

# Harmonizing neuroimaging data acquired in multi-center studies of human health



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While magnetic resonance imaging (MRI) studies are critical for the diagnosis, monitoring, and study of a wide variety of diseases, their use in quantitative analysis can be complex. An increasingly recognized issue involves the differences between MRI scanners that are used in large multi-center studies. To address this, the current state of the art is to “regress out” or “adjust for” scanner differences. The field has found these methods to be insufficient and has advocated for the adaptation of methods pioneered in genomics to help mitigate inter-scanner differences, which can vary across the brain and result in both mean and variance shifts. Dr. Shinohara and others further study the implications of differences in correlation structures across and between images, and how this affects downstream inference.

**Thursday, November 30, 2023, 3:30-4:30PM Eastern**

**133 Rosenau Hall**

Zoom Link: <https://unc.zoom.us/j/95131277245>

**Meeting ID: 951 3127 7245**

**Passcode: 203117**