

ROBERT A. DOWDEN, MS, ACSM CEP

Middletown, NJ | P: (973) 876-1127 | dowden.robert@gmail.com | <https://www.linkedin.com/in/robert-a-dowden/>

EDUCATION

- PhD Candidate (ABD): Kinesiology and Health, Rutgers, The State University of New Jersey, New Brunswick, NJ (expected *defense date*: 08/2021; *graduation date*: 10/2021)
 - Dissertation Title: “Nanopore Sequencing Shows Exercise and Diet Mediate Host-Microbiota Interactions”
 - Advisor: Sara C. Campbell, PhD, FACSM
- M.S. Clinical Exercise Physiology: East Stroudsburg University, East Stroudsburg, PA (2015)
- Post Baccalaureate, Sussex County Community College, Newton, NJ (2011-2012)
- B.S. Kinesiology: University of Maryland-College Park, College Park, MD (2010)

ACADEMIC EXPERIENCE

- Teaching Assistant, Division of Life Sciences, Rutgers, The State University of New Jersey, Piscataway, NJ (2017-Present)
- PhD Candidate, Department of Kinesiology and Health, Rutgers, The State University of New Jersey, New Brunswick, NJ (2016-Present)
- Adjunct Faculty Instructor, Department of Health and Exercise Science, County College of Morris, Randolph, NJ (2015-2016)
- Graduate Assistant, Department of Exercise Science, East Stroudsburg University, East Stroudsburg, PA (2015)
- Clinical Intern, Department of Exercise Science, East Stroudsburg University, East Stroudsburg, PA (2014-2015)

MENTORING

- Robert Falzon, Department of Kinesiology and Health, Rutgers, The State University of New Jersey, New Brunswick, NJ (2020-2021)
- Luke Yarter, Department of Microbiology, Rutgers, The State University of New Jersey, New Brunswick, NJ (2017-2021)
- Olufunmilola Ibironke, Department of Microbiology, Rutgers, The State University of New Jersey, New Brunswick, NJ (2019-2021)
- Atilade Adedeji, Department of Microbiology, Rutgers, The State University of New Jersey, New Brunswick, NJ (2019-2020)
- Chaudhary Usman Ghani, Department of Microbiology, Rutgers, The State University of New Jersey, New Brunswick, NJ (2019-2020)
- Chiemeka Okere, Department of Kinesiology and Health, Rutgers, The State University of New Jersey, New Brunswick, NJ (2017-2018)
- Lauren Hall, Department of Microbiology, Rutgers, The State University of New Jersey, New Brunswick, NJ (2016-2018)
- Erin Jennings, Research Intensive Summer Experience (RISE) summer UG, from Kings College, New Brunswick, NJ (2017)

WORK EXPERIENCE

- Exercise Physiologist, Princeton Longevity Center, Princeton, NJ (2018-2020)
- Personal Trainer, The Fit Experience, Sparta, NJ (2013-2014)
- Physical Therapist Aide, Integrated Health Professionals, Sparta, NJ (2013-2014)

PROFESSIONAL AFFILIATIONS

- American College of Sports Medicine

FUNDING

- Rutgers University: Rutgers Center for Lipid Research (RCLR) Travel/Registration Funds (2018)

- Rutgers University: Teaching Assistant and Graduate Assistant Professional Development Fund (2017-2018)

PUBLICATIONS:

- **Dowden, RA**, Wisniewski, PJ, Kerkhof, LJ, Campbell, SC. (2021). Time course examining the impact of diet, activity, and sex on gut microbiota with nanopore sequencing. (In preparation).
- **Dowden, RA**, Wisniewski, PJ, Guers, JJ, Oydanich, O, McNulty, T, Cavallo, M, Vatner, SF, Campbell, SC. (2021). Gut microbiota contributes to exercise capacity and metabolite profile in a longevity model and wild type mouse. (In preparation).
- Ehmann, PJ, Brush, CJ, Bernard, L, **Dowden, RA**, Ogilvie, A, Wisniewski, PJ, Piersol, K, McCarthy, T., Merrill, GF. (2020). Influences on blood pressure in university students. *Clinical Medical Reviews & Reports*, 3(4). DOI: 10.31579/2690-8794/044
- **Dowden, RA**, McGuinness, LR, Wisniewski, PJ, Campbell, SC, Guers, JJ, Oydanich, M, Vatner, SF, Häggblom, MM, Kerkhof, LJ. (2020). Host genotype and exercise exhibit species-level selection for members of the gut bacterial communities in the mouse digestive system. *Sci Reports*, 10(1). (IF – 4.525). DOI: 10.1038/s41598-020-65740-4
- Wisniewski PJ, **Dowden RA**, Campbell SC. (2019). Role of dietary lipids in modulating inflammation through the gut microbiota. *Nutrients*, 11(1): e117. DOI: 10.3390/nu11010117

