### **CURRICULUM VITAE**

### Richard F MacLehose, PhD

Division of Epidemiology & Community Health University of Minnesota, School of Public Health

1300 South 2nd Street, WBOB Suite 300, Minneapolis, MN 55454-1015

**Telephone:** (612) 624-1932

Fax (612) 624-0315

E-mail: macl0029@umn.edu

#### Academic Rank:

Associate Professor, Division of Epidemiology and Community Health

### Degrees Awarded

Degree	Institution	<b>Date Degree Granted</b>
B.S.	Miami University Microbiology	1995
M.S.	University of Washington Epidemiology	1998
Ph.D.	University of North Carolina Epidemiology	2005

# **Employment**

University of Minnesota, Twin Cities School of Public Health Assistant Professor	2008 - present
National Institutes of Environmental Health Sciences Biostatistics Branch Postdoctoral Fellow	2006 - 2008
National Institutes of Environmental Health Sciences Biostatistics Branch Guest Researcher	2005 - 2006

## <u>Current Membership in Professional Organizations</u>

Society for Epidemiologic Research, Society for Pediatric and Perinatal Epidemiologic Research, International Society for Bayesian Analysis, American Statistical Association

#### RESEARCH AND SCHOLARSHIP

#### Honors and Awards:

Delta Omega Public Health Honorary Society, Theta Chapter, 2006. Nominated for membership in recognition of academic achievements and work in Epidemiology.

## **Editorships**

Epidemiology, Editorial Board. 2010-present BMC Medical Research Methodology, Associate Editor 2011-2013 Epidemiologic Perspectives and Innovations, Associate Editor 2007-2012

# Journal Reviewer Experience (year of first review indicated)

2008	American Journal of Epidemiology
2009	Annals of Epidemiology
2001	Archives of Physical Medicine and Rehabilitation
2008	Bayesian Analysis
2012	BMC Bioinformatics
2006	BMC Medical Research Methodology
2007	Biometrics
2007	Biostatistics
2009	Environmental Health Perspectives
2004	Epidemiologic Perspectives and Innovations
2004	Epidemiology
2011	Epidemiology Methods
2007	Human Reproduction
2011	Injury Prevention
2011	Journal of Causal Inference
2009	Pediatric and Perinatal Epidemiology
2010	Political Analysis
2007	Statistics in Medicine

#### Research and Training Grants

### **External Sources**

### Received at the University of Minnesota:

#### Current

1. Title: Evaluating Impacts of School Programs Funding: NIH 5R01-DK067362 PI: Nanney

Purpose: Observational study examining the impact of school policy changes on student

health and behavior Period: 4/1/11-present Direct cost: \$356,413

Role: Co-investigator (methodologist/statistician)

2. Title: Occupational Epidemiology Training Grant

Funding: PI Gerberich

Purpose: Training grant for students in environmental health and epidemiology

Period: 4/1/11-present Direct cost: \$1,733,450 Role: Co-director

3. Title: ARIC

Funding: NIH (R01) PI: Folsom

Purpose: This study provides novel information on risk factors heart disease

Period: 9/1/13-present Direct cost: \$4,765,502.86

Role: co-investigator (methodologist/statistician)

5. Title: Project EAT IV

Funding: NIH (R01-HL084064) PI: Neumark-Sztainer

Purpose: This prospective cohort study was designed to investigate factors influencing

eating habits among adolescents

Period: 6/1/09-present Direct cost: \$2,331,461

Role: Statistician (methodologist/statistician)

7. Title: Minnesota Taconite Workers Health Study

Funding: State of Minnesota

Purpose: This project consists of a cohort mortality study of taconite workers, a cancer incidence study of these workers and a respiratory health screening study of current and former taconite workers and spouses.

Period: 07/01/2008 - 12/31/2013

Direct Cost: \$2,179,132

Role: co-investigator (methodologist/statistician)

8. Title: Risk and protective factors for childhood obesity in the home food environment.

Funding: NIDDK (1 R21 DK091619)

Purpose: This study uses in-home observations (video-recorded family meals, home food inventory, interviews) of the home food environment to obtain a more comprehensive understanding of the risk and protective factors for childhood obesity in the home environment.

