

# Tania A. Desrosiers

## *Curriculum Vitae*

Department of Epidemiology  
 Gillings School of Global Public Health  
 University of North Carolina at Chapel Hill  
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 Chapel Hill, NC 27599  
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### RESEARCH INTERESTS

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perinatal and pediatric epidemiology • birth defects • identification of modifiable risk factors for adverse perinatal outcomes • preconceptional exposure assessment • occupational exposures during pregnancy • male-mediated teratogenesis • epidemiologic methods • research dissemination and translation

### PROFESSIONAL SKILLS

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research methodology • interdisciplinary collaboration • multi-center study operations • surveillance • study design • proposal and grant writing • protocol development • project management • Institutional Review Board clearance • data management • survey design • data collection • data linkage • analytic planning and statistical analysis • teaching • student mentoring • peer review • research communication

### EDUCATION

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University of North Carolina at Chapel Hill, Gillings School of Global Public Health <i>PhD, Epidemiology</i>	Chapel Hill, NC 2011
Tufts University School of Medicine, Graduate Programs in Public Health <i>MPH, Epidemiology/Biostatistics</i>	Boston, MA 2003
Tufts University, School of Arts and Sciences <i>BA, Philosophy; Certificate in Community Health.</i>	Medford, MA 2002

### PROFESSIONAL EXPERIENCE

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Department of Epidemiology, University of North Carolina <i>Research Assistant Professor</i> <i>Social/Clinical Research Scientist</i>	Chapel Hill, NC January 2016-current 2011-2015
North Carolina Birth Defects Monitoring Program, Division of Public Health <i>Epidemiologist</i>	Raleigh, NC 2008-2011

Department of Epidemiology, University of North Carolina <i>Graduate Research Assistant</i>	Chapel Hill, NC 2006-2008
Constella Group (acquired by SRA International, Inc.) <i>Independent Consultant</i>	Durham, NC 2006-2008
Department of Community Affairs, Cambridge Health Alliance <i>Research and Evaluation Associate</i>	Somerville, MA 2003
Framingham Heart Study <i>Research Intern</i>	Framingham, MA 2002

## HONORS AND AWARDS

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2007	UNC Chapel Hill Sidney Kark Award for Distinguished Teaching Assistant
2004-2006	Kirschstein National Research Service Award, Predoctoral Traineeship in Environmental & Occupational Epidemiology, Department of Epidemiology, UNC Chapel Hill, NC National Institute for Environmental Health Sciences (T32ES007018); (08/24/2004 - 08/23/2005; 08/24/2005 - 08/23/2006)
2002-2003	Public Health Traineeship Graduate Programs in Public Health, Tufts University Medical School, Boston, MA US Health Resources and Services Administration
2003	AMA Foundation Health Literacy Grant for Community Organizations and Alliances (\$2500)
2003	Tufts University Graduate Programs in Public Health "Class of 2003" Achievement Award
2002	Golden Key National Honors Society
2001	Tufts University Gemma Cifarelli Memorial Scholarship Award for Community Service

## PROFESSIONAL MEMBERSHIPS

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2005-current	Society for Perinatal and Pediatric Epidemiologic Research (SPER)
2005-current	Society for Epidemiologic Research (SER)

## PEER-REVIEWED PUBLICATIONS

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Rocheleau CM, Bertke S, Lawson CC, Romitti PA, **Desrosiers TA**, Agopian AJ, Bell E, Gilboa SM and the National Birth Defects Prevention Study. Factors associated with employment status before and during pregnancy: implications for studies of pregnancy outcomes. *[Submitted]*

Rocheleau CM, Bertke SJ, Lawson CC, Romitti PA, Sanderson WT, Malik S, Lupo PJ, **Desrosiers TA**, Bell E, Druschel C, Correa A, Reefhuis J and the National Birth Defects Prevention Study. Maternal occupational pesticide exposure and risk of congenital heart defects in the National Birth Defects Prevention Study. *Birth Defects Res A Clin Mol Teratol* 2015 Oct;103(10):823-33. PMID: 26033688.

