Jen Jen Chang Professor

| child and adolescent health | mood disorders

sleep problems andesep disorders

- 2005-2013 Assistant Profess@epartment of Epidemiology, School of Public Health Saint Louis University
- 2002-2005 Destact tiply st. eNtert have stored stored in the contract of the c
- 2003-2005 Data analyst, Prevalence of Child Maltreatment stuidly the National Longitudinal Study of Adolescent Health data, Maternal and Child Health Depart Solemool of Public Health, University of North Carolina Chapel Hill
- 2001-2002 Data Analyst Internal and External Problem Behaviors among Children of iBos Refugees Study, Cardinal Glennon Children's Hospital

#### Education

- 2002-2005 PhD in Maternal and Child health Epidemiology, University of North Car@ihapel Hill
- 2000-2002 MPH in Epidemiology and Biostatistics Saint Louis University
- 1990-1993 BBA in Management Science, luversity of Iowa

### Honors and Awards

- 2017 Saint Louis University College for Public Health and Social, Justice Terry Leet Teaching award
- 2005 Society for Epidemiologic Research Poster first Prize
- 2004 Summer User Workshop Fellowship on the National Longitudinal Surveys
- 20032004 Maternal and Child Health Bureau Epidemiology traineeship
- 20022003 Maternal and Child Health Bureau Traineeship

2001-2002

- 23\*. <u>Chang J</u>, Pien G, Salas J, Habicht K, Stamatakas KA, Brownson RC. Short sleep duration and depressive symptoms in the rural Midwest. *J Rural He* 2011 2;28(3):26&276. DOI: 10.1111/j.174&3361.
- 24. <u>Chang</u> J.Pien G, Stamatakas KA, Brownson RC. Associationween physical activity and insomnia in rural communities of southeastern Missouri, Tennessee, and Arkansas. *J Rural Health.* 2013;29(3):23947.DOI: 10.1111/j.17489361.2012.00447.x
- 25. Macones G<u>AChang JJ</u>, Wang, J, Stamilio DM, Odibo AO, Cahill AG, Prediction of cesarean delivery using fetal pelvic index. Jun 19. 2013 *Am J Obstetrics and Gynecology* pii: S0002-9378(13)00642K. doi: 10.1016/j.ajog.2013.06.026.
- 26. Dong GH, Qian ZM, Wang J, TrevatharMa W, Chen W, Xaverius PK, Buckneretty S, Ray A, Liu MM, Wang D, Ren W, Emo B, Chang JResidential characteristics and household risk factors and respiratory diseases in Chinese women: The Seven Northeast Cities (SNEC) Study. Sci Total Environ. 2013 Jun 29;46664C:389394. doi: 10.1016/j.scitotenv.2013.05.063.
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- 28. Huang, XN, Wang, H<u>S, Chang</u> Wang, LH, Liu, XC, Jiang, JX, Lin, A. Felieng methods, sleep arrangement, and infant sleep patterns: a Chinese population study. *World J Pediatr* 2016 Feb;12(1):6**7**5. doi: 10.1007/s1251**9**15-00128.
- <u>Chang</u> JBuchanan P, Mitchell R. Cost analysis of tonsillectomy in children using Medicaid data. *J Pediatr*2014; Jun;164(6):13461.e1. doi: 10.1016/j.jpeds.2014.01.055. Epub 2014 Mar 14
- Xaverius P. Salas J, Woolfolk C, Leung F, Yuan J, Changeddictors of Size for Gestational Age in St. Louis City and Count *Biomed Res Int.* 2014; 2014:515827. doi: 10.1155/2014/515827. Epub 2014 Jul 7.
- 31. <u>Chang</u> J**S**trauss/F, III, Deshazo JP, Rigby FB, Chelmow DP, Macones GA. Reassessing the impact of smoking during pregnancy on preeclampsia/eclampsia: Are there age and racial differences. *Plos Oné*2014 Oct 22;9(10):e106446. doi: 10.1371/journal.pone.0106446. eCollection
- 32\*. Tabet M, Flick LH, Tuuli MG, Macones GA, Chang, Prepregnancy Body Mass Index in a First Uncomplicated Pregnancy and Outcomes of a Second Pregnancy. *Am J Obstet Gynecol* 2015 Oct;213(4):548.e**1** doi: 10.1016/j.ajog.2015.06.031
- 33\*. Joseph M, Elliot M, Zelicofa, Qian ZM, Trevathan E, <u>Chang</u> JJRacial Disparity in the Association between Body Mass Index and Stepported Asthma in children: A population-basedstudy. *J Asthma* 2016 Jun;53(5):492-doi: 10.3109/02770903.2015.1116084.

