# DANÍ K. SHEPPARD, Ph.D.

(previously **Raap**)

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## **EDUCATION**

Ph.D. Developmental Psychology (Physiological specialization), August 1996 George Mason University, Fairfax, VA; Dissertation advisor: Dr. Robert F. Smith Dissertation title: "Periadolescent cocaine and stress effects on reproductive maturity and estrous cyclicity in the female rat"

M.A. Experimental Neuropsychology, August 1995

George Mason University, Fairfax, VA; Thesis advisor: Dr. Robert F. Smith Thesis title: "Prenatal cocaine alters luteinizing hormone control in the rat"

B.S. Psychology (pre-med), December 1988 Virginia Polytechnic Institute and State University, Blacksburg, VA

#### AWARDS AND HONORS

Honorary Faculty Recognition for contributions to academic success of student-athletes, UAF Dept of Athletics, 2006-07 (for 1 student-athlete), 2005-06 (for 4 student-athletes), 2004-05 (for 4 student-athletes), 2003-04 (for 3 student-athletes)

Nominee, Usibelli Distinguished Teaching Award, 2006

Recognition Award, Finalist Judge as Alaska State High School Science Symposium, presented by the US Army, Navy, and Air Force, 2006, 2005, 2004, 2003, 2001

Sigma Xi, Scientific Research Society, Full Member, 2005-present

Carol Feist Outstanding Advisor Award for Undergraduate Academic Advising, UAF, 2005, 2002

Faculty Merit Bonus, College of Liberal Arts, University of Alaska Fairbanks (UAF), 2003

Golden Key International Honour Society, Honorary Member, 2003-present

Psi Chi Model Chapter Award, 2003

Poster Award (2<sup>nd</sup> place), Behavioral Sciences Conference of the North, Anchorage, Alaska, 2001

Psi Chi - National Honor Society for Psychology – Faculty Advisor, UAF, 1999-2004

American Society for Pharmacology and Experimental Therapeutics (ASPET)-Great Lakes Chapter Post-Doctoral Fellow Poster Award for Scientific Excellence, 1998

Graduate Fellowship, George Mason University, 1994-1995

Graduate Teaching Fellowship, George Mason University, 1992-1993

Psi Chi - National Honor Society for Psychology – Member, 1992-present

#### EMPLOYMENT HISTORY

Professional experience

University of Alaska Fairbanks, 1999-present

ASSOCIATE PROFESSOR, 2004-present, Department of Psychology

COORDINATOR, Undergraduate Studies in Psychology, 2002-present, Department of Psychology Faculty Academic Advisor, 2004-2006, Academic Advising Center

Assistant Professor, 1999-2004, Department of Psychology

Faculty Athletic Representative, 2001-2002, UAF/National Collegiate Athletic Association

Courses taught at UAF (3-5 courses per year): Physiological Psychology [8 semesters], Drugs and Drug Dependence [4], Sensation and Perception [4], Introduction to Psych [12], Laboratory in Physiological Psych [1], Psychopharmacology [1], Developmental Psych [2], Sport Psych [3], Physiology of Gender [1], Senior Capstone Seminar [4]

*Previous research projects while at UAF:* 

In collaboration with A. Bult-Ito (UAF Biology):

"Use of selected mouse lines as potential model of obsessive-compulsive disorder"

"Characterization of estrous cyclicity and nest-building behavior in selected mice lines"

In collaboration with J. Lipka (UAF Education), J. Mohatt (UAF Psychology), R. Sternberg (Yale University): "Assessing forms of learning among Alaska Natives"

In collaboration with A. Hartmann (UAF Psychology), C. Geist (UAF Emeritus): "Effect of chronic kombucha ingestion on appetitive and cognitive behaviors in the rabbit"

In collaboration with L.D. Van de Kar (Loyola): "Synergy of estrogen and fluoxetine on serotonin<sub>1A</sub> (5-HT<sub>1A</sub>) receptor-signaling in female rats"

# North Carolina State University, Jan 2006-Mar 2006

<u>VISITING ASSOCIATE PROFESSOR</u>, Service-Learning Program, Office of the Provost Mentor: Dr. Patti Clayton

