

Vita

MARY CATHERINE DESOTO

2017

Personal

Current Work Address: Department of Psychology
University of Northern Iowa
Cedar Falls, IA 50614-0505

Phone: (319)273-7475

Email: cathy.desoto@uni.edu

Web: <http://www.uni.edu/desoto>

Academic Degrees

- B.A., Summa Cum Laude, Southern Illinois University-Carbondale, 1989
- Major in Psychology with Minor in Political Science
 - Later course work in advanced math, physics, clinical psychology and higher education
- M.A., University of Missouri-Columbia, 1999
- Major: Cognitive Neuroscience
 - Thesis: The event-related optical signal and motor cortex activation
- Ph.D. in Psychology, University of Missouri-Columbia, 2001
- Major: Developmental Psychology/ Neuroscience
 - Dissertation: The influence of estrogen on borderline personality

Academic Employment History

<i>Professor of Psychology & Biopsychology</i> <i>Co-Director, Psychoneuroendocrinology Lab</i>	Department of Psychology University of Northern Iowa 2011- present
<i>Associate Professor of Psychology & Biopsychology</i>	Department of Psychology University of Northern Iowa Summer 2006- 2011
<i>Assistant Professor of Psychology & Biopsychology</i>	Department of Psychology University of Northern Iowa Fall 2001-Spring 2006

Adjunct Instructor, Psychology

1992-1997
John A Logan College
Carterville, Illinois

Adjunct Instructor, Psychology

1991-1997
Shawnee Community College
Ullin, Illinois

Publications

- Weins, D., & **DeSoto, M.C.** (2017). Is high folic acid a risk factor for autism? *Brain Sciences*, 7 (11) <https://www.mdpi.com/2076-3425/7/11/149>
- DeSoto MC.** (2017) Hormone Effects on Human Fetal Development. In: Shackelford T., Weekes-Shackelford V. (eds) *Encyclopedia of Evolutionary Psychological Science*. Springer, USA. DOI: https://doi.org/10.1007/978-3-319-16999-6_3630-1
- DeSoto MC.** (2017) Stress Reduction and Mental Health. In: Shackelford T., Weekes-Shackelford V. (eds) *Encyclopedia of Evolutionary Psychological Science*. Springer, USA. DOI: https://doi.org/10.1007/978-3-319-16999-6_826-1
- DeSoto, M.C.** (2016). Speculation on Vitamin K, VKORC1 and autism. *Medical Hypotheses*, 96: 30-33. DOI: <https://doi.org/10.1016/j.mehy.2016.09.013>
- DeSoto, M.C.** (2016) Suppression of women's cortisol variance: Depression doesn't mediate the sex difference. *Psychoneuroendocrinology*, 63, 383-4. <https://sites.uni.edu/desoto/uncorrectedProofPNEdesoto.pdf>
- Hitlan, R.T., Zarate, M.A., Kelly, K. & **DeSoto, M.C.** (2015). Linguistic ostracism causes prejudice: Support for a serial mediation effect. *Journal of Social Psychology*, 156 (4), 442-436.
- DeSoto, M.C.** & Hitlan, R.T. (2015) Can duel hormones ever duel? Neuroendocrine interactions during social exclusion. *North American Journal of Psychology*, 17, 555-574.
- DeSoto, M.C.** & Salinas, M. (2015) Neuroticism and cortisol: The importance of checking for sex differences. *Psychoneuroendocrinology*, 62, 174 - 179. <https://sites.uni.edu/desoto/PNEdesotoPreCopy.pdf>
- DeSoto, M.C.** & Hitlan, R.T. (2013). Professional opinion on the question of changes in autism incidence. *Open Journal of Psychiatry*, 3 (2A), 61-67.

