# MICHAEL NODZENSKI

Statistical Research Scientist II Rho, Durham NC michael.nodzenski@gmail.com mnodzenski.com

# **EDUCATION**

**PhD, Biostatistics,** University of North Carolina, Chapel Hill, NC, May 2023 *Advisor*: Clarice Weinberg (NIEHS)

MS, Epidemiology and Biostatistics, Northwestern University, Chicago, IL, June 2015

BA, Biology, Grinnell College, Grinnell, IA, May 2012

# PROFESSIONAL/RESEARCH EXPERIENCE

### Statistical Research Scientist II

Rho, Durham, NC October 2024 - Present

# Research Statistician Developer

SAS, Cary, NC February 2023 – October 2024

## Predoctoral IRTA Fellow

National Institute of Environmental Health Sciences, Research Triangle Park, NC NIH Graduate Partnerships Program
November 2019 - February 2023

#### Graduate Research Assistant

University of North Carolina, Chapel Hill, NC Collaborative Studies Coordinating Center Department of Biostatistics July 2018 - November 2019

## Statistical Analyst Senior

Northwestern University Feinberg School of Medicine, Chicago, IL Department of Preventive Medicine September 2016 - July 2017

## Statistical Analyst

Northwestern University Feinberg School of Medicine, Chicago, IL Department of Preventive Medicine
June 2014 - August 2016

#### Clinical Research Associate

Northwestern University Feinberg School of Medicine, Chicago, IL Department of Dermatology September 2013 - May 2014

#### Postbaccalaureate Research Fellow

Northwestern University Feinberg School of Medicine, Chicago, IL Department of Dermatology August 2012 - August 2013

#### ACADEMIC HONORS AND AWARDS

Kupper Dissertation Publication Award (best doctoral dissertation-based paper published in the preceding year, for *GADGETS: A genetic algorithm for detecting epistasis using nuclear families*), UNC-CH, Department of Biostatistics, 2022

Hardison Scholarship in Bioinformatics, UNC-CH, Department of Biostatistics, 2017

Koch Merit Scholarship in Public Health, UNC-CH, Gillings School of Public Health, 2017

Culminating exam high score, Northwestern University, Epidemiology and Biostatistics Master's Program, 2015

Phi Beta Kappa, Grinnell College, 2012

Graduation with Honors, Grinnell College, Biology Department, 2012

Academic All-America (Baseball), Grinnell College, 2012

Academic All-District (Baseball), Grinnell College, 2011-2012

Academic All-Conference (Baseball), Grinnell College, 2009-2012

Grinnell College Trustees' Honor Scholarship, 2009-2012

#### PEER REVIEWED PUBLICATIONS

Liu W, Patel K, Wang Y, **Nodzenski M**, Nguyen A, Teramura G, Higgins HA, Hoogeveen RC, Couper D, Fu X, Konkle BA, Loop MS, Dong JF. *Dynamic and functional linkage between von Willebrand factor and ADAMTS-13 with aging: an Atherosclerosis Risk in Community study.* J Thromb Haemost. 2023; 21(12):3371-3382.

Dirr MA, Christensen RE, Anvery N, Nadir U, Schaeffer M, Veledar E, Minkis K, **Nodzenski M**, Whittington A, Brieva JC, Tung R, Poon E, Alam M. Pain of local anesthetic injection of lidocaine during subsequent stages of Mohs micrographic surgery: A multicenter prospective cohort study. J Am Acad Dermatol. 2023; 89(1):114-118.

Nodzenski M\*, Shi M\*, Krahn JM, Wise AS, Li Y, Li L, Umbach DM, Weinberg CR. GADGETS: A

genetic algorithm for detecting epistasis using nuclear families. Bioinformatics. 2022; 38(4):1052-1058. (\*co-first authors)

- Poteat TC, Adams MA, Malone J, Geffen S, Greene N, **Nodzenski M**, Lockhart AG, Su IH, Dean LT.