## Western Washington University, Apr 2006-Jun 2006

VISITING ASSOCIATE PROFESSOR, Department of Psychology

Mentor: Dr. Joseph Trimble

<u>POSTDOCTORAL FELLOW</u>, 7/96-7/99, Loyola University Chicago - Stritch School of Medicine Principal investigator: Dr. Louis D. Van de Kar

<u>LECTURER</u>, 1/97-7/99, Loyola University Chicago, Pharmacology and Experimental Therapeutics Introduction to Pharmacology, selected lectures

# GRANT PROJECT MANAGER, 6/95-6/96, George Mason University

Principal investigator: Dr. Robert F. Smith

"'Childhood' Cocaine in Rats: Change in Abuse Potential?"

## RESEARCH ASSISTANT, 8/90-6/96, George Mason University

Principal investigator: Dr. Robert F. Smith

"Periadolescent and prenatal cocaine exposure in rats"

## SUMMER INTERN, 5/93-9/93, National Institutes of Health (NIAAA)

Principal investigator: Dr. John Karanian

"Ethanol dependence of rats in inhalation chambers"

#### **FUNDING**

President's Special Project Fund Award, Co-PI, University of Alaska Fairbanks, \$5000, 2000 National Alliance for Research on Schizophrenia and Depression (NARSAD) Young Investigator Award, Stritch School of Medicine, Loyola University, \$60,000, 1997-1999 International Serotonin Club Travel Award, 4th IUPHAR Satellite Meeting on Serotonin, Rotterdam, The Netherlands, 1998

## PEER-REVIEWED PUBLICATIONS (\*undergraduate students, \*\*graduate students)

Castillo, M.R., Hochstetler, K.J.\*\*, Greene, D.M.\*\*, Firmin, S.I.\*, Tavernier, R.J.\*\*, <u>Raap, D.K.</u>, and Bult-Ito, A. (2005). Circadian rhythm of core body temperature in two laboratory mouse lines. *Physiology and Behavior*, 86(4):538-545.