**Desrosiers TA**, Lawson CC, Meyer RE, Stewart PA, Waters MA, Correa A, Olshan AF and the National Birth Defects Prevention Study. Assessed occupational exposure to chlorinated, aromatic, and Stoddard solvents

during pregnancy and risk of fetal growth restriction. *Occup Environ Med* 2015 Aug;72(8):587-93. PMID: 26076683

Sanders AP, **Desrosiers TA**, Warren JL, Herring AH, Enright D, Olshan AF, Meyer RE, Fry RC. Association between arsenic, cadmium, manganese, and lead levels in private wells and birth defects prevalence in North Carolina: A semi-ecologic study. *BMC Public Health* 2014 Sept 15;14:955. PMID: 25224535. [Press Released]

Langlois PH, Hoyt AT, **Desrosiers TA**, Lupo PL, Lawson CC, Waters MA, Shaw GM, Romitti PA, Gilboa SM, Malik S and the National Birth Defects Prevention Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons and small for gestational age offspring. *Occup Environ Med* 2014 Aug;71(8):529-35. PMID:24893704.

Langlois PH, Hoyt AT, Lupo PJ, Lawson CC, Waters MA, **Desrosiers TA**, Shaw GM, Romitti PA, Lammer EJ and the National Birth Defects Prevention Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons and risk of oral cleft-affected pregnancies. *Cleft Palate Craniofac J* 2013 May; 50(3):337-46. PMID: 23136939.

Lupo PJ, Symanski E, Langlois PH, Lawson CC, Malik S, Gilboa SM, Lee LL, Agopian AJ, **Desrosiers TA**, Romitti PA, Correa A, Shaw GM, Mitchell LE and the National Birth Defects Prevention Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons and congenital heart defects among offspring in the National Birth Defects Prevention Study. *Birth Defects Res A Clin Mol Teratol* 2012 Nov; 94(11):875-81. PMID: 22945317.

Gilboa SM, **Desrosiers TA**, Lawson CC, Lupo PJ, Riehle-Colarusso T, Stewart PA, van Wijngaarden E, Waters MA, Correa A and the National Birth Defects Prevention Study. Association between maternal occupational exposure to organic solvents and congenital heart defects, National Birth Defects Prevention Study, 1997-2002. *Occup Environ Med* 2012 Sep; 69(9):628-35. PMID: 22811060. [Press Released]

Langlois PH, Hoyt AT, Lupo PJ, Lawson CC, Waters MA, **Desrosiers TA**, Shaw GM, Romitti PA, Lammer EJ and the National Birth Defects Prevention Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons and risk of neural tube defect-affected pregnancies. *Birth Defects Res A Clin Mol Teratol* 2012 Sep; 94(9):693-700. PMID: 22807044

**Desrosiers TA**, Herring AH, Shapira SK, Hooiveld M, Luben TJ, Herdt-Losavio ML, Lin S, Olshan AF and the National Birth Defects Prevention Study. Paternal occupation and birth defects: Findings from the National Birth Defects Prevention Study. *Occup Environ Med* 2012 Aug; 69(8):534-42. PMID: 22782864. [Press Released]

**Desrosiers TA**, Lawson CC, Meyer RE, Richardson DB, Daniels JL, Waters MA, van Wijngaarden E, Langlois PH, Romitti PA, Correa A, Olshan AF and the National Birth Defects Prevention Study. Maternal occupational exposure to organic solvents during early pregnancy and risks of neural tube defects and orofacial clefts. *Occup Environ Med* 2012 Jul; 69(7):493-9. PMID: 22447643; PMCID: PMC3719396.

Lupo PJ, Langlois PH, Reefhuis J, Lawson CC, Symanski E, **Desrosiers TA**, Khodr ZG, Agopian AJ, Waters MA, Duwe KN, Finnell RH, Mitchell LE, Moore CA, Romitti PH, Shaw GM and the National Birth Defects Prevention Study. Maternal occupational exposure to polycyclic aromatic hydrocarbons and gastroschisis among offspring in the National Birth Defects Prevention Study. *Environ Health Perspect* 2012 Jun; 120(6):910-5. PMID: 22330681; PMCID: PMC3385431.

**Desrosiers TA** and Meyer RE. Utilization of dental health care services among pregnant women in North Carolina. *NC Med J* 2012 Mar-Apr; 73(2):136-9. PMID: 22860328.