ABSTRACTS

- Falzon, R, **Dowden, RA**, Kerkhof, LJ, Campbell, SC. What Does Preparing for a Powerlifting Competition Do to Your Microbiome? A Case Study. 2021 Kinesiology and Applied Physiology Graduate Seminar, ePoster.
- **Dowden, RA**, Wisniewski, PJ, Kerkhof, LJ, Campbell, SC. Long-Reads Show Nature & Nurture Modulates Gut Microbiota Over Time. 2021 Theobald Smith Society, NJ Branch of the American Society for Microbiology, ePoster.
- Longoria, CR, Wisniewski, PJ, **Dowden, RA**, Malonza, N, Campbell, SC. Exercise Attenuates Weight Gain and Modulates Satiety Hormones in Female Mice. 2020 ACSM Annual Meeting, ePoster.
- **Dowden, RA**, Yarter, L, Hall, L, Wisniewski, PJ, Kerkhof, LJ, Campbell, SC. Gut Microbiota Influenced by Physical Activity, Diet & Sex. 2020 Microbiology at Rutgers Symposium, New Brunswick, NJ.
- Longoria, CR, Wisniewski, PJ, **Dowden, RA**, Malonza, N, Campbell, SC. Exercise Attenuates Weight Gain and Modulates Satiety Hormones in Female Mice. 2019 MARC ACSM Meeting, Harrisburg, PA
- Wisniewski, PJ, Longoria, CR, **Dowden, RA**, Campbell, SC. High-Fat Diets and Exercise Modulate Colon Inflammation and Proliferative Status in Male and Female Mice. 2019 MARC ACSM Meeting, Harrisburg, PA.
- **Dowden, RA**, Wisniewski PJ, Guers, J, Oydanich, M, Vatner, SF, McGuinness, L, Kerkhof, LJ, & Campbell, SC. Host Genotype and Exercise Exhibit Species-Level Selection for Members of the Gut Bacterial Communities in the Mouse Digestive System. 2019 MBGSO Annual Graduate Student Research Symposium, New Brunswick, NJ.
- **Dowden, RA**, Wisniewski PJ, Guers, J, Oydanich, M, Vatner, SF, McGuinness, L, Kerkhof, LJ, & Campbell, SC. Host Genotype and Exercise Exhibit Species-Level Selection for Members of the Gut Bacterial Communities in the Mouse Digestive System. 2019 Microbiology Symposium, New Brunswick, NJ.
- Wisniewski PJ, Malonza N, Hall LA, **Dowden RA**, Campbell SC. Exercise and High-Fat Diets Modulate Endoplasmic Reticulum Stress Sensor and Muc2 Expression in Female Mice. 2018 MARC ACSM Meeting, Harrisburg, PA.
- **Dowden, RA**, Wisniewski, PJ, Guers, J, Oydanich, M, Vatner, S, McGuinness, L, Kerkhof, L, Campbell, SC. Metabolic and Microbial Responses to Exercise in C57 Wildtype and Adenylyl Cyclase 5 KO Mice. 2018 65th ACSM Annual Meeting, Minneapolis, MN.
- **Dowden, RA**, Wisniewski, PJ, Guers, J, Oydanich, M, Vatner, S, McGuinness, L, Kerkhof, L, Campbell, SC. Metabolic and Microbial Responses to Exercise in C57 Wildtype and Adenylyl Cyclase 5 KO Mice. 2018 MBGSO Annual Graduate Student Research Symposium, New Brunswick, NJ.

- Wisniewski PJ, Joseph LB, Lightfoot SA, **Dowden RA**, Guers J, Vatner SF, Campbell SC. Antibiotics Reduce While Forced-Exercise Increases Inflammation in the Small Intestine. 2017 MARC ACSM Meeting, Harrisburg, PA.
- **Dowden, RA**, Wisniewski, PJ, Guers, J, Oydanich, M, Vatner, S, McGuinness, L, Kerkhof, L, Campbell, SC. Metabolic and Microbial Responses to Exercise in C57 Wildtype and Adenylyl Cyclase 5 KO Mice. 2017 MARC ACSM Meeting, Harrisburg, PA.
- Jennings, E, **Dowden, RA**, McGuinness, L, Kerkhof, LJ, Guers, J, Wisniewski, PJ, Campbell, SC. Evaluating Intestinal Inflammation and Microbiota in Health Aging AC5KO Phenotype. 2017 RISE Seminar, Piscataway, NJ.
- Pecha, A, **Dowden, RA**, Miltenber, M, Keshel, T, Munford, S, Sauers, E. The Acute Effect of Exposure to Barefoot Running on VO₂ Peak, Fatigue, and Time to Exhaustion in Recreational Runners. 2016 MARC ACSM Meeting, Harrisburg, PA.

INVITED PRESENTATIONS

- Big Pictures, Community, & the Jersey Shore. 3MT: Three Minute Thesis, 2021, New Brunswick, NJ.
- Long-Reads Show Nature & Nurture Modulates Gut Microbiota Over Time. MBGSO Annual Graduate Student Research Symposium, 2021, New Brunswick, NJ.
- Murine Gut Microbial Communities Influenced by Physical Activity, Diet, But Not Gender. MARC-ACSM, 2020, Harrisburg, PA.
- Murine Gut Microbial Communities Influenced by Physical Activity, Diet, But Not Gender. New Jersey Institute for Food, Nutrition, and Health 2nd Research Day, 2020, New Brunswick, NJ.
- Gut Microbiota Communities Influenced by Adaptation to Physical Activity, Diet & Sex. Rutgers Center for Lipid Research, 2020, New Brunswick, NJ.
- “Long reads” Show Exercise Alters “Who’s There?” in Gut Bacteria. 3MT: Three Minute Thesis, 2020, New Brunswick, NJ.
- Genotype and Exercise Exhibit Unique Species in the Gut Microbiome. Rutgers – Wageningen Graduate Student Symposium, 2019, New Brunswick, NJ.
- Gut Microbiota Contribute to Exercise Capacity and Metabolic Profile in a Wildtype and Longevity Model Mouse. MARC-ACSM, 2019, Harrisburg, PA.
- Microbial and Metabolic Responses to Exercise in C57 Wildtype and Adenylyl Cyclase 5 KO Mice. Rutgers Center for Lipid Research, 2018, New Brunswick, NJ.