  Delays in breast cancer care by race and sexual orientation: Results from a national survey with diverse women in the United States. Cancer. 2021; 127(19):3514-3522.
- Warrington NM, Beaumont RN, Horikoshi M, Day FR, Helgeland Ø, Laurin C, Bacelis J, Peng S, Hao K, Feenstra B, Wood AR, Mahajan A, Tyrrell J, Robertson NR, Rayner NW, Qiao Z, Moen GH, Vaudel M, Marsit CJ, Chen J, Nodzenski M, Schnurr TM, Zafarmand MH, Bradfield JP, Grarup N, Kooijman MN, Li-Gao R, Geller F, Ahluwalia TS, Paternoster L, Rueedi R, Huikari V, Hottenga JJ, Lyytikäinen LP, Cavadino A, Metrustry S, Cousminer DL, Wu Y, Thiering E, Wang CA, Have CT, Vilor-Tejedor N, Joshi PK, Painter JN, Ntalla I, Myhre R, Pitkänen N, van Leeuwen EM, Joro R, Lagou V. Richmond RC, Espinosa A, Barton SJ, Inskip HM, Holloway JW, Santa-Marina L, Estivill X, Ang W, Marsh JA, Reichetzeder C, Marullo L, Hocher B, Lunetta KL, Murabito JM, Relton CL, Kogevinas M, Chatzi L, Allard C, Bouchard L, Hivert MF, Zhang G, Muglia LJ, Heikkinen J; EGG Consortium, Morgen CS, van Kampen AHC, van Schaik BDC, Mentch FD, Langenberg C, Luan J, Scott RA, Zhao JH, Hemani G, Ring SM, Bennett AJ, Gaulton KJ, Fernandez-Tajes J, van Zuydam NR, Medina-Gomez C, de Haan HG, Rosendaal FR, Kutalik Z, Marques-Vidal P, Das S, Willemsen G, Mbarek H, Müller-Nurasyid M, Standl M, Appel EVR, Fonvig CE, Trier C, van Beijsterveldt CEM, Murcia M, Bustamante M, Bonas-Guarch S, Hougaard DM, Mercader JM, Linneberg A, Schraut KE, Lind PA, Medland SE, Shields BM, Knight BA, Chai JF, Panoutsopoulou K, Bartels M, Sánchez F, Stokholm J, Torrents D, Vinding RK, Willems SM, Atalay M, Chawes BL, Kovacs P, Prokopenko I, Tuke MA, Yaghootkar H, Ruth KS, Jones SE, Loh PR, Murray A, Weedon MN, Tönjes A, Stumvoll M, Michaelsen KF, Eloranta AM, Lakka TA, van Duijn CM, Kiess W, Körner A, Niinikoski H, Pahkala K, Raitakari OT, Jacobsson B, Zeggini E, Dedoussis GV, Teo YY, Saw SM, Montgomery GW, Campbell H, Wilson JF, Vrijkotte TGM, Vrijheid M, de Geus EJCN, Hayes MG, Kadarmideen HN, Holm JC, Beilin LJ, Pennell CE, Heinrich J, Adair LS, Borja JB, Mohlke KL, Eriksson JG, Widén EE, Hattersley AT, Spector TD, Kähönen M, Viikari JS, Lehtimäki T, Boomsma DI, Sebert S, Vollenweider P, Sørensen TIA, Bisgaard H, Bønnelykke K, Murray JC, Melbye M, Nohr EA, Mook-Kanamori DO, Rivadeneira F, Hofman A, Felix JF, Jaddoe VWV, Hansen T, Pisinger C, Vaag AA, Pedersen O, Uitterlinden AG, Järvelin MR, Power C, Hyppönen E, Scholtens DM, Lowe WL Jr, Davey Smith G, Timpson NJ, Morris AP, Wareham NJ, Hakonarson H, Grant SFA, Frayling TM, Lawlor DA, Njølstad PR, Johansson S, Ong KK, McCarthy MI, Perry JRB, Evans DM, Freathy RM. Maternal and fetal genetic effects on birth weight and their relevance to cardio-metabolic risk factors. Nat Genet. 2019; 51(5):804-814.
- Solomon JA, Oswalt M, **Nodzenski M**, Glener J, Schaeffer MR, Cartee TV, Maher IA, Sobanko JF, Waldman A, Yoo SS, Lewis S, Barr M, Marous M, Sledge B, Duke JK, Armstrong AW, Poon E, Veledar E, Dellavalle RP, Alam M. Assessing Skin Biopsy Rates for Histologic Findings Indicative of Nonpathological Cutaneous Disease. Dermatol Surg. 2019;