- DeSoto, M.C. & Hitlan R.T.** (2012). Synthetic folic acid supplementation during pregnancy may increase the risk of developing autism. *Journal of Pediatric Biochemistry*, 2 (4).
https://www.researchgate.net/profile/Mary_Desoto/publication/267404016_Synthetic_folic_acid_supplementation_during_pregnancy_may_increase_the_risk_of_developing_autism/links/5499b4170cf21eb3df60dc7b.pdf
- DeSoto, M.C. & Hitlan R.T.** (2012). Fish Consumption Advisories and the surprising relationship to prevalence rate of Developmental Disability as reported by public schools. *Journal of Environmental Protection*, 3 (11). 1579-1589.
- DeSoto, M.C., Hitlan, R.T. Deol, R.S. & McAdams, D.** (2010). Testosterone fluctuations in young men: The difference between interacting in like and not-like others. *Evolutionary Psychology*, 8(2), 173-188.
<https://www.ncbi.nlm.nih.gov/pubmed/?term=Testosterone+fluctuations+desoto>
- DeSoto, M.C. & Hitlan, R.T.** (2010). Sorting out the spinning of autism: Heavy metals and the question of incidence. *Acta Neurobiologica Experimentalis*, 70 (2). 165-76.
<https://www.ncbi.nlm.nih.gov/pubmed/20628440>
- DeSoto, M.C.** (2009). Ockham's Razor and Autism: The case for developmental neurotoxins contributing to a disease of neurodevelopment. *Neurotoxicology*, 30 (3). 331-337.
<http://www.keytoxins.com/hgbiblio-files/NeroToxMS.pdf>
- DeSoto, M.C. & Hitlan, R.T.** (2008). Concerning blood levels of mercury and autism: A need to clarify. *Journal of Child Neurology*, 23 (4). 463-465.
- DeSoto, M.C.** (2008). A reply to Soden: Your data shows autistic children have higher levels of heavy metals. *Clinical Toxicology*. 46 (10). 1098.
- DeSoto, M.C. & Hitlan, R.T.** (2007). Blood levels of mercury are related to diagnosis of autism: A reanalysis of an important data set. *Journal of Child Neurology*, 22 (11), 1308-1311.
- DeSoto, M.C.** (2007). Borderline Personality Disorder, gender and serotonin: Does estrogen play a role? In Martina Czerbskas (Ed.) *Psychoneuroendocrinology Research Frontiers*. Nova Science Publishers, Inc.: Hauppauge, NY.
- DeSoto, M.C., Bumgardner, J., Close, A., & Geary D.C.** (2007) Investigating the role of hormones in Theory of Mind. *North American Journal of Psychology*, 9 (3).
- DeSoto, M. C.** (2006). Hormones and behavior. In the *Encyclopedia of Social Psychology*: Sage Publishers.

- Sheldon, M., Cooper, M. L., Geary, D., **DeSoto, M.C.** & Hoard, M. K. (2006). Fertility Cycle Patterns in Motives for Sexual Behavior. *Personality and Social Psychology Bulletin*, 32 (12), 1659-1673.
- Hitlan, R.T. & **DeSoto, M.C.** (2006). The pros and cons of growing up in the electronic age. Review of imagination and play in the electronic age by Jerome Singer and Dorothy G. Singer. *PsycCritiques*.
- Hitlan, R.T., Clifton, R.J., & **DeSoto, M.C.** (2006). Perceived exclusion in the workplace: The moderating effects of gender on workplace attitudes and psychological health. *North American Journal of Psychology*, 8, 217-236. https://uni.edu/~hitlan/Hitlan_NAJP2006.pdf
- DeSoto, M.C.** (2005). Biological Basis of sex differences can be taught (or at least acknowledged) in women's studies courses. In M. Stalp & J. Childers (Eds.) *Teaching Sociological Concepts and the Sociology of Gender (2nd Ed)* (pp. 194-197). American Sociological Association Teaching Resource Center: Washington, D.C.
- DeSoto, M.C.** & Hitlan, R.T. (2005). Transgender, transsexual or intersexual: A plight by any name would tell as tragic. Review of *The Riddle of Gender* by Deborah Rudacille. *PsychCritiques*, 50, (43).
- Geary, D. C., Hoard, M. K., Craven, J.B & **DeSoto, M.C.** (2004). Strategy choices in simple and complex addition: Contributions of working memory and counting knowledge for children with mathematical disability. *Journal of Experimental Child Psychology*, 88 (2), 121-151.
- DeSoto, M.C.** (2003). Drops in estrogen levels affect brain and behavior: reported relationships between attitudes and menopausal symptoms. *Maturitas*, 45 (4), 299-301.
- DeSoto, M.C.** & Buelow-Kopp, K. (2003). Evolutionary theory, waist-to-hip ratio and predicting female attractiveness. *Psychology, Evolution and Gender*, 5, 83-88.
- DeSoto, M.C.** Geary, D.C., Hoard, M.K., Sheldon, M. & Cooper, M. L. (2003). Estrogen variation, oral contraceptives and borderline personality. *Psychoneuroendocrinology*, 28. 751-766. <http://faculty.missouri.edu/~gearyd/PNEC03.pdf>
- DeSoto, M.C.** (2003). A brief reply to Bloch: The issue is women's health. *Maturitas*, 45, 299-301.
- Geary, D.C., **DeSoto, M.C.**, Hoard, M.K., Sheldon, M. & Cooper, L (2002). Estrogens and relationship jealousy. *Human Nature*, 12, 299-320.