Period: 04/05/2012- 3/31/2014

Direct Cost: \$267,243

Role: co-investigator (methodologist/statistician)

9. Title: All in he family Funding: NIDDK (R03)

Purpose: This study examines the relationship between family members and the impact of

those relationships on nutrition and weight status.

Period: 04/05/2012- 3/31/2014

Direct Cost: \$33,796

Role: co-PI

#### Completed

1. Title: Depression, Adipocytokines and Metabolic Dysregulation in Black and White

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Funding: NHLBI (R21 HL091290-02) PI: Everson-Rose

Purpose: The study is a longitudinal observational study examining the relationship between

depression, adipocytokines and metabolic dysregulation

Period: 04/01/09-03/31/11

Direct cost: \$302.852

Role: co-investigator (methodologist/statistician)

2. Title: Immunological Factors and Risk of Vulvodynia

Funding: NIH (R01-HD058608) PI: Harlow

Purpose: This prospective cohort study investigates the association between altered Immune-inflammatory response mechanisms in women and vulvodynia

Period: 9/1/09-8/31/13 Direct cost: \$2,163,427

Role: co-investigator (methodologist/statistician)

3. Title: Project F-EAT

Funding: NIH (R01-HL093247) PI: Neumark-Sztainer

Purpose: This cross section study was designed to investigate factors influencing eating

habits and physical activity among the friends and family of adolescents

eating habits among adolescents

Direct cost: \$998,172 Period: 6/1/09-7/1/12

Role: co-investigator (methodologist/statistician)

4. Title: Environmental intervention for weight gain prevention (Healthworks)

Funding: NIH (R01-DK067362) PI: Jefferey

Purpose: This group randomized trial was designed to determine whether changes in workplace environment impact individual overweight as well as individual behavior.

Period: 2/1/11-6/1/11 Direct costs: \$2,033,367

Role: co-investigator (methodologist/statistician)

5. Title: Multilevel latent class and social network models for observational and adolescent obesity data

Funding: NIH (U01-HD061940) PI: Wall

Purpose: This proposal will develop and examine new statistical models and methods

incorporating latent variables, social networks and propensity scores that simultaneously

incorporate multiple variables from multilevels of influence on adolescent obesity in order to inform a

richer understanding of the phenomena.

Period: 8/10/09-6/1/2013 Direct cost: \$157,022 Role: PI of sub-contract

6. Title: Coronary artery risk development in young adults (CARDIA) study

Funding: NHLBI (N01 HC048048) PI: Schreiner

Purpose: The study is a long term observational longitudinal study examining risk factors for

development of coronary artery disease

Period: 01/01/09-6/1/2013 Direct cost: \$3,970,941

Role: co-investigator (methodologist/statistician)

7. Title: Epidemiologic study of risk factors and biomarkers of atrial fibrillation.

Funding: NIH (R01-HD058608) PI: Alonso

Purpose: This study provides novel information on risk factors for atrial fibrillation, particularly among African-Americans and contributes to our understanding of the

pathogenic process underlying atrial fibrillation..

Period: 9/1/10-6/1/2013 Direct cost: \$661,489

Role: co-investigator (methodologist/statistician)

#### **Publications**

Articles in refereed journals (+ indicates student advisee as first author, \* co first-author)

1. Loth KL, MacLehose RF, Bucchianeri M, Crow S, Neumark-Sztainer D. Predictors of dieting and disordered eating behaviors from adolescence to young adulthood. Accepted, Journal of Adolescent Health.