- Lowe WL Jr, Scholtens DM, Kuang A, Linder B, Lawrence JM, Lebenthal Y, McCance D, Hamilton J, Nodzenski M, Talbot O, Brickman WJ, Clayton P, Ma RC, Tam WH, Dyer AR, Catalano PM, Lowe LP, Metzger BE; HAPO Follow-up Study Cooperative Research Group. Hyperglycemia and Adverse Pregnancy Outcome Follow-up Study (HAPO FUS): Maternal Gestational Diabetes and Childhood Glucose Metabolism. Diabetes Care. 2019; 42(3):372-380.
- Lowe WL Jr, Lowe LP, Kuang A, Catalano PM, Nodzenski M, Talbot O, Tam WH, Sacks DA, McCance D, Linder B, Lebenthal Y, Lawrence JM, Lashley M, Josefson JL, Hamilton J, Deerochanawong C, Clayton P, Brickman WJ, Dyer AR, Scholtens DM, Metzger BE; HAPO Follow-up Study Cooperative Research Group. Maternal glucose levels during pregnancy and childhood adiposity in the Hyperglycemia and Adverse Pregnancy Outcome Follow-up Study. Diabetologia. 2019; 62(4):598-610.
- Kadakia R, Nodzenski M, Talbot O, Kuang A, Bain JR, Muehlbauer MJ, Stevens RD, Ilkayeva OR, O'Neal SK, Lowe LP, Metzger BE, Newgard CB, Scholtens DM, Lowe WL Jr; HAPO Study Cooperative Research Group. *Maternal metabolites during pregnancy are associated with newborn outcomes and hyperinsulinaemia across ancestries*. Diabetologia. 2019; 62(3):473-484.
- Josefson JL, **Nodzenski M**, Talbot O, Scholtens DM, Catalano P. Fat mass estimation in neonates: anthropometric models compared with air displacement plethysmography. Br J Nutr. 2019; 121(3):285-290.
- Powe CE, Nodzenski M, Talbot O, Allard C, Briggs C, Leya MV, Perron P,Bouchard L, Florez JC, Scholtens DM, Lowe WL Jr, Hivert MF. *Genetic Determinants of Glycemic Traits and the Risk of Gestational Diabetes Mellitus*. Diabetes. 2018; 67(12):2703-2709.
- Lowe WL Jr, Scholtens DM, Lowe LP, Kuang A, **Nodzenski M**, Talbot O, Catalano PM, Linder B, Brickman WJ, Clayton P, Deerochanawong C, Hamilton J, Josefson JL, Lashley M, Lawrence JM, Lebenthal Y, Ma R, Maresh M, McCance D, Tam WH, Sacks DA, Dyer AR, Metzger BE; HAPO Follow-up Study Cooperative Research Group. Association of Gestational Diabetes With Maternal Disorders of Glucose Metabolism and Childhood Adiposity. JAMA. 2018; 320(10):1005-1016.
- Hughes AE, Nodzenski M, Beaumont RN, Talbot O, Shields BM, Scholtens DM, Knight BA, Lowe WL Jr, Hattersley AT, Freathy RM. Fetal Genotype and Maternal Glucose have Independent and Additive Effects on Birth Weight. Diabetes. 2018; 67(5):1024-1029.
- Beaumont RN, Warrington NM, Cavadino A, Tyrrell J, **Nodzenski M**, Horikoshi M, Geller F, Myhre R, Richmond RC, Paternoster L, Bradfield JP, Kreiner-Møller E, Huikari V, Metrustry S, Lunetta KL, Painter JN, Hottenga JJ, Allard C, Barton SJ, Espinosa A, Marsh JA, Potter C, Zhang G, Ang W, Berry DJ, Bouchard L, Das S; Early Growth Genetics (EGG) Consortium, Hakonarson H, Heikkinen J, Helgeland Ø, Hocher B, Hofman A,