- 34. <u>Chang J</u>Salas J; Tabet M; Kasper Z; Elder K; Staley H; Brownson R. Changes in Body Mass Index and the Trajectory of Depressive Symptoms among Rural Men and Women. *J Rural Health*; 2016 Jan 28. doi: 10.1111/jrh.12170. [Epub ahead of print].
- 35. Liu RQ,Qian Z,Trevathan E<u>Chang J</u>Zelicoff A, Hao YT,Lin S, Dong GH. Poor sleep quality associated with high risk of hypertension and elevated blood pressure in China: Results from a large populatiobased study. Hypertens Res 16 Jan;39(1):59- doi: 10.1038/hr.2015.98. Epub 2015 Sep 3.
- 36\*. Tabet M T, Louise LH, Cook C, Xian H, Chang Age at First Birth and Psychiatric Disorders in Low-income Pregnant Women. *J Womens Heal* (Larchmt) 2016 Aug;25(8):8107-. doi: 10.1089/jwh.2015.5236.
- 37\*. <u>Chang J</u>JTabet M Elder K, Kiel DW, Flick LH. Racial/Ethnic Differences in the Correlates of Mental Health Services Use among Pregnant Women with Depressive Symptoms. *Matern Child Health J*.2016; 20(9), 1911922.DOI 10.1007/s1099516-20051
- 38\* Woolfolk, CL, Harper, LM, Flick, LH, Mathews, K, Chang, Gestational Weight Gain and Preterm Birth: Disparities in Adolescent Pregnancies. J Perin2016 Dec;36(12):1055060. doi: 10.1038/jp.2016.149
- 39. Zhou Y, Hu LW, Qian ZM, <u>Chang J</u>, JKing C, Paul G Lin S, Chen PCLee YL, Dong GH. Association of perfluoroalkyl substances exposure with reproductive hormone levels in adolescents: By sex status. *Environ* **20**(16;94:18995. doi: 10.1016/j.envint.2016.05.018.

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54.\* Tabet M, Flick LH, Xian H, <u>Chang</u> JRevisiting the Low Birthweight Paradox Using Sibling Data with Implications for the Classification of Low Birthweight. *J Public Health* (Oxf). 2018;40(4):e60/e607. doi: 10.1093/pubmed/fdy087.

1. <u>Chang J</u>,JKaufman JS, and Halpern CJ. Association between physitizeity and adolescent depressive ymptoms over time from the National Longitudinal Study of Adolescent Health [Abstract]. Am J Epi

acones G<u>A, Chan</u>g Racial Disparities in the Association between Gain and Gestational Diabetes Mellitus byregmancy BMI eco2015;Suppl (Jan, 2015)

PienG. Shift workand sleep patterns among pregnant nurses using 2. 2019; 64\$1; eS359; s62

\*indicates studented project)

