *SN Social Sciences*, **2**(8) 1-11

**Swalve**, **N.** (2022) Changes in perceptions on addiction and empathy after a drugs and behavior course at a small liberal arts college. *College Teaching*, 1-8.

**Swalve**, **N.**, DeFoster, R., & Konoplyanko, M.\* (2021) Poor and hurting: Media habits and views on drugs. *SN Social Sciences*, **1**(1) 28

**Swalve**, **N.**, Harwood, A. & Calhoun, E. (2020) Use of exam wrappers and measures of anxiety on test performance in gateway STEM courses at a small liberal arts college. *College Teaching*, **69**(3) 138-149

**Swalve, N.** & Bierlein, E.\* (2020) The anxiogenic effects of caffeine do not potentiate nicotine withdrawal in an elevated plus maze model of anxiety. *Journal of Caffeine and Adenosine Research*, **10**(3) 110-116

Harfmann, B., **Swalve**, **N**., Mitrzyk, J.\*, & Montoye, A.H.K. (2020) Effect of chronotype on sleep quality in a laboratory setting. *International Journal of Exercise Science*, **13**(3) 1283-1294

- Charntikov, S., Pittenger, S., **Swalve, N.,** Barrett, S.T., & Bevins, R.A. (2020) Conditioned enhancement of the nicotine reinforcer. *Experimental and Clinical Psychopharmacology* (epub ahead of print)
- **Swalve, N.**, Mulholland, M.M., & Li, M. (2019) Alterations of acoustic features of 50 kHz vocalizations by nicotine and phencyclidine in rats. *Behavioural Pharmacology*, **30**(5) 446-451
- Flores, R.J., Uribe, K., **Swalve, N**., & O'Dell, L.E. (2019) Sex differences in nicotine intravenous self-administration: A meta-analytic review. *Physiology and Behavior*, **203**(1), 42-50
- **Swalve**, **N.**, Harfmann, B., Mitrzyk, J.\*, & Montoye, A.H.K. (2018). Accuracy of activity monitors in assessing sleep quantity and quality. *Journal for the Measurement of Physical Behavior*. **1**, 108-121.
- DeFoster, R. & **Swalve**, **N**. (2018) Guns, culture or mental health? Mass shootings as a public health problem. *Health Communication* **33**(10) 1211-1222.
- **Swalve**, **N**., Smethells, J.R., Younk, R.\*, Mitchell, J.\*, & Carroll, M.E. (2018) Sexspecific attenuation of impulsive action by progesterone in a Go/No-Go task for cocaine in rats. *Psychopharmacology* **235**(1) 135-143
- Charntikov, S., Pittenger, S.T., **Swalve, N.,** Li, M., & Bevins, R.A. (2017) Double dissociation of the anterior and posterior dorsomedial caudate-putamen in the acquisition and expression of associative learning with the nicotine stimulus. *Neuropharmacology* **121** 111-119
- **Swalve, N.** & DeFoster, R. (2017) How broadcast media discuss new drug "epidemics": Integrating neuroscience with communication studies through textual framing. *SAGE Research Methods Cases Part 2*
- **Swalve, N**. & DeFoster, R. (2016) Framing the danger of designer drugs: mass media, bath salts and the "Miami Zombie Attack." *Contemporary Drug Problems* **43**(2) 103-21 Featured on Forbes online
- **Swalve, N.,** Smethells, J.R., & Carroll, M.E. (2016) Progesterone attenuates impulsive action in a GO/NOGO task in both female and male rats. *Hormones and Behavior* **85** 43-7
- Smethells, J.R., **Swalve**, **N.**, & Carroll, M.E. (2016) Reducing impulsive choice for cocaine in female rats with atomoxetine and progesterone. *Psychopharmacology* **233**(15-16) 2999-3008