- Inskip HM, Jones SE, Kogevinas M, Lind PA, Marullo L, Medland SE, Murray A, Murray JC, Njølstad PR, Nohr EA, Reichetzeder C, Ring SM, Ruth KS, Santa-Marina L, Scholtens DM, Sebert S, Sengpiel V, Tuke MA, Vaudel M, Weedon MN, Willemsen G, Wood AR, Yaghootkar H, Muglia LJ, Bartels M, Relton CL, Pennell CE, Chatzi L, Estivill X, Holloway JW, Boomsma DI, Montgomery GW, Murabito JM, Spector TD, Power C, Järvelin MR, Bisgaard H, Grant SFA, Sørensen TIA, Jaddoe VW, Jacobsson B, Melbye M, McCarthy MI, Hattersley AT, Hayes MG, Frayling TM, Hivert MF, Felix JF, Hyppönen E, Lowe WL Jr, Evans DM, Lawlor DA, Feenstra B, Freathy RM. Genome-wide association study of offspring birth weight in 86 577 women identifies five novel loci and highlights maternal genetic effects that are independent of fetal genetics. Hum Mol Genet. 2018; 27(4):742-756.
- Jacob S\*, Nodzenski M\*, Reisetter AC, Bain JR, Muehlbauer MJ, Stevens RD, Ilkayeva OR, Lowe LP, Metzger BE, Newgard CB, Scholtens DM, Lowe WL Jr; HAPO Study Cooperative Research Group. Targeted Metabolomics Demonstrates Distinct and Overlapping Maternal Metabolites Associated With BMI, Glucose, and Insulin Sensitivity During Pregnancy Across Four Ancestry Groups. Diabetes Care. 2017; 40(7):911-919. (\*co-first authors)
- Lowe WL Jr, Bain JR, **Nodzenski M**, Reisetter AC, Muehlbauer MJ, Stevens RD, Ilkayeva OR, Lowe LP, Metzger BE, Newgard CB, Scholtens DM; HAPO Study Cooperative Research Group. *Maternal BMI and Glycemia Impact the Fetal Metabolome*. Diabetes Care. 2017; 40(7):902-910.
- Guo C, McDowell IC, **Nodzenski M**, Scholtens DM, Allen AS, Lowe WL, Reddy TE. *Transversions have larger regulatory effects than transitions*. BMC Genomics. 2017; 18(1):394.
- Petry CJ, Mooslehner K, Prentice P, Hayes MG, **Nodzenski M**, Scholtens DM, Hughes IA, Acerini CL, Ong KK, Lowe WL Jr, Dunger DB. Associations between a fetal imprinted gene allele score and late pregnancy maternal glucose concentrations. Diabetes Metab. 2017; 43(4):323-331.
- Hivert MF, Scholtens DM, Allard C, **Nodzenski M**, Bouchard L, Brisson D, Lowe LP, McDowell I, Reddy T, Dastani Z, Richards JB, Hayes MG, Lowe WL Jr. *Genetic determinants of adiponectin regulation revealed by pregnancy*. Obesity (Silver Spring). 2017; 25(5):935-944.
- Reisetter AC, Muehlbauer MJ, Bain JR, **Nodzenski M**, Stevens RD, Ilkayeva O, Metzger BE, Newgard CB, Lowe WL Jr, Scholtens DM. *Mixture model normalization for non-targeted gas chromatography/mass spectrometry metabolomics data*. BMC Bioinformatics. 2017; 18(1):84.
- Sandler V, Reisetter AC, Bain JR, Muehlbauer MJ, **Nodzenski M**, Stevens RD, Ilkayeva O, Lowe LP, Metzger BE, Newgard CB, Scholtens DM, Lowe WL Jr; HAPO Study Cooperative Research Group. Associations of maternal BMI and insulin resistance with the maternal metabolome and newborn outcomes. Diabetologia. 2017; 60(3):518-530.