Geary, D.C. & **DeSoto**, M.C. (2001). Sex differences in spatial abilities among adults from Unites States and main land China Implications for Evolutionary Theory. *Evolution and Cognition*.
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.412.9575&rep=rep1&type=pdf>

DeSoto, M.C., Fabiani, M., Geary, D., & Gratton, G. (2001) When in doubt do it both ways: Brain evidence of simultaneous activation of conflicting motor responses in a spatial Stroop task. *Journal of Cognitive Neuroscience*. 13(4), 523-36.

Gratton, G., Fabiani, M., Goodman-Wood, M. R., & **DeSoto**, M. C. (1998). Memory-driven processing in human medial occipital cortex: An event-related optical signal (EROS) study. *Psychophysiology*, 35, 348-51.

Published Abstracts, Conference Papers, Conference Presentations (Selected)

Evans, E., DeSoto MC. (2017). A Case for Angry Eaters? Presented at UNI Student Research Conference, Faculty Sponsor MC DeSoto. Cedar Falls, IA, April 2017

Fox K, D., Hitlan RT, DeSoto MC. (2017). Vegetarian and Extraversion. Presented at UNI Student Research Conference, Faculty Sponsor MC DeSoto. Cedar Falls, IA, April 2017

Stackhouse, E., Hitlan RT, DeSoto MC. (2017). Estrogen and types of Empathy. Presented at UNI Student Research Conference, Faculty Sponsor MC DeSoto. Cedar Falls, IA, April 2017

Pieper D., Hitlan RT, DeSoto MC. (2017). Vegetarian and Extraversion. Presented at UNI Student Research Conference, Faculty Sponsor MC DeSoto. Cedar Falls, IA, April 2017

Fly, J.M., (2016). Evidence of youthful aging: Elevated cortisol and the association with DNA damage. Presented at UNI Student Research Conference April 2016. Faculty Sponsor MC DeSoto. Cedar Falls, IA, April 2016

Hitlan RT, DeSoto, MN, Can duel Hormones Duel? Poster presented at Human Behavior and Evolution Annual Conference, Columbia, MO, June 2015.

DeSoto, MC, Hitlan, Salinas, Hollenberg, Rigdon (2015). HPA and personality: Bad idea to control for sex differences. Talk presented at Human Behavior and Evolution Annual Conference, Columbia, MO June 2015.

Hollenberg, B. & Rigdon, O. Sex differences in salivary hormones. To be presented at UNI Student Research Conference April 2015. Faculty Sponsor MC DeSoto. Cedar Falls, IA. April 2015.

Rigdon, O. & Hollenberg, B. Freshman 15 is not your only problem: nutritional deficiencies are common at UNI. Presented at UNI Student Research Conference April 2015. Faculty Sponsor MC DeSoto. Cedar Falls, IA. April 2015.

DeWitt, AJ, Weins, D & DeSoto MC (2013). Influence of folic acid on chick neural connectivity. National Conference for Undergraduate Research, LaCrosse, WI, April 2013.

Hitlan R. T., Deol, R.S., McAdams, D.L. & DeSoto, M.C (2010). Racial bias mediated by testosterone change. Poster presented at Social and Psychology and Personality Research Conference. Las Vegas, NV, February, 2009.