- **Swalve**, **N.**, Smethells, J.R., & Carroll, M.E. (2016) Sex differences in reduction of nicotine reinstatement after single and combined treatments of progesterone and varenicline. *Behavioral Brain Research* **308** 46-52
- **Swalve, N.**, Smethells, J.R., Zlebnik, N. & Carroll, M.E. (2016) Sex differences in reinstatement of cocaine-seeking after progesterone, atomoxetine and combination treatments. *Pharmacology, Biochemistry and Behavior* **145** 17-23.
- Pittenger, S.T., **Swalve**, **N.**, Chou, S., Smith, M.D., Hoonakker, A., Pudiak, C., Fleckenstein, A.E., Hanson, G.R., & Bevins, R.A. (2016) Neurotensin and substance P sex differences following nicotine self-administration. *Synapse* **70**(8) 336-46
- Smethells, J.R., **Swalve**, **N.**, Brimijoin, S., Gao, Y., Parks, R.J., Greer, A.\*, & Carroll, M.E. (2016) Long-term blockade of cocaine self-administration and locomotor activation in rats by an adenoviral vector-delivered cocaine hydrolase. *Journal of Pharmacology and Experimental Therapeutics* **357**(2) 375-81
- **Swalve, N.,** Smethells, J.R. & Carroll, M.E. (2016) Sex differences in the acquisition of cocaine and nicotine self-administration in rats. *Psychopharmacology* **233**(6) 1005-1013
- **Swalve, N.**, Mulholland, M.M., Schultz, T.\*, & Li, M. (2015) Effects of the phencyclidine model of schizophrenia and nicotine on total and categorized ultrasonic vocalizations in rats. *Behavioural Pharmacology* **27**(4) 321-30
- Gao, J., Feng, M., **Swalve**, **N**., Davis, C.\*, Sui, N., & Li, M. (2015) Effects of repeated quetiapine treatment on conditioned avoidance responding in rats. *European Journal of Pharmacology* **769** 154-161
- **Swalve, N.,** Barrett, S. T., Bevins, R.A., & Li, M. (2015) Examining the reinforcement-enhancement effects of phencyclidine and its interactions with nicotine on lever-pressing for a visual stimulus. *Behavioural Brain Research* **291** 253-259
- **Swalve, N.**, Pittenger, S., Bevins, R.A., & Li, M. (2015) Behavioral effects of phencyclidine on nicotine self-administration and reinstatement in rats in the presence or absence of a visual stimulus. *Psychopharmacology* **232**(16) 2877-2887
- Charntikov, S. **Swalve**, **N.**, Pittenger, S., Fink, K.\*, Schepers, S.\*, Hadlock, G.C., Fleckenstein, A.E., Hub, G., Li, M., & Bevins, R.A. (2013) Iptakalim attenuates self-administration and acquired goal-tracking behavior controlled by nicotine. *Neuropharmacology* **95** 138-144
- **Swalve**, **N**. & Li, M. (2012) Parametric studies of antipsychotic-induced sensitization in the conditioned avoidance response model: Roles of number of drug exposure, drug dose, and test-retest interval. *Behavioural Pharmacology* **23** 380-391

Bevins, R.A., Barrett, S.T., Polewan, R.J., Pittenger, S.T., **Swalve, N.,** & Charntikov, S. (2012) Disentangling the nature of the nicotine stimulus. *Behavioural Processes* **90** 28-33

#### **BOOKS UNDER CONTRACT**

DeFoster, R. & **Swalve**, **N**. *The Fear Knot*. Non-fiction popular science book. Agent: Alice Speilburg: Speilburg Literary Agency.

# **PUBLICATIONS (NOT PEER-REVIEWED):**

DeFoster, R., & **Swalve**, **N.** (2021, December 28). *Rationalizing fear: How media coverage of violence shapes American culture*. Minnesota Women's Press. Retrieved January 13, 2022, from https://www.womenspress.com/rationalizing-fear-how-media-coverage-of-violence-shapes-american-culture/

**Swalve, N.** (2021) Fake It Till You Make It (online module). McGraw Hill Education. Introduction to Psychology e-books.