- Hartmann, A., <u>Raap, D.K.</u>, and Geist, C. (2003). Toxicity of herbal beverages. In V.R. Preedy and R. Watson (Ed.), *Reviews in Food and Nutrition Toxicity*, 1:1-15.
- Raap, D.K., DonCarlos, L., Garcia, F., Zhang, Y.\*\*, Muma, N.A., Battaglia, G. and Van de Kar, L.D. (2002). Ovariectomy-induced increases in hypothalamic 5-HT<sub>1A</sub> receptor function in rats is prevented by estradiol. *Neuroendocrinology*, 76:348-356.
- Van de Kar, L.D., <u>Raap, D.K.</u>, Battaglia, G., Muma, N., Garcia, F., and DonCarlos, L. (2002). Treatment of cycling female rats with fluoxetine induces desensitization of hypothalamic 5-HT<sub>1A</sub> receptors with no change in 5-HT<sub>2A</sub> receptors. *Neuropharmacology*, 43:45-54.
- Zhang, Y.\*\*, D'Souza, D., <u>Raap, D.K.</u>, Garcia, F., Battaglia, G., Muma, N.A., and Van de Kar, L.D. (2001). Characterization of the functional heterologous desensitization of hypothalamic 5-HT<sub>1A</sub> receptors after 5-HT<sub>2A</sub> receptor activation. *Journal of Neuroscience*, 21:7919-7927.
- Van de Kar, L.D., Javed, A.\*\*, Zhang, Y.\*\*, Serres, F., <u>Raap, D.K.</u>, and Gray, T.S. (2001). 5-HT<sub>2A</sub> receptors stimulate ACTH, corticosterone, oxytocin, renin and prolactin release and activate hypothalamic CRF and oxytocin expressing cells. *Journal of Neuroscience*, 21:3572-3579.
- <u>Raap, D.K.</u>, Morin, B.\*\*, Medici, C.N. and Smith, R.F. (2000). Adolescent cocaine and injection stress effects on the estrous cycle. *Physiology and Behavior*, 70:417-424.
- Serres, F., Muma, N.A., <u>Raap, D.K.</u>, Garcia, F., Battaglia, G. and Van de Kar, L.D. (2000). Coadministration of 5-hydroxytryptamine<sub>1A</sub> antagonist WAY-100,635 prevents fluoxetine-induced desensitization of postsynaptic 5-hydroxytryptamine<sub>1A</sub> receptors in hypothalamus. *Journal of Pharmacology and Experimental Therapeutics*, 294(1):296-301.
- Serres, F., Li, Q., Garcia, F., <u>Raap, D.K.</u>, Battaglia, G., Muma, N.A. and Van de Kar, L.D. (2000). Evidence that G<sub>z</sub>-proteins couple to hypothalamic 5-HT<sub>1A</sub> receptors *in vivo*. *Journal of Neuroscience*, 20(9):3095-3103.
- Raap, D.K., DonCarlos, L., Garcia, F., Muma, N.A., Wolf, W.A., Battaglia, G. and Van de Kar, L.D. (2000). Estrogen desensitizes 5-HT<sub>1A</sub> receptors and reduces levels of G<sub>z</sub>, G<sub>i1</sub> and G<sub>i3</sub> proteins in the hypothalamus. *Neuropharmacology*, 39:1823-1832.
- Zhang, Y.\*\*, <u>Raap, D.K.</u>, Garcia, F., Serres, F., Ma, Q.\*\*, Battaglia, G. and Van de Kar, L.D. (2000). Long-term fluoxetine produces behavioral anxiolytic effects without inhibiting neuroendocrine responses to conditioned stress in rats. *Brain Research*, 855:58-66.
- Raap, D.K. and Van de Kar, L.D. (1999). SSRIs and neuroendocrine function: a minireview. *Life Sciences*, 65(12):1217-1235.
- Smith, R.F., Medici, C.N. and <u>Raap, D.K.</u> (1999). Enduring effects of weaning-through-puberty cocaine dosing in the rat. *Psychobiology*, 27(3):432-437.
- Raap, D.K., Garcia, F., Muma, N.A., Wolf, W.A., Battaglia, G. and Van de Kar, L.D. (1999). Sustained desensitization of hypothalamic 5-hydroxytryptamine<sub>1A</sub> receptors after discontinuation of fluoxetine: inhibited neuroendocrine responses to 8-hydroxy-2-(dipropylamino)tetralin in the absence of changes in G<sub>I/O/Z</sub> proteins. *Journal of Pharmacology and Experimental Therapeutics*, 288(2):561-567.

- Raap, D.K., Evans, S.\*, Garcia, F., Li, Q.\*\*, Muma, N.A., Wolf, W.A., Battaglia, G. and Van de Kar L.D. (1999). Daily injections of fluoxetine induce dose-dependent desensitization of hypothalamic 5-HT<sub>1A</sub> receptors: reductions in neuroendocrine responses to 8-OH-DPAT and in levels of G<sub>z</sub> and G<sub>i</sub> proteins. *Journal of Pharmacology and Experimental Therapeutics*, 288(1):98-106.
- MANUSCRIPTS IN PREPARATION (\*undergraduate students, \*\*graduate students)
- Greene, D.M.\*\*, <u>Raap, D.K.</u>, Bult-Ito, A. (in preparation). Fluoxetine and clomipramine reduce nest-building behavior in selected mouse line; a potential novel model for obsessive-compulsive disorder.
- <u>Raap, D.K.</u>, Kobylk, M.\*, and Bult-Ito, A. (in preparation). Role of estrous cyclicity in circadian activity patterns in female mice.

