CURRICULUM VITAE

I. Biographical Sketch

Name:	Matthew Bruce McQueen
Current Positions:	Associate Professor of Integrative Physiology Faculty Fellow at the Institute for Behavioral Genetics (IBG) Faculty Associate at the Institute of Behavioral Science (IBS) University of Colorado Boulder
	Director, Public Health Certificate Program College of Arts & Sciences University of Colorado Boulder
	Associate Professor of Epidemiology (secondary appointment) Colorado School of Public Health University of Colorado (Anschutz Medical Campus)
Work Address:	Department of Integrative Physiology 354 UCB University of Colorado Boulder Boulder, CO 80309 Phone: (303) 735-5158 Fax: 303-492-4009 Email: matt.mcqueen@colorado.edu

II. Education

University of Colorado Boulder; Boulder, CO 1996
Bachelor of Arts (B.A.) in Psychology (Neuroscience Emphasis)
Graduated *Magna Cum Laude*

University of Washington School of Public Health; Seattle, WA 2000
Master of Science (M.S.) in Public Health (Certificate in Public Health Genetics)
Advisor: James Woods, Ph.D. (Environmental Health/Toxicology)

Harvard School of Public Health; Boston, MA 2005
Doctor of Science (Sc.D.) in Epidemiology (Minor in Biostatistics)
Advisors: Nan Laird, Ph.D. (Biostatistics) and Deborah Blacker, M.D./Ph.D. (Epidemiology)

Harvard School of Public Health; Boston, MA 2006
Postdoctoral Fellowship in Biostatistics
Advisor: Nan Laird, Ph.D. (Biostatistics)