- DeSoto, M.C., Deol, R.S., McAdams, D.L. & Hitlan R. T. (2010). In-group/out-group interactions mediate testosterone change. Poster presented at Social and Psychology and Personality Research Conference. Las Vegas, NV, February, 2009.
- Joshi P. & DeSoto, M.C. Testosterone makes me green: The unexplored relation between testosterone and jealousy. Poster presented at Midwestern Psychological Association Annual Meeting, Chicago IL, May 2009.
- Hitlan, R. T. & DeSoto, M. C. (2009). The Relation between testosterone, and social dominance orientation. Poster presented at the annual meeting of the Society for Personality and Social Psychology conference, Tampa, Fl. February, 2009
- DeSoto, MC & Joshi P (2009). Is it an Urban Legend that Sex Differences don't show up on continuous-choice measures of Jealousy Triggers? Poster presented at Social and Psychology and Personality Research Conference. Florida, February, 2009.
- DeSoto, M.C. (2008). Hormones, Human Behavior and Borderline Personality. Invited feature speaker. The Iowa Psychological Association Annual Meeting. November 2008.
- Osborn, A. (2008). Professional Opinions of Autism Prevalence. Poster presented at UNI Graduate Research Conference. Cedar Falls, IA. March 2008 (Faculty Sponsor MC DeSoto).
- Tasovski, I & DeSoto, M.C. (2008). Correlating Testosterone with Social Dominance. Poster Presented at the University of Northern Iowa's CSBS Student Research Conference, Cedar Falls, IA. April 2008.
- Gillette, M., Bakeris, A. & DeSoto, M.C. (2008). Life events and Early Menarche. Poster Presented at the University of Northern Iowa's CSBS Student Research Conference, Cedar Falls, IA. April 2008.
- Fang, Q.J. & DeSoto, M.C. (2007). Relational Aggression: Comparison of Chinese and American Students. Poster Presented at the Annual Meeting of the Midwestern Psychological Association, Chicago, Il. May 2007.
- Fang, Q.J. Bumgardner, J. & DeSoto, M.C. (2007). Cross Cultural Study of Sex Differences in Relational Aggression. Poster Presented at the University of Northern Iowa's CSBS Student Research Conference, Cedar Falls, IA. April 2007.
- DeSoto, M.C., Close, A., Bumgardner, J., & Collingwood, M. (2006). Testosterone and ToM. Poster presented at the Annual Meeting of the Midwestern Psychological Association, Chicago, Il. May 2006.
- Collingwood, M. and DeSoto, M.C. (2006). Lower Estrogen levels increase pain ratings in women. Poster presented at the University of Northern Iowa's CSBS Student Research Conference, Cedar Falls, IA. April, 2006.
- Bumgardner, J., Collingwood, M. DeSoto, M.C. (2006). Altruism and response to hurricane Katrina. Poster presented at the University of Northern Iowa's CSBS Student Research Conference, Cedar Falls, IA. April, 2006.
- Collingwood, M. and DeSoto, M.C. (2006). Estrogen levels influence pain ratings in women. Poster presented at the Annual meeting of the American Psychological Association, March, 2006.
- Baker, L. A., Vickroy, L. M., Hitlan, R. T., MacLin, O. H., DeSoto, M. C., Williams, J. E., & MacLin, M. K. (2005). The effects of appearance on perceptions of sexual harassment. Poster presented at the American Psychology-Law Society, La Jolla, CA.