#### **PRESENTATIONS**

- Raap, D.K. (2006). Reach in to reach out. Keynote address to Golden Key International Honour Society Induction, University of Alaska Fairbanks, Fairbanks, AK.
- Clark, C., Stickel, T., and <u>Raap, D.K.</u> (2004). Registration exposition: Your catalog is more than a doorstop. *Orientation 2004, University of Alaska Fairbanks, Fairbanks, AK*.
- Raap, D.K. (2004). Recent developments toward an animal model of Obsessive-Compulsive Disorder. Neuroscience Research Forum, University of Alaska Fairbanks, Fairbanks, AK.
- Raap, D.K. (2004). Validating an animal model of Obsessive-Compulsive Disorder. *Psychology Department Colloquium, University of Alaska Fairbanks, Fairbanks, AK*.
- Gorman, R., Flinn, G., and <u>Raap, D.K.</u> (2003). Lecture-free lectures in psychology. 25<sup>th</sup> Annual National Institute on the Teaching of Psychology, St. Pete Beach, FL.
- Raap, D.K. and Clark, C. (2002). Success in the classroom at UAF. *Orientation 2002, University of Alaska Fairbanks, Fairbanks, AK*.
- Raap, D.K. and Bult-Ito, A. (2001). Circadian rhythms. KUAC Radio Talk Show "Evening Rounds" with host, Amy Meyer, Fairbanks, AK. (airing several dates since)
- Raap, D.K. (1999). Prozac and Estrogen: A Novel Therapeutic Technique? *Life Sciences Seminar, University of Alaska Fairbanks, Fairbanks, AK.*

# ABSTRACTS AND POSTERS (\*undergraduate students, \*\*graduate students)

- Greene, D.M.\*\*, Castillo, M.R., Alexander, K.A.\*, McMahan, A.\*, <u>Raap, D.K.</u> and Bult-Ito, A. (2005). Neurotoxic lesions of serotonin cells in the dorsal raphe reduce compulsive-like nest building in mice. *Soc. Neurosci. Abstracts*, 31.
- Alexander, K.A.\*, Greene, D.M.\*\*, <u>Raap, D.K.</u> and Bult-Ito, A. (2005). Effects of desipramine and fluoxetine on repetitive nesting behavior in *Mus musculus*. *Soc. Neurosci. Abstracts*, *31*.

- Greene, D.M.\*\*, <u>Raap, D.K.</u> and Bult-Ito, A. (2004). Serotonergic drug effects on nest-building behavior in mice. *Soc. Neurosci. Abstracts*, *30*.
- Foltz, H.\*, Slater, M.\*, Greene, D.\*\*, Jennison, B., <u>Raap, D.K.</u>, and Bult-Ito, A. (2004). The effects of selective breeding and sex on repetitive digging behavior in mice. *Soc. Neurosci. Abstracts*, *30*.
- Greene, D.M.\*\*, <u>Raap, D.K.</u> and Bult-Ito, A. (2003). Characterization of serotonergic involvement in nest-building behavior in mice. *Soc. Neurosci. Abstracts*, 29.
- Greene, D.M.\*\*, <u>Raap, D.K.</u> and Bult-Ito, A. (2003). Neurotransmitter pathways involved in the regulation of thermoregulatory nest-building behavior in mice. 54<sup>th</sup> Annual Arctic Science Conference.
- Greene, D.M.\*\*, <u>Raap, D.K.</u> and Bult-Ito, A. (2003). Neurotransmitter pathway involvement in the regulation of nest-building behavior in mice: a preliminary study. *Specialized Neuroscience Research Program Annual Meeting*.
- Hochstetler, K.J.\*\*, Firmin, S.I.\*, Castillo, M.R., Greene, D.M.\*\*, Kobylk, M.E.\*, <u>Raap, D.K.</u>, and Bult-Ito, A. (2002). Circadian rhythm stability influences body temperature regulation. *Soc. Neurosci. Abstracts*, 28, 177.17.
- Greene, D.M.\*\*, <u>Raap, D.K.</u>, Cozad, K. and Bult-Ito, A.(2002). Characterization of neurotransmitter involvement in nest-building behavior in mice. *Soc. Neurosci. Abstracts*, 28, 90.1.
- Kobylk, M.E.\*, <u>Raap, D.K.</u> and Bult, A. (2001). Serotonin transporter immunoreactivity in the mouse suprachiasmatic nucleus. *Soc. Neurosci. Abstracts*, 27, 180.5.
- Raap, D.K., DonCarlos, L., Serres, F., Garcia, F., Muma, N.A. and Van de Kar, L.D. (1999). Estrogen induces desensitization of hypothalamic serotonin<sub>1A</sub> receptors in a time-dependent manner. *Soc. Neurosci. Abstracts*, 25, 587.7.
- Van de Kar, L.D., <u>Raap, D.K.</u>, Garcia, F., Li, Q., Zhang, Y.\*\*, Battaglia, G. and Muma, N.A. (1999). Activation of 5-HT<sub>2A</sub> receptors induces a heterologous desensitization of hypothalamic 5-HT<sub>1A</sub> receptors. *Soc. Neurosci. Abstracts*, *25*, 587.12.
- Zhang, Y.\*\*, Van de Kar, L.D., <u>Raap, D.K.</u>, Garcia, F., Li, Q., Battaglia, G. and Muma, N.A. (1999). Long-term fluoxetine decreases stress-induced behaviors, without inhibiting neuroendocrine responses to conditioned stress in rats. *Soc. Neurosci. Abstracts*, 25, 173.7.
- Van de Kar, L.D., <u>Raap, D.K.</u>, Garcia, F., Li, Q., Zhang, Y.\*\*, Battaglia, G. and Muma, N.A. (1999). Role of G proteins in SSRI-induced desensitization of post-synaptic 5-HT<sub>1A</sub> receptors. *Second European Congress of Pharmacology Abstracts*.
- Serres, F., <u>Raap, D.K.</u>, Muma, N.A., Garcia, F., Battaglia, G., Zhang, Y.\*\*, Ma, Q.\*\* and Van de Kar, L.D. (1998). Reduction of G<sub>z</sub> protein in the hypothalamus by antisense oligonucleotides inhibits the oxytocin response to the 5-HT<sub>1A</sub> agonist 8-OH-DPAT. *Soc. Neurosci. Abstracts*, 24, 539.18.
- Raap, D.K., DonCarlos, L., Serres, F., Garcia, F., Muma, N.A. and Van de Kar, L.D. (1998). Long-term fluoxetine desensitizes hypothalamic 5-HT<sub>1A</sub> receptors in cycling female rats without altering the estrous cycle: Reduction in hormone responses to 8-OH-DPAT and no change in hormone responses to DOI. *Fourth IUPHAR Satellite Meeting on Serotonin Abstracts*, PP16.