- 2. Allen EM, Alexander BH, **MacLehose RF**, Ramachandran G, Mandel JH. Mortality experience among Minnesota taconite mining industry workers. Accepted, Occupational and Environmental Medicine.
- 3. Naimi A, **MacLehose RF**, Kaufman JS. Mediation misgivings: ambiguous clinical and public health interpretations of natural direct and indirect effects. Accepted, International Journal of Epidemiology
- 4. Nanney MS, **MacLehose RF**, Kubik MY, Davey CS, Coombes B, Nelson TR. Recommended school policies are associated with student sugary drink and fruit and vegetable intake. Accepted, Preventive Medicine.
- +Muller C, MacLehose RF. Estimating predicted probabilities from logistic regression: default methods
  may not be appropriate for the intended population of inference. Accepted, International Journal of
  Epidemiology
- Lampard AM, MacLehose RF, Eisenberg ME Neumark-Sztainer D, Davison KK. Weight related teasing
  in the school environment: associations with psychosocial health and weight control practices among
  adolescent boys and girls. Accepted, Journal of Youth and Adolescence.
- 7. +Bruening M, MacLehose RF, Eisenberg ME, Nanney MS, Story M, Neumark-Sztainer D. Are sugar-sweetened beverage consumption and eating at fast food restaurants related among adolescents and their friends. accepted to Journal of Nutrition Education and Behavior.
- 8. +Hamra G, MacLehose RF, Richardson DB, Bertke S, Daniels RD. Modeling complex mixtures in epidemiologic analysis: additive versus relative measures for differential effectiveness. Occupational and Environmental Medicine. 71(2): 141-6. 2014
- 9. Harlow BL, Nguyen RHN, Kunitz K, Rydell S, **MacLehose RF**. Prevalence of Symptoms Consistent with a Diagnosis of Vulvodynia: Population-based estimates from two geographical regions. American Journal of Obstetrics and Gynecology, 2014.
- Kaufman JS, MacLehose RF. Which of these things is not like the other. Cancer. 119(24): 4216-4222.
   2013
- 11. Berge JM, Bauer KW, **MacLehose RF**, Eisenberg ME, Neumark-Sztainer D. Association bwetween relationship status and day-to-day health behaviors and weight among diverse young adults. Accepted, Family Systems and Health.
- 12. Loth K, MacLehose RF, Fulkerson J, Crow S, Neumark-Sztainer D. Are food restriction and pressure-to-eat parenting practices associated with adolescent disordered eating behaviors? International Journal of Eating Disorder. 47(3) 310-4. 2013
- 13. Larson N, MacLehose R, Fulkerson JA, Berge JM, Story M, Neumark-Sztainer D.Eating breakfast and dinner together as a family: Associations with sociodemographic characteristics and implications for diet quality and weight status. J Acad Nutr Diet. 113(12): 1601-1609. 2013.
- 14. Nguyen RHN, Turner RM, Rydell SA, **MacLehose RF**, Harlow BL. Perceived sterotyping and seeking care for chronic vulvar pain. Pain Medicine. 14(10):1461-7. 2013.
- +Whitham H, MacLehose RF, Harlow B, Wellons M, Schreiner P. Assessing the Utility of Methods for Menopausal Transition Classification in a Population-Based Cohort: The CARDIA Study. Maturitas. 75(3): 289-93. 2013.

16. +Hamra G, **MacLehose RF**, Richardson DB. A gentle introduction to Markov chain Monte Carlo. International Journal of Epidemiology. 42(2): 627-634. 2013.