- Petry CJ, Sanz Marcos N, Pimentel G, Hayes MG, **Nodzenski M**, Scholtens DM, Hughes IA, Acerini CL, Ong KK, Lowe WL Jr, Dunger DB. Associations Between Fetal Imprinted Genes and Maternal Blood Pressure in Pregnancy. Hypertension. 2016; 68: 1459-1466.
- Horikoshi M, Beaumont RN, Day FR, Warrington NM, Kooijman MN, Fernandez-Tajes J, Feenstra B, van Zuydam NR, Gaulton KJ, Grarup N, Bradfield JP, Strachan DP, Li-Gao R, Ahluwalia TS, Kreiner E, Rueedi R, Lyytikäinen LP, Cousminer DL, Wu Y, Thiering E, Wang CA, Have CT, Hottenga JJ, Vilor-Tejedor N, Joshi PK, Boh ET, Ntalla I, Pitkänen N, Mahajan A, van Leeuwen EM, Joro R, Lagou V, Nodzenski M, Diver LA, Zondervan KT, Bustamante M, Marques-Vidal P, Mercader JM, Bennett AJ, Rahmioglu N, Nyholt DR, Ma RC, Tam CH, Tam WH; CHARGE Consortium Hematology Working Group, Ganesh SK, van Rooij FJ, Jones SE, Loh PR, Ruth KS, Tuke MA, Tyrrell J, Wood AR, Yaghootkar H, Scholtens DM, Paternoster L, Prokopenko I, Kovacs P, Atalay M, Willems SM, Panoutsopoulou K, Wang X, Carstensen L, Geller F, Schraut KE, Murcia M, van Beijsterveldt CE, Willemsen G, Appel EV, Fonvig CE, Trier C, Tiesler CM, Standl M, Kutalik Z, Bonàs-Guarch S, Hougaard DM, Sánchez F, Torrents D, Waage J, Hollegaard MV, de Haan HG, Rosendaal FR, Medina-Gomez C, Ring SM, Hemani G, McMahon G, Robertson NR, Groves CJ, Langenberg C, Luan J, Scott RA, Zhao JH, Mentch FD, MacKenzie SM, Reynolds RM; Early Growth Genetics (EGG) Consortium, Lowe WL, Tönjes A, Stumvoll M, Lindi V, Lakka TA, van Duijn CM, Kiess W, Körner A, Sørensen TI, Niinikoski H, Pahkala K, Raitakari OT, Zeggini E, Dedoussis GV, Teo YY, Saw SM, Melbye M, Campbell H, Wilson JF, Vrijheid M, de Geus EJ, Boomsma DI, Kadarmideen HN, Holm JC, Hansen T, Sebert S, Hattersley AT, Beilin LJ, Newnham JP, Pennell CE, Heinrich J, Adair LS, Borja JB, Mohlke KL, Eriksson JG, Widén E, Kähönen M, Viikari JS, Lehtimäki T, Vollenweider P, Bønnelykke K, Bisgaard H, Mook-Kanamori DO, Hofman A, Rivadeneira F, Uitterlinden AG, Pisinger C, Pedersen O, Power C, Hyppönen E, Wareham NJ, Hakonarson H, Davies E, Walker BR, Jaddoe VW, Järvelin MR, Grant SF, Vaag AA, Lawlor DA, Frayling TM, Smith GD, Morris AP, Ong KK, Felix JF, Timpson NJ, Perry JR, Evans DM, McCarthy MI, Freathy RM. Genome-wide associations for birth weight and correlations with adult disease. Nature. 2016; 538(7624):248-252.
- Scholtens DM, Bain JR, Reisetter AC, Muehlbauer MJ, **Nodzenski M**, Stevens RD, Ilkayeva O, Lowe LP, Metzger BE, Newgard CB, Lowe WL Jr. *Metabolic networks and metabolites underlie associations between maternal glucose during pregnancy and newborn size at birth*. Diabetes. 2016; 65(7):2039-50.
- Tyrrell J, Richmond RC, Palmer TM, Feenstra B, Rangarajan J, Metrustry S, Cavadino A, Paternoster L, Armstrong LL, De Silva NM, Wood AR, Horikoshi M, Geller F, Myhre R, Bradfield JP, Kreiner-Møller E, Huikari V, Painter JN, Hottenga JJ, Allard C, Berry DJ, Bouchard L, Das S, Evans DM, Hakonarson H, Hayes MG, Heikkinen J, Hofman A, Knight B, Lind PA, McCarthy MI, McMahon G, Medland SE, Melbye M, Morris AP, Nodzenski M, Reichetzeder C, Ring SM, Sebert S, Sengpiel V, Sørensen TI, Willemsen G, de Geus EJ, Martin NG, Spector TD, Power C, Järvelin MR, Bisgaard H, Grant SF, Nohr EA, Jaddoe