**Desrosiers, TA.** Maternal occupational exposure to organic solvents during early pregnancy and selected congenital anomalies [Dissertation]. The University of North Carolina at Chapel Hill, ProQuest, UMI Dissertations Publishing, 2011. 3465193

National Toxicology Program (NTP). 2011. Formaldehyde. Pp. 195-205 in Report on Carcinogens, 12<sup>th</sup> Ed. U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program, Research Triangle Park, NC [online]. Available: <http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/formaldehyde.pdf>  
**[Contributing Author]**

## **SELECT ABSTRACTS AND PRESENTATIONS**

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**Desrosiers TA, Siega-Riz AM, Mosely BS, Hobbs CA, Meyer RE.** Low Carb Diets: Are they counter to the success of folic acid fortification in the United States? 49<sup>th</sup> Annual Meeting of the Society for Epidemiologic Research (SER). Miami, FL. June 21-24, 2016. (Poster)

**Desrosiers TA, Siega-Riz AM, Mosely BS, Hobbs CA, Meyer RE.** Low Carb Diets: Are they counter to the success of folic acid fortification in the United States? 29<sup>th</sup> Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research (SPER). Miami, FL. June 20-21, 2016. (Invited plenary session presentation)

**Desrosiers TA.** Do low carb diets increase the risk of NTDs? 18<sup>th</sup> Annual Meeting of the National Birth Defects Prevention Network (NBDPN). Arlington, VA. October 19-21, 2015. (Invited presentation)

Pace ND, Siega-Riz AM, Carmichael SL, Shaw GM, **Desrosiers TA\***, Olshan AF. Antioxidant consumption is associated with decreased odds of congenital limb deficiencies. 18<sup>th</sup> Annual Meeting of the National Birth Defects Prevention Network (NBDPN). Arlington, VA. October 19-21, 2015. (Poster)

**Desrosiers TA, Lawson CC, Meyer RE, Stewart PA, Waters MA, Correa A, Olshan AF.** Assessed maternal occupational exposure to chlorinated, aromatic and Stoddard solvents during pregnancy and risk of fetal growth restriction in offspring. 48<sup>th</sup> Annual Meeting of the Society for Epidemiologic Research (SER). Denver, CO. June 16-19, 2015. (Poster)

**Desrosiers TA, Lawson CC, Meyer RE, Stewart PA, Waters MA, Correa A, Olshan AF.** Assessed maternal occupational exposure to chlorinated, aromatic and Stoddard solvents during pregnancy and risk of fetal growth restriction in offspring. 28<sup>th</sup> Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research (SPER). Denver, CO. June 15-16, 2015. (Poster)

**Desrosiers TA, Lawson CC, Meyer RE, Richardson DB, Daniels JL, Waters MA, van Wijngaarden E, Langlois PH, Romitti PA, Correa A, Olshan AF.** Maternal occupational exposure to organic solvents during early pregnancy and selected congenital anomalies. 15<sup>th</sup> Annual Meeting of the National Birth Defects Prevention Network (NBDPN). Arlington, VA. February 27-29, 2012. (Poster)

**Desrosiers TA, Lawson CC, Meyer RE, Richardson DB, Daniels JL, Waters MA, van Wijngaarden E, Langlois PH, Romitti PA, Correa A, Olshan AF.** Maternal occupational exposure to organic solvents during early pregnancy and selected congenital anomalies. UNC-CH Center for Environmental Health and Susceptibility. Symposium on Interdisciplinary Environmental Health Research. Chapel Hill, NC. November 14, 2011. (Poster)

**Desrosiers TA**, Lawson CC, Meyer RE, Richardson DB, Daniels JL, Waters MA, van Wijngaarden E, Langlois PH, Romitti PA, Correa A, Olshan AF. Maternal occupational exposure to organic solvents during early pregnancy and selected congenital anomalies. 3<sup>rd</sup> North American Congress of Epidemiology and 44<sup>th</sup> Annual Meeting of the Society for Epidemiologic Research (SER). Montreal, Canada. June 21-24, 2011. (Poster)

**Desrosiers TA**, Lawson CC, Meyer RE, Richardson DB, Daniels JL, Waters MA, van Wijngaarden E, Langlois PH, Romitti PA, Correa A, Olshan AF. Maternal occupational exposure to organic solvents during early pregnancy and selected congenital anomalies. 24<sup>th</sup> Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research (SPER). Montreal, Canada. June 21-22, 2011. (Poster)

**Desrosiers TA**, Lawson CC, Meyer RE, Richardson DB, Daniels JL, Waters MA, van Wijngaarden E, Langlois PH, Romitti PA, Correa A, Olshan AF. Maternal occupational exposure to organic solvents during early pregnancy and selected congenital anomalies. 10<sup>th</sup> Annual "Poster Day" of the North Carolina Division of Public Health Epidemiology & Evaluation Team. Raleigh, NC. May 13, 2011. (Poster)