- 17. Shimotsu ST, Jones-Webb R, **MacLehose RF**, Nelson TF, Forster JL, Lytle LA, Neighborhood Socioeconomic Characteristics, the Retail Environment, and Alcohol Consumption: A Multilevel Analysis. Drug and Alcohol Dependence. 132(3) 449-456. 2013.
- 18. Soliman A, Carlson A, **MacLehose RF**, Schommer JC, Brummel A. Patient characteristics predicting the frequency of medication therapy management visits for diabetes patients. Clinical Therapeutics. 35(4): 534-540. 2013.
- 19. Kubik MY, Davey C, Nanney MS, **MacLehose RF**, Nelson TF, Coombes B. Gaines, stalls and reversals: availability of low-nutrient, energy-dense food and beverages in vending machines and school stores in Minnesota secondary schools, 2002-2010. American Journal of Preventive Medicine. 44(6): 583-588. 2013.
- 20. Huxley R, Lopez F, **MacLehose RF**, Chen LY, Agarwal S, Soliman E, Alonso A. Novel Association between Matrix Metalloproteinase-9 and risk of Incident Atrial Fibrillation: the Atherosclerosis Risk in Communities Study (ARIC). PLOS ONE. 8(3), e59052. 2013.
- 21. Loth K, MacLehose RF, Fulkerson J, Crow S, Neumark-Sztainer D. Food related parenting practices and adolescent weight status: a population based study. Pediatrics. 131(5): 1443-1450. 2013
- 22. \*Harlow B, **MacLehose RF** (co first author), Smolenski DJ, Soares CN, Otto MW, Joffe H, Cohen LS. Depression onset during the menopausal transition: can we trust our data? American Journal of Epidemiology. 177(10):1148-56. 2013.
- 23. Berge JM, MacLehose RF, Loth KA. Eisenberg M, Bucchianeri MM, Neumark-Sztainer D. Parent conversations about healthful eating and weight: associations with adolescent disordered eating behavior. JAMA Pediatrics. 167(8). 746-753. 2013.
- 24. Quick V, Loth K, **MacLehose RF**, Linde JA, Neumark-Sztainer D. Prevalence of adolescents's elfweighing behaviors and associations with weight-related behaviors and psychological well-being. Journal of Adolescent Health. 52(6): 738-744. 2013.
- 25. Hamra G, Richardson DB, **MacLehose RF**, Wing S. Integrating informative priors from experimental research: an example from radiation epidemiology. Epidemiology, 24(1): 90-5. 2013.
- 26. Loth KA, **MacLehose RF**, Fulkerson J, Crow S, Neumark-Sztainer D. Eat this, not that: demographic correlates of food-related parenting practices. Appetite. 60(1): 140-7. 2013
- 27. +Hamra G, MacLehose RF, Cole S. Using weakly informative Bayesian priors to conduct sensitivity analyses for sparse data problems. Epidemiology. 24(2): 233-9. 2013
- 28. Bruening M, Eisenberg M, MacLehose RF, Nanney MS, Story M, Neumark-Sztainer D. Relationship between adolescents' and their friends eating behaviors: breakfast, fruit, vegetable, whole-grain and dairy intake. Journal of the Academy of Nutrition and Dietetics. 112(10): 1608-13. 2012.
- Shimotsu ST, Jones-Webb R, Nelson TF, MacLehose RF, Lytle LA, Forster JL, Van Riper DC, Food and Alcohol Access in Neighborhoods of Varying Socioeconomic Status, Journal of Alcohol and Drug Education, 2012; 56(3): 77-92, December 2012.
- 30. Neumark-Sztainer D, **MacLehose RF**,Loth KA, Fulkerson JA,,Eisenberg ME. What's for dinner? Foods served at family meals in the homes of adolescents and associations with parent characteristics. Public Health Nutrition, 19:1-11. 2012.

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31. +Johnson G, **MacLehose RF**, Baird DD, Laughlin SK, Hartmann KE. Uterine Leiomyomata and time to conception. Human Reproduction. 27(10): 2991-7. 2012