Veaver<u>N, Chang be effect of counseling on fetal and neonatal</u>

- 4. 2010 'Comparative Effectiveness Research of Prenatal Care Services in Missemutier for Disease Control and Prevention, Not Funded.
- 5. 2011 'Shiftwork during pregnancy and risk of postpartum depression Natienal Institute of Health Clinical Research Training Center of Washington University School of Medicine in St. Louis, Not Funded.
- 6. 2011 'Shiftwork During Pregnancy And Preeclamös \$50,000 from Saint Louis University President Research Funding program, FUNDED.
- 7. 20122013 "Shiftwork duing pregnancy and risk of preterm deliverNational Institute of Health, Not Funded.
- 8. 2014 'Vitamin D Insufficiency and Risk of Postpartum Depression", \$7,096 from Saint Louis University, FUNDED.
- 9. 20142015 "Shiftwork during pregnancy and risk of preterm delive Genter for Disease Control and Prevention, Not Funded.
- 10. 2017-2018 'Promoting Healthy Sleep Health Among Families Of Young Children: A Pilot Study', \$50,000 from the NIHhstitute of Clinical and Translational Soces at Washington University in St. Louis, FUNDED.
- 11. 2019 Effects of Shiftwork on Health Behaviors During pregnancy and Preterm Definition for Disease Control and Prevention, Scored 11 percentile
- 12. 2019 'Telemedicine an M-Health in Hypertension Management during Pregnancy to Reduce Racial Disparity in Maternal and Fetal Outcomes", Saint Louis University Applied Health Sciences Research Grant Progrator Funded.
- 13. 20192020 'Chronic Maternal Sleep Restriction and Risk of Overweight/Obesity during Early Childhood' Saint Louis University President's Research Fund. FUNDED.
- 14. 2020 "Covid19 Pandemic and Food Insecurity During Pregnancy amonglithcome Families in St. Louis City". The Washington University Institute of rotal and Translational Sciences (ICTS). Not Funded.

Conference Presentatio(19st dicates studented project)

- 1. <u>Chang J</u>,JAmon E, Leet T. Is mode of delivery arisk factor for cerebral palsy." Presented at the 50th annual meeting of the American College of Obstetrics and Gynecology, Los Angleles, C May, 2002.
- 2. Theodore A, <u>Chang</u> JRunyan D, Hunter WM, Bangdiwals I, Egans R<sup>e</sup>Measuring the physical and exual maltreatment of brildren in the Carolinas. Presented at the Pediatric Academic Societies' Annual Meeting, San Francisco, MAy, 2004.

3. Park MM, Chang JJHussey JM. "

# Jen Jen Chang

at the Society for Maternal and Fetal Medicine 2006 Annual meeting, San Francisco, CA, February, 2007.

- 19\*. Bryan RL, Garfield LD, <u>Chang J</u>, JHoffstetterS, Leet TL. Induction of labor and maternal and neonatabutcomes in multiparous women in a population sed sample. Abstract presentee the 2007 APHA conference, Washington DC, November, 2007.
- 20. <u>Chang J</u>, JMuglia LJ, Macones GA. Recurrent preeclampsia and adverse birth outcomes in a populationbased study. Abstract accepted for presentation at the Society for Maternal and Fetal Medicine 2007 Annual meeting, Dast, TX, January, 2008.
- 21. Defranco E, <u>Chang</u>, <u>J</u>Wluglia LJ. The correlation in birth timing between singleton and multifetal gestations. Abstract accepted for presentation at the Society for Maternal and Fetal Medicine 2007 Annual meeting, Dallas, TX, Janya2008.
- <u>Chang J</u>, JPien G, Stamatakas KA, Brownson RC. Association between short sleep duration and depressive symptoms in rural communities of southeastern Missouri, Tennessee, and Arkansas. Abstract accepted for presentation at SLEEP 2010, 24th Anmeeting of the Associated Professional Sleep Societies, LLC, St. Antonio, TX, June, 2010
- <u>Chang J</u>, JPien G, Stamatakas KA, Brownson RC. Association between physical activity and insomnia in rural communities of southeastern Missouri, Tennessee, and Arkansteesct accepted for presentation at SLEEP 2010, 24th Annual Meeting of the Associated Professional Sleep Societies, LLC, St. Antonio, TX, June, 2010
- 24\*. Salas, J. Chang, Brownson RC. Temporal association of body mass index and depression among rural womenAbstract accepted for presentation the 2010 MCH EPI conference, St. Antonio, TX, December, 2010.
- 25\*. Gomez JW, <u>Chang</u> JAcculturation and Health Care Access and Utilization for Hispanic Children in the United States. Abstract accepted for presentatitibe 2010 MCH EPI conference, St. Antonio, TX, December, 2010.
- <u>Chang J</u>,JStamilio DM, Odibo AO, Cahill AG, MaconesAG Prediction of cesarean delivery using fetal pelvic index. Abstract accepted for presentation at the Society for Maternal and Fetal Medicine 2011 Annual meeting, San Francisco, CA, February, 2011.
- <u>Chang J</u>, JPatel K, Duntley, SP, Leung F, Meien GW. Association between sleep duration and maternal mental well being during pregnancy: A population based study. Abstract accepted for presentation at SLEEP 2011, 25th Annual Meeting of the Associated Professional Sleep Societie LLC, Minneapolis/St. Paul, MN, June, 2011
- <u>Chang J</u>JChien LC, Duntley, SP, Pien GWsleep Duration During Pregnancy and Maternal and Fetal Outcomes: A pilot study Using Actigraphystract accepted for presentation at SLEEP 2011, 25th Annual Meeting of the Associated ProfessiSheep Societies, LLC, Minneapolis/St. Paul, MN, June, 2011