- Parkin, J.L. & DeSoto, M.C. (2005). Effect of partner age on feelings of sexual and emotional jealousy. Poster presented at the Human Behavior and Evolution Society Annual Meeting, Austin, TX. June 2005
- Parkin, J.L. & DeSoto, M.C. (2005). Male Expression of Sexual Jealousy: A Test of Evolutionary Hypotheses. University of Northern Iowa's CSBS Student Research Conference, Cedar Falls, IA.
- Cliffton, R. J., Hitlan, R. T., & DeSoto, M. C. (2005). Work place ostracism: Examining the moderating effects of gender on workplace attitudes and psychological health. Poster presented at the CSBS Research Conference, Cedar Falls, IA.
- Baker, L. A., Vickroy, L. M., Hitlan, R. T., MacLin O. H., DeSoto M. C., Williams J. E., & MacLin, M. K. (April, 2005).Criminality and its effects on perceptions of sexual harassment. Poster presented at the University of Northern Iowa's CSBS Student Research Conference, Cedar Falls, IA.
- Wang, M.C., DeSoto, M.C., Wells, A. (2004). How Body Esteem Differs among Women with Different Body Sizes. Poster presented at the American Psychological Society Annual Meeting, July 2004.
- Baumgartner, S.B., Wise, L.W., Renfrow, A., Williams, J.E., & DeSoto, M. C. (2004). Sex Differences in MMPI Reliability. Poster presented at the CSBS research conference, University of Northern Iowa. April, 2004
- Cliffton, R. J., Hitlan, R. T., Peterson, K., & DeSoto, M. C. (2004) Gender differences in exclusion: Aggression, perceived fairness, and organizational citizenship behaviors. Poster presented at the CSBS research conference, University of Northern Iowa. April 2004.
- DeSoto, M.C., Geary, D.C. & Renfrow, A. (2004). Theory of Mind and reading people's intent: A possible role for Estrogen? Poster presented at the Annual Meeting of the Society for Personality and Social Psychology, January 2004.
- Buelow, K., Ruley, C., Renfrow, A., Ashby, J., DeSoto, M. C. (2003) Waist to Hip Ratio Reported Null Findings: The Roll of Stimuli. Poster presented at the American Psychological Society Annual Meeting , June 2003
- Wang, M.C. & DeSoto, M.C. (2003). Symptoms of anorexia: Women at high and low estrogen times in the menstrual cycle. Poster presented at the American Psychological Society Annual Meeting , June 2003
- DeSoto, M.C., and Buelow, K. (2003). WHR and Evolutionary theory. Poster presented at the Human Behavior and Evolution Society, June 2003.
- Wang, M.C., & DeSoto, M.C. (2003). Eating Disturbance and estrogen levels across the menstrual cycle: Bulimia and anorexia symptoms are differentially affected. Poster presented at the Human Behavior and Evolution Society, June 2003.
- Ruley, C., Renfrow, A. & DeSoto, M.C. (2003). Borderline symptom clusters in women and the role of estrogen. Poster presented at the Annual UNI Undergraduate Research Conference , April 2003.
- Wang, M.C. & DeSoto, M.C. (2003). Symptoms of anorexia: Women at high and low estrogen times in the menstrual cycle. American Psychological Society Annual Meeting, June 2003
- Buelow, K., Ruley, C., Renfrow, A., Ashby, J., DeSoto, M. C. (2003) Waist to Hip Ratio Reported Null Findings: The Roll of Stimuli. American Psychological Society Annual Meeting , June 2003DeSoto,
- M. C., Gratton, G., & Fabiani, M. (1998). Response competition within the motor cortex: An optical imaging study. *Psychophysiology*, 35, S27.

- DeSoto, M. C., Fabiani, M., & Gratton, G. (1998). ERP analysis of task switching during a spatial Stroop task. *Psychophysiology*, 35, S27.
- Gratton, G., Fabiani, M., & DeSoto, M. C. (1998). The time course of response-related brain activity in a choice reaction time task: Comparison of optical and electrophysiological measures. *NeuroImage*. 7(4), S688.
- Gratton, G., Fabiani, M., Ho, J. K., Goodman-Wood, M., DeSoto, M. C. (1997). Brain activity associated with retrieval from working memory: A comparison of ERP and EROS data. *Psychophysiology*, 34, S39.

Invited Presentations / Plenary Conference Talks

- “Nature, Nurture and Vitamin K: Speculations regarding neurodevelopmental effects of VK genotype.” To be presented March 22, 16th Fat Soluble Vitamins Congress, Paris. France.
- “The Importance of Checking for Sex Differences: Personality and Cortisol.” Presented at the 2015 Human Behavior and Evolution Society annual Meeting. Columbia, MO.
- "Blood levels of mercury are related to the diagnosis of Autism." Invited featured speaker at Autism Conference, Biology Department University of Warsaw, Poland, October 2008.
- "Instability: The Link Between Estrogen and Borderline Personality." Presented at the 2008 Iowa Psychological Association General Meeting. October 2008
- “Estrogen and Borderline Personality” Presented May, 2005, Midwest Psychological Association Annual Meeting, Chicago, IL.
- "Estrogen and Borderline Personality" Presented at 2002 American Psychological Society Annual Conference. New Orleans, LA.
- "The link between estrogen, brain and behavior: Why it matters" presented 2002 CROW (Current Research On Women) Forum, Graduate Program in Women's Studies, University of Northern Iowa.