**Desrosiers TA**. Paternal occupation and birth defects: findings from the National Birth Defects Prevention Study. Annual Meeting of the Centers for Birth Defects Research and Prevention. Atlanta, GA. January 26, 2010. (Invited presentation)

**Desrosiers TA**. Assessing the relation between solvents and birth defects: analytic strategies and challenges. National Institute for Occupational Safety and Health (NIOSH). August 19, 2008. Cincinnati, OH. (Invited presentation)

**Desrosiers TA**, Maygarden SJ, Wang L, Yankaskas BC. Comparison of pathologic features of screen-detected and interval breast cancers in African American and white women. 7<sup>th</sup> Annual Women's Health Research Day. Center for Women's Health Research at the University of North Carolina. Chapel Hill, NC. June 5, 2006. (Poster)

## TEACHING EXPERIENCE

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Gillings School of Global Public Health, University of North Carolina	Chapel Hill, NC
<i>Guest Lecturer, EPID 851 Reproductive and Perinatal Epidemiology</i>	2010-2016
<i>Guest Lecturer, EPID 853 Advanced Topics in Reproductive and Perinatal Epidemiology</i>	2016
<i>Guest Lecturer, PATH 726 Human Environmental Disease</i>	2010-2015
<i>Teaching Assistant, EPID 715/16 Theory and Quantitative Methods in Epidemiology</i>	Spring 2007
<i>Teaching Assistant, EPID 600 Principles of Epidemiology for Public Health</i>	Fall 2006
Department of Epidemiology and Biostatistics, Tufts University School of Medicine	Boston, MA
<i>Teaching Assistant, Principles of Epidemiology (graduate)</i>	Summer 2002; Fall 2002; Summer 2004
Department of Civil & Environmental Engineering, Tufts University School of Engineering	Medford, MA
<i>Co-instructor, Fundamentals of Epidemiology (undergraduate)</i>	Spring 2002; Spring 2003
Department of Community Health, Tufts University School of Arts and Sciences	Medford, MA
<i>Teaching Assistant, Introduction to Community Health (undergraduate)</i>	Fall 2002

## GRADUATE STUDENT ADVISING

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Dissertation Committee Member

Devika Chawla, doctoral candidate in Reproductive, Perinatal and Pediatric Epidemiology (current)

## RESEARCH GRANTS

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- 2014-2016      Exploring the Intersection between Childhood Cancer and Birth Defects to Identify Novel Cancer Predisposition Syndromes  
Alex's Lemonade Stand Foundation; \$200,000; (07/01/2014 - 06/30/2016)  
Role: Co-Investigator, PI of sub-contract to UNC (PI: PJ Lupo)
- 2013-2018      North Carolina Birth Defects Study to Evaluate Pregnancy Exposures (NC BDSTEPS)  
Centers for Disease Control and Prevention (1 U01 DD0001036-01); (09/01/2013 - 08/31/2018)  
Role: Co-Investigator (PI: AF Olshan and RE Meyer)
- 2002-2013      North Carolina Center for Birth Defects Research and Prevention (NCCBD RP)  
Centers for Disease Control and Prevention (1 U01 DD000488-01); (09/01/2002 - 11/30/2013)  
Role: Research Staff (PI: AF Olshan and RE Meyer)

## PROFESSIONAL SERVICE

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Ad-hoc manuscript reviewer for the following journals: *American Journal of Epidemiology*; *Annals of Epidemiology*; *Birth Defects Research Part A: Clinical and Molecular Teratology*; *Epidemiology*; *Journal of Occupational and Environmental Medicine*; *Occupational and Environmental Medicine*; *Pediatric and Perinatal Epidemiology*

- 2015              Data Sharing Editor, National Birth Defects Prevention Study
- 2007-2008      Graduate Studies Committee (Student Representative), Epidemiology, UNC Chapel Hill
- 2004-2010      Team EpiAid (Volunteer), UNC/North Carolina Division of Public Health
- 2005-2007      Perinatal and Environmental Epidemiology Journal Club (Chair), UNC Chapel Hill
- 2005-2006      Epidemiology Student Organization (Co-President), UNC Chapel Hill

## SELECT MEDIA COVERAGE

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*What does dad's job have to do with baby's birth defects?* TIME. July 20, 2012.  
(<http://healthland.time.com/2012/07/20/what-does-dads-job-have-to-do-with-babys-birth-defects/>)