- Serres, F., <u>Raap, D.K.</u>, Battaglia, G., Muma, N.A., Garcia, F. and Van de Kar, L.D. (1998). Low doses of WAY-100,635 do not potentiate the fluoxetine-induced desensitization of the hypothalamic 5-HT<sub>1A</sub> receptors while high doses of WAY-100,635 prevent their desensitization. *Fourth IUPHAR Satellite Meeting on Serotonin Abstracts*, PP17.
- Van de Kar, L.D., <u>Raap, D.K.</u>, Serres, F., Garcia, F., Wolf, W.A., Battaglia, G. and Muma, N.A. (1998). Serotonin mediated stress hormone responses to therapeutic drugs. *Fourth IUPHAR Satellite Meeting on Serotonin Abstracts*, S8.3.
- <u>Raap, D.K.</u>, Garcia, F., Battaglia, G., Muma, N.A. and Van de Kar, L.D. (1997). Withdrawal from chronic fluoxetine produces a gradual reversal of desensitization of 5-HT<sub>1A</sub> receptor-mediated neuroendocrine responses to 8-OH-DPAT. *Soc. Neurosci. Abstracts*, *23*, 385.5.
- Li, Q., <u>Raap, D.K.</u>, Evans, S., Garcia, F., Muma, N.A., Battaglia, G. and Van de Kar, L.D. (1997). Daily injections of fluoxetine induced dose-dependent desensitization of hypothalamic 5-HT<sub>1A</sub> receptor-mediated neuroendocrine responses to 8-OH-DPAT. *Soc. Neurosci. Abstracts*, *23*, 385.4.
- Van de Kar, L.D., <u>Raap, D.K.</u>, Garcia, F., Wolf, W.A., DonCarlos, L.L., Muma, N.A. and Battaglia, G. (1997). Estrogen desensitizes the neuroendocrine response of hypothalamic 5-HT<sub>1A</sub> receptors to 8-OH-DPAT. *Soc. Neurosci. Abstracts*, *23*, 385.6.
- Siciliano, D., Smith, R.F., Morin, B. and <u>Raap, D.K.</u> (1997). Juvenile alcohol consumption in the rat induces behavioral changes evident later in adulthood. *Soc. Neurosci. Abstracts*, *23*, 724.23.
- Medici, C.N., Smith, R.F. and <u>Sheppard, D.K.</u> (1996). Prenatal and early postnatal cocaine exposure: Long-term effects on cocaine sensitivity in the adult rat. *Soc. Neurosci. Abstracts*, 22, 739.17.
- Sheppard, D.K., Smith, R.F., Morin, B. and Medici, C.N. (1996). Periadolescent cocaine and stress effects on reproductive maturation and estrous cyclicity in the female rat. *Soc. Neurosci. Abstracts*, 22, 738.5.
- Smith, R.F., Morin, B., <u>Sheppard, D.K.</u> and Medici, C.N. (1996). Context-specific enhancement of cocaine conditioned place preference after pre-/peri-adolescent cocaine exposure. *Int'l Society for Developmental Psychobiology Abstracts*.
- Smith, R.F., Medici, C.N., <u>Sheppard, D.K.</u> and Chandhoke, V. (1995). Developmental time course of prenatal cocaine-induced prolactin suppression. *Soc. Neurosci. Abstracts*, *21*, 283.13.
- Sheppard, D.K., Smith, R.F. and Medici, C.N. (1994). Prenatal cocaine alters basal and estrogen-primed LH levels in female rats. *Soc. Neurosci. Abstracts*, 20, 250.14.
- Smith, R.F., Sheppard, D.K., Medici, C.N. and Shepanek, N.A. (1994). A rat model of periadolescent cocaine use: Sexually dimorphic effects on body weight gain. *Soc. Neurosci. Abstracts*, 20, 250.17.
- Smith, R.F., Medici, C.N., Rivers, T.A. and <u>Sheppard, D.K.</u> (1993). Neither early separation stress nor environmental enrichment selectively reverses behavioral effects of prenatal cocaine. *Soc. Neurosci. Abstracts*, 19.