- 32. Shimotsu S, Jones Webb RJ, Lytle LA, **MacLehose RF**, Nelson TF, Forster JL. The Relationships between Fruit and Vegetable Intake, Alcohol Consumption, and Socioeconomic Status. American Journal of Health Promotion. 27(1): 21-8. 2012
- Nguyen Rh, Ecklund A, MacLehose RF, Veasley, C, Harlow B. Co-morbid pain conditions and feelings of invalidation and isolation among women with vulvodynia. Psychology, Health and Medicine. 17(5): 589-98. 2012.
- 34. +Bruening M, MacLehose RF, Loth K, Story M, Neumark-Sztainer D. Feeding a family in a recession: Food insecurity among Minnesota parents. American Journal of Public Health. 102(3): 520-6. 2012.
- 35. Nguyen R, **MacLehose RF**, Veasley C, Turner RM, Harlow BL, Horvath KJ. Comfort in discussing vulvar pain in social relationships among women with vulvodynia. Reproductive Medicine.57(3-4):109-14. 2012
- 36. **MacLehose RF**, Gustafson P. Is probabilistic bias analysis approximately Bayesian? Epidemiology. 23(1):151-8. 2012
- 37. **MacLehose RF**, Kaufman JS. Commentary: the wizard of odds (with discussion). Epidemiology. 23(1):10-2. 2012.
- 38. Motsinger S, Lazovich D, **MacLehose RF**, Torkelson C, Robein K. Vitamin D intake and mental healthrelated quality of life in older women: the Iowa women's health study. Maturitas. 71(3):267-73. 2012
- 39. Lopez FL, Agarwal SK, **MacLehose RF**, Soliman EZ, Sharrett AR, Huxley RR, Konety S, Ballantyne CM, Alonso A. Blood lipid levels, lipid lowering medications, and the incidence of atrial fibrillation: the Atherosclerosis Risk in Communities (ARIC) study. Circ Arrhythm Electrophysiol. 5(1): 155-62. 2012.
- 40. Linde J, Nygaard KE, **MacLehose RF**, Mitchell NR, Harnack LJ, Cousins JM, Graham DJ, Jeffrey RW. Results of a multi-component group randomized worksite environmental intervention trial for weight gain prevention. International Journal of Behavioral Nutrition and Physical Activity. 9(14):1-14. 2012
- 41. Berge JM, **MacLehose RF**, Loth KA, Eisenberg ME, Fulkerson JA, Neumark-Sztainer D. Family Meals: Associations with Weight and Eating Behaviors Among Mothers and Fathers. Appetite.58(3): 1128-1135. 2012.
- 42. Berge JM, MacLehose RF, Eisenberg M, Laska M, Neumark-Sztainer D. How Significant is the 'Significant Other': Associations between Significant Others' Health Behaviors and Young Adults' Health Outcomes. International Journal of Behavioral Nutrition and Physical Activity. 2;9:35. 2012.
- 43. Khandker M, Brady SS, Vitonis AF, **MacLehose RF**, Stewart EG, Harlow BL. The influence of depression and anxiety on risk of adult onset vulvodynia. Journal of Women's Health, 2011
- 44. Kaufman JS, **MacLehose RF**, Torrone E, Savitz DA. A flexible Bayesian hierarchical model of preterm birth risk among US Hispanic Subgroups in Relation to maternal nativity and education. BMC Med Res Meth. 19(11):51. 2011
- 45. Huxley RR, Lopez FL, Folsom AR, Agarwal SK, Loehr LR, Soliman EZ, **Maclehose RF**, Kunety S, Alonso A. Absolute and attributable risks of atrial fibrillation in relation to optimal and borderline risk factors: the Atherosclerosis Risk in Communities (ARIC) Study. Circulation. 123(14):1501-8. 2011
- 46. MacLehose RF, Oakes JM, Carlin B. Turning the Bayesian crank. Epidemiology. 22(3):365-7. 2011

47. Magnani J, Lopez F, Soliman EZ, **MacLehose RF**, Crow RS, Alonso A P Wave Indices, Obesity, and the Metabolic Syndrome: the Atherosclerosis Risk in Community Study. Obesity. 2011.

- 48. Li J, MacLehose RF, Smith K, Hedberg C. Development of a Salmonella screening tool for consumer complaint based foodborne illness surveillance systems. Journal of Food Protection. 74(1): 106-10. 2011.
- 49. Richardson D., **MacLehose RF**, Cole S, Langholz B. Hierarchical latency models for dose-time-response associations. American Journal of Epidemiology. 173(6):695-702. 2011.
- MacLehose RF, Dunson DB. Bayesian semi-parametric multiple shrinkage priors. Biometrics. 66(2): 455-462. 2010
- Kaufman S., Kaufman JS, MacLehose RF. Analytic Bounds on Causal Risk Differences in Directed Acyclic Graphs Involving Three Observed Binary Variables. Journal of Statistical Planning and Inference. 139(10): 3473-87. 2009
- 52. Harlow BL, Vazquez G, **MacLehose RF**, Erickson DJ, Oakes JM, Duval SJ. Self-reported vulvar pain characteristics and their association with clinically confirmed vestibulodynia. Journal of Women's Health. 18(9): 1-12. 2009
- 53. **MacLehose RF**, Dunson DB. Nonparametric Bayes kernel-based priors for functional data analysis. Statistica Sinica. 19(2): 611-630. 2009
- 54. **MacLehose RF**, Olshan A., Herring AH, Honein MA, Shaw GM, Romitti PA. Bayesian methods for correcting misclassification: an example from birth defects epidemiology. Epidemiology. 20(1): 27-35. 2009
- 55. **MacLehose RF**, Herring AH, Savitz DA, Hartmann KE, Singer P, Weinberg H. Tap water disinfection byproducts and time to pregnancy. Epidemiology. 19(3): 451-458. 2008
- 56. Phillips CV, MacLehose RF, Kaufman JS. Errors in statistical tests 3. Emerging themes in Epidemiology. 5:9. 2008.
- 57. Vinikoor LC, Kaufman JS, **MacLehose RF**, Laraia BA. Effects of racial density and income incongruity on pregnancy outcomes in less segregated communities. Social Science in Medicine. 66(2):255-9. 2007
- 58. **MacLehose RF**, Dunson DB, Herring AH, Hoppin JA. Bayesian methods for highly correlated data (with commentary). Epidemiology. 18(2): 199-207. 2007
- 59. Gesink Law DC, **MacLehose RF**, Longnecker MP. Obesity and time to pregnancy. Human Reproduction. 22(2): 414-20. 2007
- 60. **MacLehose RF**, Kaufman S, Kaufman JS, Poole C. Bounding causal effects under uncontrolled confounding using counterfactuals. Epidemiology. 16(4):548-555. 2005
- 61. Kaufman S, Kaufman JS, **MacLehose RF**, Greenland S, Poole C. Improved estimation of controlled direct effects in the presence of unmeasured confounding of intermediate variables. Statistics in Medicine. 24(11):1683-702. 2005
- 62. Kaufman JS, **MacLehose RF**, Kaufman S. A further critique of the analytic strategy of adjusting for covariates to identify biologic mediation. Epidemiologic Perspectives and Innovations. 1(1):4. 2004
- 63. Baldwin LM, **MacLehose RF**, Hart LG, Beaver SK, Every N, Chan L. Quality of care for acute myocardial infarction in rural and urban US hospitals. Journal of Rural Health. 20(2):99-108. 2004