- 29\*. Muthukrishnan M, Thampy L, Flick LH, Chang. Correlates of Physical Inactivity in Overweight/Obese Pregnant Women. Abstract accepted for preseatable 2011 MCH EPI conference, New Orleans, LA, December, 2011.
- 30. Chang J,JChien LC, Macones GA.

39. Chang J,JStraussJF, III, Deshazo,

- 7. 'Measurement of Sleep duration and sleep problems Population and Health Research Center Bureau of Health Promotion, Center for Disease Control, Taiwan, 2013
- 8. 'Effect of Sleep Restriction on Population Health" at National Defense Medical Center, Taiwan, 2014
- 9. 'Methodological issues with Longitudinal Studies the

- 3. National Institutef HealthMechanisms of Emotion, Stress, and Health study section. Bethesda. MD, June 2011
- 4. National Institute of Healthotor Function, Speech and Rehabilitation Study Section. Bethesda. MD,

Sum of the Times Cited	2,131
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Hussey JM <u>Chang J</u> ,Jand Kotch JBChild maltreatment in the United States: prevalence, isk factors, and dolescent healthornsequences <i>Pediatrics</i> , 2006; 118 (3): 933942	562
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Zolotor AJ, Theodore AD <u>Chang J</u> ,JBerkoff MC, Runyan DK. Speak softand forget the stick: Corporal punishment and child physical abuse. <i>Am J Prev Med</i> 2008;35(4):3649	116
Lee LC, Harrington RA <u>Chang J</u> JConnors SL.Increased risk of injury in children with developmental disabilities <i>Res Dev Disabil</i> . 2008;29(3):24755 Zolotor AJ, Theodore AD <u>Chang J</u> JLaskey AL, Runyan DK. Corporal punishmer and physical abuse: populati <b>ba</b> sed trends for <b>3</b> 1 yearold children in the United States <i>Child Abuse Review</i> . 2011;20(1):57	