## STUDENT MENTORSHIP

# Student research funding awards (as faculty mentor)

- Adam McMahan (2004-2005). UAF undergraduate student, "Serotonergic involvement in repetitive nesting behaviors." UAF Undergraduate Research Opportunities Program (\$2500). Co-advised with Dr. Abel Bult-Ito (UAF Biology).
- Traci Burrow (Summer 2004). UAF undergraduate student, "Serotonergic function in locomotor activity in association with obsessive compulsive behavior." Alaska BRIN/INBRE Undergraduate Summer Research Experience (USRE) Award (\$6,956). Co-advised with Dr. Abel Bult-Ito (UAF Biology).
- Crystal Duncan (Summer 2004). UAF undergraduate student, "Effect of fluoxetine on marble-burying in mice selectively bred for repetitive nesting behavior." Alaska BRIN/INBRE & ANSEP (Alaska Native Science and Engineering Program) Summer Internship Program (\$2461). Co-advised with Dr. Abel Bult-Ito (UAF Biology).
- Rae Ann Croy Filla (2002-2003). UAF undergraduate student, "Grandparents raising grandchildren: Challenges and services." UAF Undergraduate Research Opportunities Program (\$1,510). Coadvised with Dr. Jordan Titus (UAF Sociology).
- Emily Szostak (2001-2002). UAF undergraduate student, "Effects of body size on portion size perception, portion size knowledge, and answers to a multivariate eating disorder inventory for anorexia nervosa and bulimia among college women." ND Systems Strategic Consulting (Ester, Alaska; \$1000). Coadvised with Dr. Anita Hartmann (UAF Psychology).

# Undergraduate senior theses (as faculty mentor)

- Filla, R.A.C. (2003). Grandparents raising grandchildren: Challenges and services. Co-advised with Dr. Jordan Titus (UAF Sociology).
- Szostak, E. (2002). Effects of body size on portion size perception, portions size knowledge, and answers to a multivariate eating disorder inventory for anorexia nervosa and bulimia among college women. Coadvised with Dr. Anita Hartmann (UAF Psychology).