- VW, Jacobsson B, Murray JC, Hocher B, Hattersley AT, Scholtens DM, Davey Smith G, Hivert MF, Felix JF, Hyppönen E, Lowe WL Jr, Frayling TM, Lawlor DA, Freathy RM; Early Growth Genetics (EGG) Consortium. *Genetic Evidence for Causal Relationships Between Maternal Obesity-Related Traits and Birth Weight*. JAMA. 2016; 315(11):1129-40.
- Alexis AF, Coley MK, Nijhawan RI, Luke JD, Shah SK, Argobi YA, **Nodzenski M**, Veledar E, Alam M. Nonablative Fractional Laser Resurfacing for Acne Scarring in Patients With Fitzpatrick Skin Phototypes IV-VI. Dermatol Surg. 2016; 42(3):392-402.
- Alam M, Khan M, Veledar E, Pongprutthipan M, Flores A, Dubina M, **Nodzenski M**, Yoo SS.

  \*\*Correlation of Inflammation in Frozen Sections With Site of Nonmelanoma Skin Cancer.

  JAMA Dermatol. 2016; 152(2):173-6.
- Alam M, Desai S, **Nodzenski M**, Dubina M, Kim N, Martini M, Fife D, Reid D, Pirigyi M, Poon E, Hsu J, Yoo S, Bhatia A. *Active ascertainment of recurrence rate after treatment of primary basal cell carcinoma (BCC)*. J Am Acad Dermatol. 2015; 73(2): 323-5.
- Vockely, C, Guo C, Majoros W, **Nodzenski M**, Scholtens D, Hayes M, Lowe W, Reddy T. *Massively parallel quantification of the regulatory effects of non-coding genetic variation in a human cohort.* Genome Res. 2015; 25(8): 1206-14.
- Alam M, Geisler A, Sadhwani D, Poon E, **Nodzenski M**, Schaffer M, Tung R, Minkis K. The Effect of Needle Size on Pain Perception in Patients Treated with Botulinum Toxin A Injections: A Split-Face, Patient- and Injector-Blinded Randomized Controlled Trial. JAMA Dermatol. 2015; 151(11):1194-9.
- Alam M, Kakar R, Nodzenski M, Ibrahim O, Disphanurat W, Bolotin D, Borovicka JH, Pace N, Alster TS, Arndt KA, Beer KR, Berlin JM, Bernstein LJ, Brightman LA, Butterwick K, Cox SE, Chotzen V, Fabi SG, Fitzpatrick RE, Geronemus RG, Goldman MP, Groff WF, Kaminer MS, Kilmer S, Rohrer TE, Tanzi EL, Silva SK, Yoo SS, Weinkle SH, Strasswimmer J, Poon E, Dover JS. Multicenter Prospective Cohort Study of the Incidence of Adverse Events Associated With Cosmetic Dermatologic Procedures: Lasers, Energy Devices, and Injectable Neurotoxins and Fillers. JAMA Dermatol. 2015; 151(3): 271-7.
- Ibrahim O, Khan M, Bolotin D, Dubina M, **Nodzenski M**, Disphanurat W, Kakar R, Yoo S, Whiting D, West DP, Poon E, Veledar E, Alam M. *Treatment of Keratosis Pilaris With 810-nm Diode Laser: Randomized Clinical Trial.* JAMA Dermatol. 2015; 151(2): 187-91.
- Alam M, Rauf M, Ali S, **Nodzenski M**, Minkis K. A systematic review of reporting in randomized controlled trials in dermatologic surgery: jadad scores, power analysis, and sample size determination. Dermatol Surg. 2014; 40(12):1299-305.
- Nodzenski M, Muehlbauer MJ, Bain JR, Reisetter AC, Lowe WL Jr, Scholtens DM. *Metabomxtr: an R package for mixture-model analysis of non-targeted metabolomics data*. Bioinformatics.