#### **GRANT HISTORY:**

R21 Exploratory Grant, with Amanda Harwood, National Institute of Drug Abuse/National Institute of Environmental Health Sciences, "Postnatal Lead Exposure and Nicotine Addiction," submitted 2/18, scored 38, resubmitted 7/18, scored 32, resubmitted as R15, scored 36, resubmitted 7/2021

R21 Exploratory Grant, with Brandi Stupica, National Institute of Child Health and Human Development, "Interaction of Maternal Behavior and Temperament on Impulsive Behavior," submitted 6/18, withdrawn

Ro3 Behavioral Science Track Award for Rapid Transition grant, National Institute of Drug Abuse, "Interaction of Sex, Hormones, and Stimulant Co-Use on Motivational Deficits Induced by Nicotine Withdrawal," submitted 10/17

Andison Grant, Alma College, Redesign of Introduction to Psychology, awarded 2017

F31 DA034407-01 Predoctoral Ruth L. Kirschstein National Research Service Award, National Institute of Drug Abuse, "Novel Hypothesis for the Comorbidity of Schizophrenia and Nicotine Abuse in Rats," awarded 09/2012-08/2014

Internal Grant, University of Nebraska-Lincoln, Substance Abuse and Violence Initiative, Co-Investigator, "Sex Differences in Methamphetamine Self-Administration and Stress-Induced Reinstatement," awarded 09/2012-08/2013

# PRESENTATIONS/PUBLISHED ABSTRACTS:

- Nykanen, D., Stiffler, H., Bay, M., Goldie, C., & **Swalve**, **N.** (2022) The effects of cannabinoid agonism on auditory discrimination. Society for Neuroscience Conference. San Diego, CA
- **Swalve, N.** (2022) Teaching Diversity, Equity and Inclusion: Pedagogical Best Practices for Meaningful Learning in the Classroom. Invited Panel. Association for Education in Journalism and Mass Communication. Detroit, MI
- **Swalve**, **N.** (2021) Low and No Stakes Assessments in an Introductory Level Biopsychology Course. Neuroscience Teaching Conference, virtual.
- Ettema, J.,\* Alvarado, L.,\* Boss, S.,\* Canfield, K.,\* & **Swalve**, **N.** (2020) Parental Death as a Moderator of Sibling Relationships. Society for Personality and Social Psychology, New Orleans, LA
- Alvarado, L.,\* Ettema, J.\* & **Swalve, N.** (2020) Personality Disorder Symptomatology, ACEs, Attachment, and Self-Regulation. Society for Personality and Social Psychology, New Orleans, LA
- Sowa, S.\* & **Swalve**, **N.** (2019) Evaluation of the Rhizoma Anemarrhena Herb for Potential to Reduce Reactive Oxidative Species (accepted to Society for Neuroscience)
- Bierlein, E., Gibson, A., Swiecicki, N., Sowa, S., & **Swalve, N.** (2019) Effects of Environmental Interactions on Autism Spectrum Disorder. Michigan Academy Science, Arts, Letters, Alma, MI
- DeFoster, R. & **Swalve**, **N.** (2019) "Poor and Hurting" News Media Consumption and Beliefs about Drugs and Drug Users. (submitted to Association for Education in Journalism and Mass Communication)
- **Swalve, N.** & DeFoster, R. (2019) Influence of Media, Environment, and Social Factors on Perceptions of Drug Harm (submitted to Association for Education in Journalism and Mass Communication)
- Bierlein, E.\*, Yoder, M.\*, Sowa, S.\* & **Swalve**, **N.** (2018) The effect of caffeine on aversive symptoms of nicotine withdrawal in rats. Society for Neuroscience, San Diego, CA.
- Mitrzyk, J.\*, **Swalve**, **N.**, Harfmann, B., and Montoye, A.H.K. (2017) Accuracy of activity monitors in assessing sleep. Experimental Biology, San Diego, CA.
- Mitrzyk, J.\*, **Swalve, N.**, Harfmann, B., and Montoye, A.H.K. (2017) Accuracy of activity monitors in assessing sleep. Midwest Chapter of the American College of Sports Medicine, Grand Rapids, MI.