## *Undergraduate research projects (as faculty mentor)*

- Adam McMahan (2004-2005). Role of serotonin in repetitive nesting behavior. Co-advised with Dr. Abel Bult-Ito (UAF Biology).
- Traci Burrow (Summer 2004). Serotonergic function in locomotor activity in association with obsessive compulsive behavior. Co-advised with Dr. Abel Bult-Ito (UAF Biology).
- Crystal Duncan (2004). Effect of fluoxetine on marble-burying in mice selectively bred for repetitive nesting behavior. Co-advised with Dr. Abel Bult-Ito (UAF Biology).
- Heather Foltz (2003-2004). Marble burying differences in mice bidirectionally selected for nesting behavior. Co-advised with Dr. Abel Bult-Ito (UAF Biology). Presented at 30<sup>th</sup> Annual Society for Neuroscience, San Diego, CA, November 2004.
- Michael Slater (2003-2004). Marble burying differences in mice bidirectionally selected for nesting behavior. Co-advised with Dr. Abel Bult-Ito (UAF Biology). Presented at 30<sup>th</sup> Annual Society for Neuroscience, San Diego, CA, November 2004.

- Rae Ann Croy Filla (2002-2003). Senior Thesis: Grandparents raising grandchildren: Challenges and services. Co-advised with Dr. Jordan Titus (UAF Sociology). Presented at *Full Lives: Moving Forward Together Direct Support Conference (oral)*, Anchorage, AK, April 2003, 19<sup>th</sup> Annual Behavioral Sciences Conference of the North (poster), Anchorage, AK, April 2003, 3<sup>rd</sup> Biannual UAF Social Sciences Conference (oral), Fairbanks, AK, March 2003, and Undergraduate Research Opportunities Forum (poster), Fairbanks, AK, April 2003.
- Aaron Leonard (2002-2003). Implications for increasing firefighter survivability: Use of top-down processing and somatosensory association in training. Presented at 3<sup>rd</sup> Biannual UAF Social Sciences Conference, Fairbanks, AK, April 2003.
- Emily Szostak (2001-2002). Senior Thesis: Effects of body size on portion size perception, portion size knowledge, and answers to a multivariate eating disorder inventory for anorexia nervosa and bulimia among college women. Co-advised with Dr. Anita Hartmann (UAF Psychology).
- Michael Lindsey (2000-2002). Senior Thesis (incomplete): Correlation between academic performance and athletic performance.
- Micki Kobylk (2000-2001). Serotonin transporter immunoreactivity in the mouse suprachiasmatic nucleus. Co-advised with Dr. Abel Bult-Ito (UAF Biology). Presented at 27<sup>th</sup> Annual Society for Neuroscience, San Diego, CA, November 2001.
- Rae Ann Croy (2000-2001). Effect of handling in infancy on cognitive behaviors of rabbits. Co-advised with Dr. Anita Hartmann (UAF Psychology). Presented at 17<sup>th</sup> Annual Behavioral Sciences Conference of the North, Anchorage, AK, April 2001.
- Robert Fath (2000-2001). Effect of handling in infancy on cognitive behaviors of rabbits. Co-advised with Dr. Anita Hartmann (UAF Psychology). Presented at 17<sup>th</sup> Annual Behavioral Sciences Conference of the North, Anchorage, AK, April 2001.

## Graduate dissertations, theses, and projects (as committee member)

Greene, D. (2007, Ph.D. Neuroscience). Characterization of obsessive-compulsive animal model.

- Reilly, J. (2006, M.A. Northern Studies). Role of serotonin in depression in the North.
- Voth, D. (2006, M.A. Community Psychology). Psychopharmacological substances in-service curriculum for educators.
- Dosch, K.A. (2004, M.Ed.). The transition from elementary to middle school: A suggested program for Fairbanks, Alaska.
- Willett, L. (2003, M.Ed., Co-Chair). Solutions for success: A model for teachers with adolescent students.
- Ott, R. (2002, M.Ed.). Risk factors among adolescent homosexuals.

## Alaska State High School Science Symposium projects (as faculty mentor)

Olson, J. (2005-06). Developmental effects of extreme lighting in Arctic on visual illusion perception in teenagers. *Presented March 2006, Finalist, 2<sup>nd</sup> place in division* 

Wisel, C. (2005-06). Effects of handedness on various intelligences.