III. Publications (since and including 2016)

Refereed Journal Articles

1. DeVan AE, Johnson LC, Brooks FA, Evans TD, Justice JN, Cruickshank-Quinn C, Reisdorph N, Bryan NS, **McQueen MB**, Santos-Parker JR, Chonchol MB, Bassett CJ, Sindler AL, Giordano T, Seals DR (2016). Effects of sodium nitrite supplementation on vascular function and related small metabolite signatures in middle-aged and older adults. *J Appl Physiol* 120:416-425.
2. Domingue BW, Wedow R, Conley D, **McQueen MB**, Hoffmann TJ, Boardman JD (2016). Genome-Wide Estimates of Heritability for Social Demographic Outcomes. *Biodemography Soc Biol* 62:1-18.
3. Bohr AD, Laurson K, **McQueen MB** (2016). A novel cutoff for the waist-to-height ratio predicting metabolic syndrome in young American adults. *BMC Public Health* 16:295.
4. Kaplon RE, Hill SD, Bispham NZ, Santos-Parker JR, Nowlan MJ, Snyder LL, Chonchol M, LaRocca TJ, **McQueen MB**, Seals DR (2016). Oral trehalose supplementation improves resistance artery endothelial function in healthy middle-aged and older adults. *Aging (Albany NY)* 8: 1167-1183.
5. Melroy-Greif WE, Vadasz C, Kamens HM, **McQueen MB**, Corley RP, Stallings MC, Hopfer CJ, Krauter KS, Brown SA, Hewitt JK, Ehringer MA (2016). Test for association of common variants in GRM7 with alcohol consumption. *Alcohol* 55:43-50.
6. Schrock JB, Kraeutler MJ, Houck DA, **McQueen MB**, McCarty EC (2017). A Cost-Effectiveness Analysis of Surgical Treatment Modalities for Chondral Lesions of the Knee: Microfracture, Osteochondral Autograph Transplantation, and Autologous Chondrocyte Implantation. *Orthop J Sports Med eCollection 2017 May*.
7. Demmitt BA, Corley RP, Huibregtse BM, Keller MC, Hewitt JK, **McQueen MB**, Knight R, McDermott I, Krauter KS (2017). Genetic Influences on the Human Oral Microbiome. *BMC Genomics* 18:659.
8. Hemmings SMJ, Malan-Müller S, van den Heuvel LL, Demmitt BA, Stanislawski MA, Smith DG, Bohr AD, Stamper CE, Hyde ER, Morton JT, Marotz CA, Siebler PH, Braspenning M, Van Criekinge W, Hoisington AJ, Brenner LA, Postolache TT, **McQueen MB**, Krauter KS, Knight R, Seedat S, Lowry CA (2017). The Microbiome in Posttraumatic Stress Disorder and Trauma-Exposed Controls: An Exploratory Study. *Psychosom Med* 79:936-946.
9. Goldmann E, Stark JH, Kapadia F, **McQueen MB**. Teaching Epidemiology at the Undergraduate Level: Considerations and Approaches (2018). *Am J Epidemiol* 187(6):1143–1148.
10. Johnson LC, Martens CR, Santos-Parker JR, Bassett CJ, Strahler TR, Cruickshank-Quinn C, Reisdorph N, **McQueen MB**, Seals DR. Amino acid and lipid associated plasma metabolomic patterns are related to healthspan indicators with aging in humans (2018). *Clin Sci* 132(16):CS20180409.
11. Martens CR, Denman BA, Mazzo MR, Armstrong ML, Reisdorph N, **McQueen MB**, Chonchol M, Seals DR (2018). Chronic nicotinamide riboside supplementation is well-Tolerated and elevates NAD+ in healthy middle-Aged and older adults. *Nat Commun* 9(1):1286.
12. Santos-Parker JR, Santos-Parker KS, **McQueen MB**, Martens CR, Seals DR (2018). Habitual aerobic exercise and circulating proteomic patterns in healthy adults: relation to indicators of healthspan. *J Appl Physiol* 125(5):1646–1659.
13. Walters RK, Polimanti R, Johnson EC, McClintick JN, Adams MJ, Adkins AE, Aliev F, Bacanu S-A, Batzler A, Bertelsen S, Biernacka JM, Bigdeli TB, Chen L-S, Clarke T-K, Chou Y-L, Degenhardt F, Docherty AR, Edwards AC, Fontanillas P, Foo JC, Fox L, Frank J, Giegling I, Gordon S, Hack LM, Hartmann AM, Hartz SM, Heilmann-Heimbach S, Herms S, Hodgkinson C, Hoffmann P, Jan Hottenga J, Kennedy MA, Alanne-Kinnunen M, Konte B, Lahti J, Lahti-Pulkkinen M, Lai D, Ligthart L, Loukola A, Maher BS, Mbarek H, McIntosh AM, **McQueen MB**, Meyers JL, Milaneschi Y, Palviainen T, Pearson JF, Peterson RE, Ripatti S, Ryu E, Saccone NL, Salvatore JE, Sanchez-Roige S, Schwandt M, Sherva R, Streit F, Strohmaier J, Thomas N, Wang J-C, Webb BT, Wedow R, Wetherill L, Wills AG, Boardman JD, Chen D, Choi D-S, Copeland WE, Culverhouse RC, Dahmen N, Degenhardt L, Domingue BW, Elson SL, Frye MA, Gäbel W,

Hayward C, Ising M, Keyes M, Kiefer F, Kramer J, Kuperman S, Lucae S, Lynskey MT, Maier W, Mann K, Männistö S, Müller-Myhsok B, Murray AD, Nurnberger JI, Palotie A, Preuss U, Räikkönen K, Reynolds MD, Ridinger M, Scherbaum N, Schuckit MA, Soyka M, Treutlein J, Witt S, Wodarz N, Zill P, Adkins DE, Boden JM, Boomsma DI, Bierut LJ, Brown SA, Bucholz KK, Cichon S, Costello EJ, de Wit H, Diazgranados N, Dick DM, Eriksson JG, Farrer LA, Foroud TM, Gillespie NA, Goate AM, Goldman D, Grucza RA, Hancock DB, Harris KM, Heath AC, Hesselbrock V, Hewitt JK, Hopfer CJ, Horwood J, Iacono W, Johnson EO, Kaprio JA, Karpyak VM, Kendler KS, Kranzler HR, Krauter K, Lichtenstein P, Lind PA, McGue M, MacKillop J, Madden PAF, Maes HH, Magnusson P, Martin NG, Medland SE, Montgomery GW, Nelson EC, Nöthen MM, Palmer AA, Pedersen NL, Penninx BWJH, Porjesz B, Rice JP, Rietschel M, Riley BP, Rose R, Rujescu D, Shen P-H, Silberg J, Stallings MC, Tarter RE, Vanyukov MM, Vrieze S, Wall TL, Whitfield JB, Zhao H, Neale BM, Gelernter J, Edenberg HJ, Agrawal A, Agrawal A (2018). Transancestral GWAS of alcohol dependence reveals common genetic underpinnings with psychiatric disorders. *Nat Neurosci* 21(12):1656–1669.