Leadership Activities

Chair, Department Professional Assessment Committee (PAC) 2010-2013, 2015 to 2017 (break due to need to manage an external grant)

President UNI United Faculty, the faculty collective bargaining organization 2010-2013

Chair of Academic Appeals Committee, 2018-2018

Chair of Graduate Faculty, 2007

Chair of Academic Policies Committee, 2003-2005

Professional Societies

- American Psychological Society (APS)
- Human Behavior and Evolution Society (HBES)

- Society for Personality and Social Psychology (SPSP)
- Midwest Psychological Association (MPA)

Awards and Honors

Young Investigator Award, 2004

National Educational Alliance for Borderline Personality Disorder
Borderline Personality Research Foundation

In conjunction with National Alliance on Research for Schizophrenia and Depression.

Who's Who in America, 2004

Included in the 59th Edition for scholarly contributions, published October.

Outstanding Teaching Award, 2005

College of Social and Behavioral Sciences
University of Northern Iowa, 2005.

Outstanding Scholarship Award, 2008

Colleges Social and Behavioral Sciences
University of Northern Iowa, 2008.

Grants and Research Support

Professional Development Award 2009 "Disseminating recent science about autism and environmental correlates."

Awarded to support peer-reviewed manuscript writing and conference travel regarding toxins and autism, Fall 2009.

Funded External Grant Award 2011 -2012

CADE Foundation (Children with Autism Deserve Education. 6031 Culligan Way Minnetonka, MN 55343).

"Study of Autism among Somali Immigrants in MPLS, MN Area."
Award amount \$80,000

Funded External Grant Award 2011 -2012

Coalition for SafeMinds Organization, Summit, NJ 07901

"Study of Autism among Somali Immigrants in MPLS, MN Area."
Award amount \$9000

UNI Graduate College Matching Funds

Cedar Falls, IA

"Study of Autism among Somali Immigrants in MPLS, MN Area."
Amount \$8000

Summer Research Fellow, "Testosterone and Theory of Mind."

UNI Graduate College, Awarded December 8, 2004 to support full time research activities. June of 2005.

Summer Research Fellow, "Autism and Vitamin K."

UNI Graduate College, Awarded December, 2014 to support full time research activities. Summer 2015.

Summer Research Fellowship 2002 "Estrogen and Personality."

UNI Graduate College, Awarded December, 2002 to support full time research activities. Summer 2015.

Selected Successful completion of Quality Matters Workshop "Designing Your Online Course. January 2017.

Professional Development

Quality Matters Workshop "Designing Your Online Course." January 2017.

Quality Matters Workshop "Applying the Quality Matters Rubric." January 2017.

Research Supervision: Student Research Awards

- Mei-Chuan Wang. Thesis Project: **Estrogen and Eating Disturbance**
The 2003 University Outstanding Thesis Award, First Place.
- Qui Juan Fang. **Cross Cultural Study of Sex Differences in Relational Aggression.**
The Outstanding Graduate Student Poster Research Award,
CSBS 2007 Student Research Conference.
- Meghan Gillette. **Environmental Correlates of Early Menarche.**
Outstanding Undergraduate Poster Award, 2008 CSBS Student Research Conference
- Derrick McAdams. **Testosterone and Racial Bias**
Outstanding Undergraduate Poster Award
CSBS 2009 Student Research Conference.
- Rory Sean Deol. **Out-Groups and Testosterone**
Outstanding Conference Talk: Oral Presentations
2010 Student Research Conference.
- Jason Fly. **Evidence of Youthful Aging: Chronic Stress and the Association With DNA Damage.** McNair Scholar 2017.
- Jon Pederson: **Circulating and Organizational Testosterone Effects of the Perception of Dominance**
2014 Outstanding Master's Thesis Award, Second Place.

