

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF PEDIATRICS
SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF NUTRITIONAL SCIENCES

Brigid E. Gregg, M.D., assistant professor of pediatrics, Department of Pediatrics, Medical School, and assistant professor of nutritional sciences, Department of Nutritional Sciences, School of Public Health, is recommended for promotion to associate professor of pediatrics, with tenure, Department of Pediatrics, Medical School, and associate professor of nutritional sciences, without tenure, Department of Nutritional Sciences, School of Public Health.

Academic Degrees:

M.D.	2004	Case Western Reserve University
B.S.	1999	University of California, San Diego

Professional Record:

2018-present	Assistant Professor, Department of Nutritional Sciences, University of Michigan
2015-present	Assistant Professor, Department of Pediatrics, University of Michigan
2011-2015	Clinical Lecturer, Department of Pediatrics, University of Michigan

Summary of Evaluation:

Teaching: Dr. Gregg is responsible for the bedside teaching of medical students, residents, and fellows. She is a celebrated teacher with evaluations that speak to her enthusiasm, inclusion, and engagement from learners at all levels. She has served as the primary mentor for clinical fellows, medical students, graduate students, and undergraduate students, and serves on dissertation committees. She also was a mentor for the Michigan Institute for Clinical and Health Research (MICHR) K grant writing workshop. She teaches a class in the nutrition trunk, and lectures in the core pediatric residency lecture series and graduate-level courses. She created a patient-facing workshop for the Juvenile Diabetes Research Foundation (JDRF) in 2018 and 2019, which was a regional conference attended by more than 1,400 patients. Her teaching evaluations range from fair to excellent, with her clerkship evaluations slightly below the departmental average. Letters from former trainees are highly supportive and note that she is a trusted source of support in all facets of professional development. Dr. Gregg was awarded a Department of Pediatrics Teaching Award in 2022 and was recognized as an outstanding UROP Research Mentor in 2020.

Research: Dr. Gregg is a pediatric endocrinologist with a productive research program focused on nutrition in the newborn period, and its potential impact on lifetime metabolic risk. She is recognized as a leader in developmental programming with a specific niche in lactation programming. Specifically, she looks at the impact of maternal metabolic disease on breast milk composition and offspring health. Dr. Gregg has demonstrated consistent productivity in her research contributions and has obtained funding to advance the field forward as evidenced by her publications and extramural grant support. Her portfolio of current funding includes an R01 from

the National Institutes of Health (NIH) as a multi-principal investigator and as the principal investigator on a grant from the Michigan Nutrition Obesity Research Center and the Michigan Medicine Office of Research. She has a track record of funding from the NIH and several small extra and intramural grant awards. Dr. Gregg is well published with 40 peer reviewed manuscripts in highly regarded journals such as *Clinical Diabetes*, *Journal of Immunology*, and *Journal of Nutrition*. She has been invited to deliver 26 extramural presentations regionally and nationally and served as a moderator for six extramural panels. Dr. Gregg's work was recognized both in 2020 and 2021 through receipt of the *Maternal and Child Nutrition* top cited paper award. She has also received recognition for poster and paper presentations at national meetings in 2019 and 2020.

Recent and Significant Publications:

- Carlson Z, Hafner H, Habbal NE, Harman E, Liu S, Botezatu N, Alharastani M, Rivet C, Reynolds H, Both N, Sun H, Bridges D, Gregg B, "Short Term Changes in Dietary Fat Content and Metformin Treatment During Lactation Impact Milk Composition and Mammary Gland Morphology," *Journal of mammary gland biology and neoplasia* 01/2022. PM35137304
- Ellsworth L, Perng W, Harman E, Das A, Pennathur S, Gregg B, "Impact of maternal overweight and obesity on milk composition and infant growth," *Matern Child Nutr* 16(3): e12979, 07/2020. PM32074402
- Carlson Z, Hafner H, Mulcahy M, Bullock K, Zhu A, Bridges D, Bernal-Mizrachi E, Gregg B, "Lactational metformin exposure programs offspring white adipose tissue glucose homeostasis and resilience to metabolic stress in a sex-dependent manner," *Am J Physiol Endocrinol Metab* 318(5): E600-E612, 05/2020. PM32154743
- Hafner H, Chang E, Carlson Z, Zhu A, Varghese M, Clemente J, Abrishami S, Bagchi DP, MacDougald OA, Singer K, Gregg B, "Lactational High-Fat Diet Exposure Programs Metabolic Inflammation and Bone Marrow Adiposity in Male Offspring," *Nutrients* 11(6)06/2019. PM31234301
- Gregg BE, Botezatu N, Brill JD, Hafner H, Vadrevu S, Satin LS, Alejandro EU, Bernal-Mizrachi E, "Gestational exposure to metformin programs improved glucose tolerance and insulin secretion in adult male mouse offspring," *Sci Rep* 8(1): 5745, 04/2018. PM29636523