14. Liu M, Jiang Y, Wedow R, Li Y, Brazel DM, Chen F, Datta G, Davila-Velderrain J, McGuire D, Tian C, Zhan X, Choquet H, Docherty AR, Faul JD, Foerster JR, Fritsche LG, Gabrielsen ME, Gordon SD, Haessler J, Hottenga J-J, Huang H, Jang S-K, Jansen PR, Ling Y, Mägi R, Matoba N, McMahon G, Mulas A, Orrù V, Palviainen T, Pandit A, Reginsson GW, Skogholt AH, Smith JA, Taylor AE, Turman C, Willemsen G, Young H, Young KA, Zajac GJM, Zhao W, Zhou W, Bjornsdottir G, Boardman JD, Boehnke M, Boomsma DI, Chen C, Cucca F, Davies GE, Eaton CB, Ehringer MA, Esko T, Fiorillo E, Gillespie NA, Gudbjartsson DF, Haller T, Harris KM, Heath AC, Hewitt JK, Hickie IB, Hokanson JE, Hopfer CJ, Hunter DJ, Iacono WG, Johnson EO, Kamatani Y, Kardia SLR, Keller MC, Kellis M, Kooperberg C, Kraft P, Krauter KS, Laakso M, Lind PA, Loukola A, Lutz SM, Madden PAF, Martin NG, McGue M, **McQueen MB**, Medland SE, Metspalu A, Mohlke KL, Nielsen JB, Okada Y, Peters U, Polderman TJC, Posthuma D, Reiner AP, Rice JP, Rimm E, Rose RJ, Runarsdottir V, Stallings MC, Stančáková A, Stefansson H, Thai KK, Tindle HA, Tyrfingsson T, Wall TL, Weir DR, Weisner C, Whitfield JB, Winsvold BS, Yin J, Zuccolo L, Bierut LJ, Hveem K, Lee JJ, Munafò MR, Saccone NL, Willer CJ, Cornelis MC, David SP, Hinds DA, Jorgenson E, Kaprio J, Stitzel JA, Stefansson K, Thorgeirsson TE, Abecasis G, Liu DJ, Vrieze S, Liu DJ, Vrieze S (2019). Association studies of up to 1.2 million individuals yield new insights into the genetic etiology of tobacco and alcohol use. *Nat Genet* [Epub Ahead of Print].

15. Karlsson Linnér R, Biroli P, Kong E, Meddens SFW, Wedow R, Fontana MA, Lebreton M, Tino SP, Abdellaoui A, Hammerschlag AR, Nivard MG, Okbay A, Rietveld CA, Timshel PN, Trzaskowski M, Vlaming R de, Zünd CL, Bao Y, Buzdugan L, Caplin AH, Chen C-Y, Eibich P, Fontanillas P, Gonzalez JR, Joshi PK, Karhunen V, Kleinman A, Levin RZ, Lill CM, Meddens GA, Muntané G, Sanchez-Roige S, Rooij FJ van, Taskesen E, Wu Y, Zhang F, Auton A, Boardman JD, Clark DW, Conlin A, Dolan CC, Fischbacher U, Groenen PJF, Harris KM, Hasler G, Hofman A, Ikram MA, Jain S, Karlsson R, Kessler RC, Kooyman M, MacKillop J, Männikkö M, Morcillo-Suarez C, **McQueen MB**, Schmidt KM, Smart MC, Sutter M, Thurik AR, Uitterlinden AG, White J, Wit H de, Yang J, Bertram L, Boomsma DI, Esko T, Fehr E, Hinds DA, Johannesson M, Kumari M, Laibson D, Magnusson PKE, Meyer MN, Navarro A, Palmer AA, Pers TH, Posthuma D, Schunk D, Stein MB, Svento R, Tiemeier H, Timmers PRHJ, Turley P, Ursano RJ, Wagner GG, Wilson JF, Gratten J, Lee JJ, Cesarini D, Benjamin DJ, Koellinger PD, Beauchamp JP, Cesarini D, Benjamin DJ, Koellinger PD, Beauchamp JP (2019). Genome-wide association analyses of risk tolerance and risky behaviors in over 1 million individuals identify hundreds of loci and shared genetic influences. *Nat Genet* [Epub Ahead of Print].