64. Jha A, Patrick DL, **MacLehose RF**, Doctor JN, Chan L. Dissatisfaction with Medical Services Among Medicare Beneficiaries with Disabilities. Archives of Physical Medicine and Rehabilitation. 83(10): 1335-41. 2002

- 65. Chan L, Beaver SK, MacLehose RF, Jha A, Maciejewski M, Doctor JN. Disability and health care costs in the Medicare population. Archives of Physical Medicine and Rehabilitation. 83(9):1196-201. 2002
- 66. Doctor JN, Chan L, **MacLehose RF**, Patrick DL. Weighted health status in the Medicare population: Development of the weighted health index for the Medicare current beneficiaries survey (WHIMCBS). Journal of Outcome Measurement, 4(4), 721-739. 2001
- 67. Chan L, **MacLehose RF**, Houck PM. Impact of Physician Reminders on the Use of Inuenza Vaccinations: a Randomized Trial. Archives of Physical Medicine and Rehabilitation. 83(3):371-5, 2001.
- 68. Chan L, Doctor J, Temkin N, **MacLehose RF**, Esselman P, Bell K, Dikmen S. Insurance type and discharge disposition from acute care following traumatic brain injury. Archives of Internal Medicine. 82(9):1151-4. 2001.
- 69. Chan L, Houck PM, Prela CM, MacLehose RF. Using medicare databases for outcomes research in rehabilitation medicine. American Journal of Physical Medicine and Rehabilitation. 80(6):474-80. 2001
- 70. Houck PM, MacLehose RF, Neiderman M. Initial Empiric antibiotic therapy and mortality among elderly pneumonia inpatients. Chest. 119(5):1420-6. 2000
- 71. Gan SC, Beaver SK, Houck PM, **MacLehose RF**, Lawson HW, Chan L. Treatment of acute myocardial infarction and 30 day mortality among men and women. New England Journal of Medicine. 343(1): 8-15. 2000
- Taplin S, Balow W, Ludman E, MacLehose RF, Meyer DM, Seger D, Herta D, Chin C, Curry S. Testing reminder and motivational telephone calls to increase screening mammography: a randomized study. Journal of the National Cancer Institute. 92(3):233-42. 2000
- 73. **MacLehose RF**, Harpster A, Lanier AP, Schiff MA, Koehler K, Murphy N, Becker TM. Risk factors for cervical dysplasia in Alaska Native women: a pilot study. Alaska Medicine 41(4):76-85. 1999
- 74. Chan L, Doctor JL, **MacLehose RF**, Lawson H, Rosenblat RA, Baldwin LM, Jha A. Do Medicare patients with disabilities receive preventive services? A population-based study. Archives of Physical Medicine and Rehabilitation. 80(6):642-6. 1999