- Alam M, Han S, Pongprutthipan M, Disphanurat W, Kakar R, **Nodzenski M**, Pace N, Kim N, Yoo S, Veledar E, Poon E, West DP. *Efficacy of a needling device for the treatment of acne scars: a randomized clinical trial.* JAMA Dermatol. 2014; 150(8):844-9.
- Hattori Y, Falgout L, Lee W, Jung SY, Poon E, Lee JW, Na I, Geisler A, Sadhwani D, Zhang Y, Su Y, Wang X, Liu Z, Xia J, Cheng H, Webb RC, Bonifas AP, Won P, Jeong JW, Jang KI, Song YM, Nardone B, Nodzenski M, Fan JA, Huang Y, West DP, Paller AS, Alam M, Yeo WH, Rogers JA. Multifunctional Skin-Like Electronics for Quantitative, Clinical Monitoring of Cutaneous Wound Healing. Adv Healthc Mater. 2014; 3(10):1597-607.
- Alam M, Nodzenski M, Yoo S, Poon E, Bolotin D. Objective Structured Assessment of Technical Skills in Elliptical Excision Repair of Senior Dermatology Residents: A Multirater, Blinded Study of Operating Room Video Recordings. JAMA Dermatol. 2014; 150(6):608-12.
- Alam M, Lee A, Ibrahimi OA, Kim N, Bordeaux J, Chen K, Dinehart S, Goldberg DJ, Hanke CW, Hruza GJ, Nehal KS, Olbricht SM, Orringer J, Rohrer TE, Scheinfeld NS, Schmults CD, Strasswimmer JM, Taylor JS, Yoo S, **Nodzenski M**, Poon E, Cartee T; for the Cutaneous Surgery Consensus Group. A Multistep Approach to Improving Biopsy Site Identification in Dermatology: Physician, Staff, and Patient Roles Based on a Delphi Consensus. JAMA Dermatol. 2014; 150(5):550-8.
- Kamalpour L, Brindise RT, **Nodzenski M**, Bach DQ, Veledar E, Alam M. *Primary Cutaneous Mucinous Carcinoma: A Systematic Review and Meta-Analysis of Outcomes After Surgery*. JAMA Dermatol. 2014; 150(4):380-4.
- Dubina M, Tung R, Bolotin D, Mahoney AM, Tayebi B, Sato M, Mulinari-Brenner F, Jones T, West DP, Poon E, Nodzenski M, Alam M. Treatment of forehead/glabellar rhytide complex with combination botulinum toxin a and hyaluronic acid versus botulinum toxin a injection alone: a split-face, rater-blinded, randomized control trial. J Cosmet Dermatol. 2013; 12(4):261-6.
- Alam M, Ibrahim O, Nodzenski M, Strasswimmer JM, Jiang SI, Cohen JL, Albano BJ, Batra P, Behshad R, Benedetto AV, Chan CS, Chilukuri S, Crocker C, Crystal HW, Dhir A, Faulconer VA, Goldberg LH, Goodman C, Greenbaum SS, Hale EK, Hanke CW, Hruza GJ, Jacobson L, Jones J, Kimyai-Asadi A, Kouba D, Lahti J, Macias K, Miller SJ, Monk E, Nguyen TH, Oganesyan G, Pennie M, Pontius K, Posten W, Reichel JL, Rohrer TE, Rooney JA, Tran HT, Poon E, Bolotin D, Dubina M, Pace N, Kim N, Disphanurat W, Kathawalla U, Kakar R, West DP, Veledar E, Yoo S. Adverse Events Associated With Mohs Micrographic Surgery: Multicenter Prospective Cohort Study of 20, 821 Cases at 23 Centers. JAMA Dermatol. 2013; 149(12):1378-85.