IV. Grant Support

Active

R01 AG013038 (Seals) 04/01/2014 - 03/31/2019
NIH/NIA $3,001,996 (total direct)
Nitrite Supplementation for Improving Physiological Function in Older Adults
Nitric oxide (NO) is an essential molecule in the body that decreases with aging and causes reductions in vascular, movement ("motor") and cognitive functions. This study will determine if daily oral supplementation (3 months) with a compound that increases NO in the body, i.e., sodium nitrite, improves vascular, motor and cognitive function in older adults. The project also seeks to provide insight into the biological reasons (mechanisms) by which supplementation with sodium nitrite improves physiological function in older adults.
Role: Co-I

R01 DA035804 (Hopfer/Stallings) 04/01/2014 - 03/31/2019
NIH/NIDA $3,772,718 (total direct)
Genetics and Progression of Early-Onset Substance Dependence and HIV Risk
Adolescent onset substance use problems present a serious public health problem. Youth who exhibit drug and alcohol problems are at high risk for persisting with these behaviors as they become adults and many develop more serious addictions, including cocaine, methamphetamine, and opiate addictions. This study will follow the largest sample of youth who presented with adolescent onset substance problems into adulthood.
Role: Co-I

R01 HL131458 (DeSouza/Connick) 01/15/2016-12/31/2019
NIH/NHLBI $556,017 (total direct)
HIV-1, Insufficient Sleep and Vascular Endothelial Dysfunction
The aims of this proposal to: 1) to determine the influence of chronic insufficient sleep (< 6.5 hours/night) on vascular endothelial vasodilator and fibrinolytic function in antiretroviral-treated older HIV-1-seropositive adults; and 2) to determine whether increasing habitual sleep duration and quality will improve vascular health in this population.
Role: Co-I

2-02_Pac-12-Colorado-McQueen-16-01 (McQueen) 07/01/2016-06/30/2019
Pacific-12 (Pac-12) Athletic Conference $755,973 (total direct)
Assessing Student-Athlete Health and Performance
The proposed research will (1) Develop protocols and criteria to assess student-athlete health, wellness and performance, (2) Integrate data and information collected with the Pac-12 SIRMAP, (3) Determine effectiveness of new strategies to improve student-athlete health and performance, (4) Implement new strategies and practices to improve student-athlete health and performance, (5) Disseminate information to current student-athletes at CU as well as to other Pac-12 institutions.
Role: PI

U54 HG006938 (Ramsay) 09/14/2017-06/30/2022
NIH/NHGRI $1,105,748 (2017 direct)
AWI-GEN Phase 2: Genomic and Environmental Risk Factors for CMD in Africans
AWI-GEN is the Africa Wits-INDEPTH partnership for Genomic Studies, a NIH funded and university supported Collaborative Center of the Human Heredity and Health in Africa (H3Africa) Consortium. It is a strategic partnership between the University of the Witwatersrand, Johannesburg (Wits), and the International Network for the Demographic Evaluation of Populations and Their Health (INDEPTH). AWI-Gen examines genomic and environmental factors that interact with individual physiology and behaviors to influence body composition, body fat distribution and cardiometabolic disease and risk in African populations, with the aim to provide insights and evidence toward effective prevention, treatment and intervention strategies.
Role: Co-Investigator

Pac-12 Concussion Coordinating Unit (McQueen) 10/01/2017-09/30/2020
NCAA/Pac-12 Conference $590,430 (total direct)
The Pac-12 Concussion Coordinating Unit (CCU) will direct and administer the Pac-12 NCAA CARE-Affiliated Protocol (CAP) to study best practices in concussion care. The Pac-12 CCU will support and implement the partnership among Pac-12 schools to collect common data elements in order to establish a clinical and research infrastructure and framework to advance concussion education and research.
Role: Director/PI