#### Articles Submitted to Peer Review Journals (Not comprehensive)

- + Indicates a publication for which one of Dr. MacLehose's student advisees was first author.
  - 1. Oakes JM, **MacLehose RF**, Harlow BL. Using Administrative Health Care System Records to Recruit a Community-Representative Sample. Submitted to Epidemiology
  - 2. +Bruening M, **MacLehose RF**, Eisenberg ME, Kim S, Story M, Neumark-Sztainer D. Friends like me: associations in overweight status among adolescent friends by race/ethnicity, gender and friendship status. submitted to Archives of Pediatrics.
  - 3. Nelson TF, Hearst MO, Davey C, **MacLehose RF**, Kubik MY, Coulter S, Coombes B, Nanney MS. Disparities in Secondary School Physical Activity Policies and Practices: Statewide Trends in Minnesota 2002-2010. submitted to American Journal of Preventive Medicine
  - 4. MacLehose RF, Hamra G. Application of Bayesian methods to epidemiology. Submitted to Epidemiologic Reports

### Non-refereed Journal Articles

- MacLehose RF. A program for graphing point estimates and confidence intervals. Stata Technical Bulletin. Jul: Vol 56, 2000
- Savitz DA, Singer PC, Hartmann KE, Herring AH, Weinberg HS, Makarushka C, Hoffman C, Chan R, MacLehose RF. Drinking water disinfection by-products and pregnancy outcome. AWWA Research Foundation. 2005

### Invited Presentations Presented at Professional Meetings, Conferences, etc.

- 1. Selection bias in observational research. Division of Environmental Health. Minneapolis, MN 2013
- Bayesian inverse probability weighted models. Society for Epidemiologic Research. Minneapolis, MN 2012
- 3. Direct effects, indirect effects and mediation. University of Minnesota. Minneapolis, MN 2012
- Is probabilistic bias analysis approximately Bayesian? Causal Inference in Health Research, University of Montreal 2011
- 5. Bayesian methods for epidemiologic data analysis. University of North Carolina, 2010
- 6. Is probabilistic bias analysis approximately Bayesian? McGill University, 2010
- Bayesian analysis in epidemiology. Epidemiologic Student Caucus Symposium at the Society for Epidemiologic Research. Anaheim, 2009
- 8. Bayesian hierarchical modeling of dose-response curves. Society for Epidemiologic Research. Anaheim, 2009
- Bayesian hierarchical estimation of dose-response curves. American Public Health Association. San Diego, 2008.
- Kernel mixtures of Gaussian processes. Division of Biostatistics, University of Minnesota. Minneapolis, 2008
- 11. Kernel mixtures of Gaussian processes. Department of Biostatistics, Emory. Atlanta, 2008.
- 12. Bayesian adjustments for misclassification of maternal smoking. Centers for Disease Control and Prevention. Atlanta, 2008.
- 13. Kernel mixtures of Gaussian processes. Department of Biostatistics, Vanderbilt. Nashville, 2008.
- 14. Bayesian parametric and semi-parametric hierarchical models. Vanderbilt. Nashville, 2007
- 15. Bayesian semi-parametric multiple shrinkage priors. Joint Statistical Meetings, Salt Lake City, 2007
- 16. Bayesian Methods for Highly Correlated Data. ENAR. Atlanta, 2007
- 17. Bayesian Methods for Highly Correlated Data. National Institute of Environmental Health Sciences. 2007
- 18. Disinfection By-Products and Spontaneous Abortion: A Bayesian Correction for Errors in Measurement of Time to Loss. Society for Epidemiologic Research. Toronto, 2005

#### TEACHING AND ADVISING

### University of Minnesota

Courses taught

PubH 8342 – Advanced Epidemiologic Methods 2 (co Instructor)

Spring 2014 16 students

PubH 8300 –Novel Theory and Methods in Epidemiology (Co Instructor)

Spring 2013. 19 students

PubH 8300 – Novel Theory and Methods in Epidemiology. (Co Instructor)

Fall 2012. 16 students

PubH 7401 - Fundamentals of Biostatistical Inference. (Sole Instructor)

Fall 2012. 12 students

PubH 7401 - Fundamentals of Biostatistical Inference. (Sole Instructor)