- Smethells, J.R., **Swalve**, **N.** & Carroll, M.E. (2017) "Reducing impulsivity for food and cocaine with progesterone (PRO) and atomoxetine (ATO) in male and female rats" College on Problems of Drug Dependence, Vancouver, Can.
- **Swalve, N.,** Zlebnik, N. Veglahn, H., & Carroll, M.E. (2015) "Sex differences in reinstatement of cocaine-seeking in rats after acute treatment of progesterone and atomoxetine." College on Problems of Drug Dependence, Phoenix, AZ
- Carroll, M.E., Zlebnik, N., Smethells, J.R., & **Swalve**, **N.** (2015) "Novel treatments for cocaine bingeing and relapse: progesterone and exercise. American College of Neuropsychopharmacology, Hollywood, FL
- Bevins, R.A., Charntikov, S, Pittenger S., **Swalve**, **N.** & Barrett, S.T., (2015) "Conditioned enhancement of the nicotine reinforcer." Pavlovian Society, Portland, OR
- Chou, S., **Swalve**, **N.**, Davis, C., & Li, M. (2014) "The effects of prenatal immune activation and infantile repeated maternal separation stress on maternal behavior." Society for Neuroscience, Washington, D.C.
- Charntikov, S., Pittenger, S.T., **Swalve, N.** & Bevins, R.A. (2014) Interoceptive conditioning and nicotine reinforcement. Behavioral Pharmacology Society. San Diego, CA
- Charntikov, S., Pittenger, S., **Swalve, N.,** & Bevins, R.A. (2014) The effects of appetitive interoceptive conditioning on nicotine reinforcement: A novel nicotine self-administration model. Society for Neuroscience, San Diego, CA
- **Swalve, N.,** Pittenger, S., Bevins, R.A. & Li, M. (2013) "The effects of phencyclidine on self-administration of nicotine: A novel hypothesis for the comorbidity of schizophrenia and nicotine abuse." Society for Neuroscience, San Diego, CA
- **Swalve, N.,** Petracca, M. & Li. M. (2013) "Phencyclidine and nicotine's effects on ultrasonic vocalizations induced by a visual stimulus." American Psychological Association, Honolulu, HI
- **Swalve, N.**, Feng, M. & Li, M. (2013) "Drug-drug conditioning between nicotine and clozapine in a conditioned avoidance response model." American Psychological Association, Honolulu, HI
- **Swalve, N.** & DeFoster, R. (2013) "The Miami Zombie attack: How broadcast news media constructed a "bath salts epidemic" Association for Education in Journalism and Mass Communication, Washington D.C.
- Charntikov, S, Pittenger, S.T., **Swalve**, **N**., Vestakis, K., Bevins, R.A. (2013) "Role of dorsomedial caudate putamen in interoceptive conditioning with the nicotine stimulus." European Behavioral Pharmacology Society, La Rochelle, France

**Swalve, N.,** Barrett, S.T., Bevins, R.A., & Li, M. (2012) "Phencyclidine increases sensitivity to the reward-enhancement effect of nicotine." Society for Neuroscience, New Orleans, LA

Charntikov, S, S. Pittenger, **N. Swalve**, K. Fink, S. Schepers, G. Hu, M. Li, & R.A. Bevins (2012) "Iptakalim attenuates the stimulus and reinforcing effects of nicotine in rats." Society for Neuroscience, New Orleans, LA

Charntikov, S., **Swalve**, **N.**, Pittenger, S., Fink, K., Schepers, S., Hu, G., Li, M., & Bevins R. A. (2012) "Assessment of iptakalim in preclinical models of nicotine abuse liability." Society for Research on Nicotine and Tobacco, Houston, TX

**Swalve, N.,** Barrett, S.T., Bevins, R.A., & Li, M. (2011) "A demand analysis of the effects of PCP and nicotine on sensory reinforcement." Society for the Quantitative Analysis of Behavior, Denver, CO

**Swalve, N.** & Li, M. (2010) "Parametric evaluation of the antipsychotic sensitization effect in the conditioned avoidance response model" Society for Neuroscience, San Diego, CA

Zhao, C., **Swalve**, **N.**, Sun, T., Zhang, C., & Li, M. "Neuroanatomical mechanisms underlying the inhibitory effect of repeated antipsychotic treatment on repeated phencyclidine-induced hyperlocomotion." (2010) Society for Neuroscience, San Diego, CA

**Swalve. N.** & Deyo, R. (2008) "Effects of nicotine withdrawal on anxiety and depression in rats" Seven Rivers, LaCrosse, WI