Schooley, E. (2005-06). Adolescent sleeping rhythms in the Arctic.

Miller, K. (2005-06). Specialized effects of subliminal persuasion.

Risse, E. (2004-05). Developmental effects on perception of optical illusions.

Hendersen, D. (2003-04). Environmental effects on taste preference.

## **UNIVERSITY SERVICE**

Coordinator, Undergraduate Studies in Psychology, University of Alaska Fairbanks (UAF) (2002-present)

Faculty Advisor, Psi Chi, National Honor Society in Psychology, UAF (1999-2004, 2007-present)

Faculty Representative, UA Scholars Reception, UAF (2005, 2007)

Faculty Representative, UA Scholars Reception, UAA (2005, 2007)

Faculty Representative, UA Scholars Reception, UAS (2005)

Speaker, UA Scholars Reception, UAF (2004)

Speaker, New Student Orientation, UAF (2002, 2004, 2007)

Member, College of Liberal Arts Dean Search Committee, UAF (2002-2003)

Member, Development of Ph.D. Degree in Psychology, UAF (2000-2005)

Member, Intercollegiate Athletic Committee, UAF (2000-2002)

National Collegiate Athletic Association Faculty Athletic Representative, UAF (2000-2001)

Coordinator, Introductory Psychology Curriculum, UAF (1999-2003)

## PROFESSIONAL SERVICE

Table Leader, Educational Testing Service, Advanced Placement (AP) Psychology (2007-present)

Reader, Educational Testing Service, Advanced Placement (AP) Psychology (2002-2006)

Workshop Facilitator, National Institute for the Teaching of Psychology (2003)

National Collegiate Athletic Association Faculty Athletic Representative, UAF (2000-2001)

#### **PUBLIC SERVICE**

Social Sciences Representative, UAF-North Star Borough School District Curriculum Alignment Initiative (2007-present)

Mentor, Alaska State High School Science Symposium projects (2003-present)

Resource provider (ongoing), guest lecturer (2 times per year) – West Valley High School Anatomy & Physiology Class (2001-present)

Advisor, Alaska State High School Science Symposium projects (2001-present)

Finalist Judge, Alaska State High School Science Symposium (2001-present)

Judge, Fairbanks District Science Fair (2001-present)

Mentor, 1<sup>st</sup> grade student, District Science Fair Project: Home-made skinner box, Blue Ribbon recipient (2006)

Sponsor, Job Shadowing, Fairbanks North Star Borough High School Students (2001-present)

Resource provider (ongoing), mentor (ongoing), guest lecturer (2-3 times per year), collaborative project coordinator (biannual) – West Valley High School Psychology Class (2000-present)

Guest speaker, Circadian rhythms with Abel Bult-Ito, KUAC Public Radio Talk Show "Evening Rounds" with Amy Meyer (2001)

Collaborative project coordinator – Lathrop High School Anatomy and Physiology Class (2000)

#### PROFESSIONAL MEMBERSHIPS

Society for the Teaching of Psychology [Div 2 – American Psychological Assoc], Member, since 2005 Sigma Xi, Scientific Research Society, Full Member, since 2005

Golden Key International Honour Society, Honorary Member, since 2003

Society for Neuroscience, Member, since 1993

Psi Chi, National Honor Society in Psychology, Member, since 1992 (Faculty advisor, 1999-2004, 2007-present)

#### PROFESSIONAL DEVELOPMENT

Service-Learning – Campus Compact, UAA, Association of American Colleges & Universities, North Carolina Campus Compact, Campus visits (11)

National Institute for the Teaching of Psychology (2)

Rubric use for essays – Educational Testing Service sponsored (6)

Laboratory safety certification – UAF sponsored (once per year)

Animal Care and Use certification - UAF sponsored

Grant Proposal Workshops – UAF and National Institutes of Health (NIH) sponsored (4)

Grantsmanship series -10 week program – UA sponsored

University of Alaska Retreats on Women's Issues (2)

Behavioral Test Methods Workshop (National meeting)