

ME 599/AA 546/EE 546: **Biology-inspired robot control**

Lecture 7

Sawyer B. Fuller

Goals:

- Introduce Paper4
- Presentation and discussion of Paper 3 by Sam Hordeski

Friday's paper: "Designing Collective Behavior in a Termite-Inspired Robot Construction Team", Werfel, Petersen, and Nagpal *Science* (2014).

- termites build enormous mounds
 - but what rules do they follow?
 - how would you design those rules?
- this paper has two big ideas:
 1. construction by using rules describing *interaction with the constructed environment*
 2. one solution for how to specify those rules to create a desired shape