Arch Pediatr Adolesc Med. 2007;161 (7):69-7703	
<u>Chang</u> JJBrownson RCandChen JJ. Theole of repeat victimization in adolescent delinquent behaviors and ecidivism. J Adolesc Health. 2003;32(4):27280	77
LangfordA, JoshuCE. <u>Chang J</u> , Myles, T, Leet TL. Does gestational weight gain affect the risk of adverse maternal and infant outcomes in overweight women? <i>Matern Child Health J</i> . February 5 2008: DOI: 10.1007/s109958-03184	49
Harper LM, <u>Chang J</u> , JMacones GA. Adolescent pregnancy and weight gain: Do Institute of Medicine recommendations apply? <i>Am J Obstet &amp; Gyne</i> <b>20</b> , 11 Aug;205(2):140.e <sup>-</sup> B	41
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sleep quality associated with high risk of hypertension and elevated blood pres China: Results from a large populatibased study. Hypertens R& 16 Jan;39(1):549. doi: 10.1038/hr.2015.98. Epub 2015 Sep 3	sure in
Mostello D, <u>Chang J</u> , JAllen J, Luehr L, Shyken J, Leet T. Recurrent Preeclampsia: The Effect of Weight Change between Pregnancies t & <i>Gynecol</i> . 2010; 116(3):66-7672	35
Theodore AD, RunyanDK, <u>Chang J</u> , JMeasuring the risk for physical neglect in a population based sample <i>Child Maltreat</i> 2007; 12 (1):96105	32
<u>Chang J</u> , JTheodore A, Martin, SandRunyan D.K. Psychological abuse between parents: associations withit maltreatmentisk from a population based ample <i>Child Abuse Negl</i> 2008;32:819829.	28
Zhou Y, Hu LW, Qian ZM, Chang J, King C, Paul G Lin S, Chen PCLee	28
YL, Dong GH. Association of perfluoroalkyl substances exposure with reproduction hormone levels in adolescents: By sex status. <i>Environ</i> 201/16;94:18995. doi: 10.1016/j.envint.2016.05.018	ctive

Spring 2007 present EPI 5020 Epidemiology Method II

Fall 2014 present EPI 5080 Perinatal Epidemiology

Spring 207-present PUBH 2100 Introduction to Global Health

### Graduate Students Independent Research Project TitleMentored

- 1. Rebecca P. Bryabauren D. Garfield(2006)"Induction of labor and maternal and neonatal outcomes in multiparous women in a population sample"
- 2. Aisha Langford, Corrie Jost (2006) "Does gestational weight gain affect the risk of adverse maternal and infant outcomes in overweight work endotree.
- 3. Swathy Kolli, Chris Giggey (2008) Short Sleep Duration in Adolescence and Risk of Obesity in Young Adulthood A Population Based Study)
- 4. Rubina Mir Younathan Abdia(2009)' Maternal and fetal outcomes of Vaginal Birth after Cesarean Delivery in the Normotensive Second Pregnancy following Preeclampsia in First Pregnancy
- 5. Jacob Henrich Fang Bai (2010) "Do placenta previa and placental abruption carry implications for the prognosis of a subsequent pregnancy? A population approach
- 6. Joanne Salas (2010) 1) "Risk factors of child Maltreatment cluster and its association with affect/behavior deregulation using the Longitudinal Studies of Child Abuse and Nægrled?") "Does a medical home influence the effect of bindhweight on health outcome's? PUBLISHED.
- 7. Jennifer Gomez (201'0) Acculturation and Health Care Access and Utilization for Hispanic Children in the United State Conference Presentation
- 8. Kanan PateKetankumar Shat(2010)" Does weight change between first and second pregnancies affect the risk of pregnancy complications among overweight and obese women"
- 9. Melissa Anthony, Raya Khoury (2011) fel effects of depression on quality of prenatal diet
- 10. Meera Muthukrishnan, Leila Tham (2)011) 'Racial Disparity and Correlates of Physical Inactivity in Overweight/obese Pregnant Women"
- 11. Shailja JakhaChristine Williams, Usha Rawat, Yismaw Hailegior(2014)"Racial/Ethnic Differences in Correlates of Spontaneous and Medidadijcated Late Preterm Births among Adolescent's, PUBLISHED.
- 12. Brandi Simmon Dianna Romer (2011) "Determining Fatigue vs. Sleepiness Using Scribye Measures (PSQI) and Objective Measures (PSG) of Sleep Quality