# **AWARDS/HONORS:**

| 2021      | Barlow Award for Faculty Excellence                                     |
|-----------|---|
| 2020      | Andison Award for Teaching Excellence                                   |
| 2020      | Outstanding Faculty Award in Natural Sciences Division                  |
| 2019      | Acceptance to National Institute of Health's Early Career Reviewer      |
|           | Program   |
| 2015      | NIDA Women and Sex/Gender Differences Junior Investigator Travel        |
|           | Award. College on Problems of Drug Dependence                           |
| 2014-2012 | Recipient of NRSA Predoctoral Fellowship (2012-2014) National Institute |
|           | of Drug Abuse   |
| 2013      | Top 3 Papers: Mass Communication & Society Division. Association for    |
|           | Education in Journalism & Mass Communication                            |
| 2012      | University of Nebraska-Lincoln Warden Travel Award                      |
| 2012      | Acceptance in Preparing Future Faculty program                          |
| 2011-2009 | Recipient of Chancellor's Fellowship. University of Nebraska-Lincoln    |
| 2010      | University of Nebraska-Lincoln Warden Travel Award                      |
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#### **SERVICE**

# **Committees and Task Forces:**

Chair of Psychology Department (2019-present)

Chair of Sociology Department (2021-present)

Chair of Institutional Animal Care and Use Committee (2017-2022)

Vice Chair of the Faculty (2020-2022)

Professional Development Task Force (2019-present)

Master's of Public Health Development Committee (2020-2022)

Title IX Case Management Team (2019-present)

Educational Policy Committee (2019-present, chair 2021-2022)

Faculty Elections Committee (2017-2020)

Pre-Health Professions Task Force (2018-19)

Transfer Pathways advisor (2018-19)

Co-Chair of Multi-Directional Mentoring Program (2018-20)

Honors Day Committee (2017-18)

#### **Advisor:**

Psych Club (2017-2019, 2022-present)

Nu Rho Psi (2018-2020)

Equestrian Club (2018-2020)

Psi Chi (2016-2019)

Sigma Alpha Iota (2018-2020)

### **Other Service:**

Psychology Introductory Psychology Initiative member (2022)

AP Psychology Exam scorer (2020-2022)

Early Career Reviewer for National Institute of Health (2018-present)

Director of Neuroscience program (2016-present)

#### **Reviewer:**

Journal of Psychoactive Drugs (ad hoc)

International Criminal Justice Review (ad hoc)

Behavioural Processes (ad hoc)

International Archives of Clinical Pharmacology (ad hoc)

Psychoneuroendocrinology (ad hoc)

Physiology and Behavior (ad hoc)

Toxicological Sciences (ad hoc)

Pharmacology, Biochemistry & Behavior (ad hoc)

Nicotine and Tobacco Research (ad hoc)

Society for Research on Nicotine and Tobacco conference (2018)

# **Service in Graduate School:**

Chair of Neuroscience and Behavior Journal Club

President of Graduate Student Association

#### **AREAS OF RESEARCH INTERESTS:**

Co-Morbidity of Nicotine Use in Schizophrenia and Other Mental Disorders; Behavioral Mechanisms of Drug Addiction (Nicotine, Opioids, Methamphetamine, Cocaine, Phencyclidine); Neuropharmacology of Drug Abuse Treatments; Hormonal Interactions with Drug Abuse; Neurobiology of Schizophrenia; Media Use and Drug Characterization

# PROFESSIONAL EXPERIENCE/SKILLS:

Animal models of drug addiction, reward, and withdrawal (e.g. nicotine, cocaine,

methamphetamine, opioids) Animal models of schizophrenia

Animal models of depression and anxiety

Self-administration surgeries

Models of sensitization/tolerance (antipsychotics)

Corticosterone assays

Immunohistochemistry techniques

Advanced vocalization recording/analyzing techniques

Biopac analysis

Qualitative examination of texts

#### PROFESSIONAL MEMBERSHIPS

2017-present Society for Research on Nicotine and Tobacco

2010-present Society for Neuroscience

2013-present American Psychological Association

2013-present Association for Education in Journalism and Mass Communication