Fall 2011. 24 students

PubH 7401 - Fundamentals of Biostatistical Inference. (Sole Instructor)

Fall 2010. 27 students

PubH 8141 - Doctoral Seminar in Observational Inference. (Co instructor)

Spring 2010 8 students

PubH 7401 - Fundamentals of Biostatistical Inference. (Sole Instructor)

Fall 2009. 16 students

Masters Theses Directed

Ifrah Biyoow (MPH, Epidemiology) Misclassification in case control studies. 2013

Diedre Kiefer (MPH, Epidemiology) A critical analysis of Minnesota's FluSafe program. 2013

Kris Kapphahn (MS, Biostatistics) The effect of missing data in peer networks. 2012

Meg Tabaka (MPH, Epidemiology) Impact of depression history on incident depression during the late reproductive years. 2011

Gayle Johnson (MPH, Biostatistics) Uterine fibroids and fecundability. 2010

Nan Zhang (MS, Biostatistics) Lifetime social support and depression in the late reproductive years. 2010

### Master's Student Advisees

Jonah Popp (Biostatistics)

Brett Peterson (Biostatistics)

Diedre Kiefer (Epidemiology)

Sarah Motsinger (Epidemiology)

Allison Schlak (Epidemiology)

Kara Marlat (Epidemiology)

#### Doctoral Dissertations Directed:

Clemma Muller, dissertation in progress

Craig Meyer, dissertation in progress

## Doctoral Committees Served on (\* current)

- \*Amber Fyfe Johnson, Epidemiology
- \*Bozena Morawski, Epidemiology
- \*Erika Fuchs, Epidemiology
- \*Xiaoye Ma, Biostatistics

Noel Muller, Epidemiology

Katie Loth, Epidemiology

\*Laura Scott, Environmental Health

Ben Al-Haddad, Epidemiology

\*Elizabeth Allen, Environmental Health

Christine Lambert, Environmental Health

- \*Nnaemeka Odo, Environmental Health
- \*Angie Vasquez, Nutrition

Meg Bruening, Nutrition

Ahmed Soliman, Pharmacy

\*Noelle Gronroos, Epidemiology

Katie Schonfeld, Environmental Health

\*Kate Nygaard, Epidemiology

Kelsey McDonald, Epidemiology

Scott Shimotsu, Epidemiology

Brian Lee, Epidemiology

John Li, Epidemiology

#### University of North Carolina at Chapel Hill

Doctoral Committees Served on

Ghassan Hamra, Epidemiology

### McGill University, Montreal

Doctoral Committees Served on

\*Jeremy Lebreque, Epidemiology and Biostatistics

#### SERVICE TO THE DISCIPLINE/PROFESSION

Ad hoc grant reviewer for Psychosocial Risk and Disease Prevention Study Section, NIH. 2013

Ad hoc grant reviewer for the Medical Research Council, United Kingdom. 2012

Roundtable discussion leader, Society for Epidemiologic Research. 2012

Symposium chair, "Teaching Epidemiologic Methods." Society for Epidemiologic Research. 2012

Symposium chair, "Applied Causal Models." Society for Epidemiologic Research. 2010

Symposium chair, "Bayesian Methods in Epidemiologic Research." Society for Epidemiologic Research. 2009

Session chair, "Hierarchical modeling of large biomedical datasets." International Biometric Society, Eastern North American Region. 2007

### SERVICE TO THE UNIVERSITY/COLLEGE/DEPARTMENT

### University of Minnesota

Graduate faculty in Epidemiology and Community Health: 2007-Present

Graduate faculty in Biostatistics: 2007-Present PhD credentials committee: 2009 – Present Part A exam committee: 2010 – present

Seminar committee chair in Biostatistics: 2010 – 2012

Ad hoc Part B exam grader: 2007 - present Ad hoc Part A exam grader: 2007 - present

Ad hoc masters qualifying exam grader in Biostatistics: 2007-2011

Epidemiology FEC: 2012-present

School of Public Health, APT Committee: 2013-present

## University of North Carolina

Visiting scholar, 2006-2008

### OTHER SERVICE

Guest teacher and reader. Lake Harriet Community School, 1st grade Minneapolis United Soccer Coach, girls 5-7 year team Madagascar (undefeated, 2011)