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- Alam M, Voravutinon N, Warycha M, Whiting D, **Nodzenski M**, Yoo S, West DP, Veledar E, Poon E. Comparative effectiveness of nonpurpuragenic 595-nm pulsed dye laser and microsecond 1064-nm neodymium:yttrium-aluminum-garnet laser for treatment of diffuse facial erythema: A double-blind randomized controlled trial. J Am Acad Dermatol. 2013; 69(3):438-43.
- Ibrahim O, Kakar R, Bolotin D, **Nodzenski M**, Disphanurat W, Pace N, Becker L, West DP, Poon E, Veledar E, Alam M. The comparative effectiveness of suction-curettage and onabotulinumtoxin-A injections for the treatment of primary focal axillary hyperhidrosis: a randomized control trial. J Am Acad Dermatol. 2013; 69(1):88-95.

## **SOFTWARE**

# Open-source

- epistasisGA An R package implementing the GADGETS method (Genetic Algorithm for Detecting Genetic Epistasis using Trios or Siblings) to mine genetic data from family based studies for higher order epistatic interactions. Available through *Bioconductor*: https://www.bioconductor.org/packages/release/bioc/html/epistasisGA.html.
- metabomxtr An R package for mixture model analysis of non-targeted metabolomics data. Available through *Bioconductor*: http://bioconductor.org/packages/release/bioc/html/metabomxtr.html.

# **Proprietary**

SAS IML – Developed statistical functions for SAS IML (Interactive Matrix Language) software.

Examples of functions written include REGCOMP, which performs Passing-Bablok and Deming regression, and MOVEWIN, which computes moving-window statistics.

#### TECHNICAL SKILLS

Statistical Software: SAS, R

Other: C, C++, Python, Shell Scripting (Bash), Cluster Computing, Git

## LEADERSHIP AND OTHER HONORS

Team Captain, Grinnell College Baseball Team, 2011, 2012
ABCA/Rawlings All America Baseball Team, Grinnell College, 2011
ABCA/Rawlings All Region Baseball Team, Grinnell College, 2010, 2011, 2012
Midwest Conference South Division Player of the Year, Grinnell College, 2009, 2010, 2011, 2012
Grinnell College Athletic Hall of Fame, Class of 2020