- 13. Amanda Hoeffker/Vinita Dora, Nimra Tariq(2012)"Protective Factors for Gestational Weight Gain" Conference presentation
- 14. Lauren Hø2012)"Preterm birth outcomes among Asian, Native Hawaiian, and other Pacific Islander mother's
- 15. Won Choi (2012) Sleep patterns among Korean adolescent".
  - 16. Vicky Choi (2012) Associations Between Sleep Duration and Age at Onset of Ever Smoking and Daily Cigarette Use among Korean Adolescents
- 17. Erin Sanders (2013)Neighborhood Conditions and Psychosocial Outcomes among Middle Aged African Americans, PUBLISHED.
- 18. Michael Joseph (2013)) "Risk factors for insomnia symptoms among adolescents: a populationbased study" and (2) "Racial Disparity in the Association between Body Mass Index and SelfReported Asthma in children: A populationased study," PUBLISHED.
- 19. Joseph Espiritu (2013)Supine Slorenso2j)-Dj. @U3CT of 10.00-122046h (p)2(4)(-2)(-v)26y4(s)-1(yA)2(s)-1(s)

- 26. Lan Luong (2014)) "Large for Gestational Age at Preterm Birth: Associations with Obstetric Morbidities and Birth Outcomesand "Effects ofInterpregnancy interval on second pregnancy outcomes after the first pregnancy resulted in fetal death and/or neonatäl **Sebth**itted.
- 27. George Yang (2015)

# Jen Jen Chang

## Committees at theDepartment, College, and the University

- x Graduate Curriculum Committee Chool of Public Health (20027008)
- x Graduate Admission Committee Chool, of Public health (20027008)
- f Practice Experience Committee, School of Public He(200082012)
- f Center for Sleep Science Task Force Committee, School of Me (2000-2010)
- f Faculty Advisor, Taiwanese Student Association, Saint Louis Unive 2009 present
- f Research Committee, School of Public Hea2000(8-2010)
- f Graduate Sobol Research Committe Saint Louis University (2008016)
- x Chair, Admission committee pepartment of Epidemiology & Biostatistic 20(12 presen)t
- *f* Global Health Initiative Work Group Committe Ollege for Public Health and Social Justice (2013-2015)
- *f* Maternal and Child Health Advisory Committee ollege for Public Health and Social Justice, (2014presen)t
- f Faculty workload CommitteeCollege for Public Health and Social Just(220142016)
- *f* Faculty Assembly Executive Conittee, College for Public Health and Social Just(20214presen)t
- f President, Faculty CounciCollege for Public Health and Social Just (2015-2017)
- f President's Advisory CounciSaint Louis University(2015-2017)
- f Academic Affair Committee College for Public Health and Social Just (2015-2017)
- x Judge reviewerJudge Panel for the Saint Louis University's Ann@adduate StuderAtssociation Symposium(2017)
- x Student internship CommitteeDepartment of Epidemiology and Biostatist(2917present)
- x MPH Reinvention Task Force for Applied Practice Experientic Academic Affairs Committee, College for Public Health and Social Just(2017present)
- x Case Study Judge, Judge Panel for the Saint Louis University's AlPhublish Health Scholar Bowl (2019)

- x Faculty Judge, Paper Presentation Judge Panel for the Saint Louis University's Annual Gradua Student Research Symposium (2019)
- x MPH Academic Adviser, Department of Biositat

- x Grant Reviewer. Clinical and Transtatal Research Funding Program grant review study section. Washington University in St. Louis, St. Louis, Missouri, October 11, 2019
- x Leader, EPI/BST Core for Wid-19 Pandemic Data analysis Saint Louis County Department of Health, Saint Louis University College for Public Health and Sodiastice, 2020



- 1. Expert talk on a mother's prepregnancy body makes iduring first pregnant on future pregnancies with KTVI-TV Fox2 newsroom Instudio interview in Maryland Heights, Misso (20015)
- 2. Expert talk on gestational weight gain and maternal and fetal outcomes. St. Louis Public Radio (KWMU) interview with Dr. Veronique Lacrapra. **St**ouis, Missouri(2015)
- 3. Expert Talk on postpartum depression. WUFT Public Radio "Public Health Minute." aired on a number of stations throughout the country (including Florida, Minnesota, Illinois, Alabama, Wisconsin and Texas2017)