Is Obesity Less Harmful in Older Adults? The Challenge of Studying a Lifelong Exposure Under Dynamic Confounding, Selection, and Misclassification

MONDAY, 04 FEBRUARY 2019 / 4:30 pm – 5:30 pm
Strathcona Anatomy & Dentistry Building
3640 University Street, Room 2/36 – Directions from Purvis Hall

ALL ARE WELCOME

ABSTRACT:
The effect of obesity on morbidity and mortality in childhood and middle age has been studied extensively, but there is still a debate about whether obesity poses a health risk to older adults. There is some evidence suggesting that obesity is not associated with increased mortality risk in older adults, and in fact, may confer some degree of protection. The objective of this presentation is to examine methodological explanations for the attenuated effect of obesity on mortality in older adults, including misclassification of obesity status, selection bias, reverse causality, and interaction. All of the data for these analyses come from the Women’s Health Initiative (WHI), a large cohort study of 161,808 postmenopausal women in the United States. Questions about the effect of obesity in old age are particularly salient with respect to older women because the hormone changes that occur during menopause are associated with weight gain, changes in the distribution of adipose tissue, and loss of lean body mass.

OBJECTIVES
1. To recognize the changes that occur in body weight and composition in older adults;
2. To explore methods to remediate exposure misclassification, selection bias, and reverse causality;
3. To understand the impact of additive and multiplicative interaction on estimates of the obesity-mortality relationship.

BIO:
Hailey Banack is a postdoctoral fellow in epidemiology at the University at Buffalo working with the Women’s Health Initiative (WHI). Her research is focused broadly on obesity and aging. She is interested in using quantitative bias analysis techniques to investigate and remediate sources of bias in aging research.