Service: Dr. Gregg has a strong institutional, national, and international service record. Institutionally, she is an active clinician who sees all facets of pediatric endocrinology but has been focused on building a clinical obesity program that will incorporate nutritional counseling, metabolic monitoring, and medical management. She is the associate director of wellness for the Department of Pediatrics, as well as the director of enrichment for the UM Caswell Diabetes Institute. She also has served on the departmental Clinical Competency Committee and the Child Health Research Career Development Award (CHRCDA) Executive Committee. Dr. Gregg has served on several search committees including for the associate dean for the tenure track, the pediatric endocrinology chair, and the pediatric infectious disease chair. She has also assisted with the planning of several events focused on career development for women in STEM. Regionally, Dr. Gregg has served on several committees with the Midwest Islet Club and the Midwest Society for Pediatric Research Council. Nationally, she served as an ad hoc reviewer on four NIH study sections. She is the co-chair of the Women's Interprofessional Network of the American Diabetes Association and is on the Medical Advisory Board for the Diabetes Action Research and Action Education Foundation. She serves on the editorial board of two scientific journals including the

Frontiers in Pediatric Endocrinology, performs ad hoc review services for 20 journals, and has reviewed abstracts for several different entities including the International Meeting of Pediatric Endocrinology and the American Diabetes Association. Internationally, she has served on three international study sections including the United Kingdom and New Zealand.

External Reviewers:

Reviewer A: “The impact of Dr. Gregg’s work has been recognized further by leading scientists in our field through numerous invitations to present her laboratory’s findings through seminars and presentations at scientific meetings, both nationally and internationally. She has also served as moderator for sessions at a number of scientific meetings, further demonstrating her outstanding research reputation. Dr. Gregg has served on the editorial board of several journals, including the *Journal of Clinical Endocrinology and Metabolism*. She currently serves as a reviewer for more than a dozen high-impact journals, including *Scientific Reports*, *PLoS One*, *Diabetes*, and *Maternal and Child Nutrition*, among others.”

Reviewer B: “She has an impressive list of mentees even at this early stage in her career and these span from high school students and undergraduates all the way to clinical fellows. In my opinion, Brigid is an outstanding example of a successful physician scientist and I am sure that she is a role model to many and someone whom prospective physician scientists wish to emulate. I also want to highlight Brigid’s commitment and passion for paying it forward to the next generation. She is deeply involved in initiatives through the American Diabetes Association to promote women in diabetes research careers and has held important leadership roles in these endeavors.”

Reviewer C: “Dr. Gregg is an accomplished physician scientist in the field of developmental origins of adult disease, specifically related to pancreatic islet function, adipose health, and the interaction between fetal exposures and neonatal exposures. Importantly, she has developed a line of research for which she is nationally and internationally recognized. Her leadership in this field is specifically noteworthy to me, as she has consistently evaluated sex as a biological variable on the impact of intrauterine and neonatal exposures on metabolic outcomes. Productivity is demonstrated by robust publications and strong funding.”


Reviewer D: “Dr. Gregg’s scholarship, is outstanding. This is evidenced by the quality, quantity and impact of their publications...has become a leader in the DOHAD field...no doubt that Dr. Gregg will continue to make critical contributions to the field that will only increase in impact over the years. This is supported by their impressive level of external funding for their research. Their current MPI grant held in conjunction with Faculty at Northwestern demonstrates that Dr. Gregg is a sought-after collaborator and leader in the field.”

Reviewer E: “She is a prolific writer and has published 29 papers since 2015 with 15 of them as first or last author. She has also been invited to speak at grand rounds or research seminars at six leading medical schools and a meeting of the Perinatal Research Society Meeting. This is an extraordinary number of invited presentations for someone so early in their career, which is a testament to the high quality and impact of her work. She has brought her expertise as an ad hoc reviewer to 6 NIH study sections since 2020, which demonstrates how highly her insights are valued by the scientific community.”

Reviewer F: “Dr. Gregg’s research is high impact within the important, but, until recently, ignored field of lactation science. Specifically, Dr. Gregg is one of a handful of scientists evaluating the signals from women with obesity and/or diabetes to their offspring through human milk. Dr. Gregg’s work signifies the importance of this field as she has identified metabolic inflammation in the offspring and the potential effect of medications such as metformin on offspring outcomes.”

Summary of Recommendation:

Dr. Gregg is an accomplished physician-scientist in the field endocrinology. Her record of accomplishments and contributions to the field of diabetes research and the scientific and teaching mission of her institution is unrivalled. We are pleased to recommend Brigid E. Gregg, M.D. for promotion to associate professor of pediatrics, with tenure, Department of Pediatrics, Medical School, and associate professor of nutritional sciences, without tenure, Department of Nutritional Sciences, School of Public Health.



Marschall S. Runge, M.D., Ph.D.
Executive Vice President for Medical Affairs
Dean, Medical School



F. DuBois Bowman, Ph.D.
Dean, School of Public Health

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