"Consolation and Community in Mary Wroth's Sonnets" Author: Leila Watkins

Literary scholars often claim that Renaissance erotic sonnet sequences are more concerned with exploring the authorial self than they are with actually courting a real human lover. Because Mary Wroth was the first woman to publish an erotic sonnet sequence in English, many scholars have discussed her work as a rare glimpse into a female perspective on selfhood and authorship in the 1600s. A closer look at Wroth's poems, however, reveals much more than a female version of the self-examination and introspection we have come to regard as one of the primary characteristics of the Renaissance sonnet sequence. Rather than simply use the genre to fashion a highly stylized authorial self, as many of her male contemporaries do, Wroth envisions the sonnet sequence as a more communal genre capable of helping a diverse range of readers work through emotional distress. In the first section of this paper, I argue that *Pamphilia to Amphilanthus* constructs an ideal community of readers founded on shared emotion rather than status markers such as gender or social rank. In the latter sections, I show how Wroth employs and revises the conventions of the sonnet sequence to implement her vision of the genre as a source of consolation for those who suffer from erotic disappointment or frustration.

What is my general field of inquiry? Why is it important?

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What specific question in the field am I addressing?

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What did I find? / What will I do to answer this question?

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A Novel Synthetic Biology Method to Study the Cooperative Behavior of Kinesin Motors in Cells" Authors: Stephen R. Norris ^{1,2}, Virupakshi Soppina ², Aslan S. Dizaji ², David Sept ³, Dawen Cai ², Sivaraj Sivaramakrishnan ^{1,2}, and Kristen J. Verhey ^{1,2} Departments of Biophysics ¹, Cell and Developmental Biology ², Department of Biomedical Engineering ³, University of Michigan, Ann Arbor, MI 48109

Molecular motor proteins such as kinesin, dynein, and myosin are essential for the organization and function of cells. These motors move along the cytoskeleton to transport cellular cargo – including organelles, vesicles, and even viruses – to specific locations within the cell at specific times. Since its discovery in 1985, the motor protein kinesin has been studied intensively on an individual, single-molecule level. In cells, however, kinesin is thought to work in teams where multiple motors cooperate to transport cargo; unfortunately, this team-based behavior remains poorly understood. Here, we develop a protein-based synthetic biology method to assemble teams of kinesin motors on an artificial cargo, the first such method to be developed inside cells. First, we describe the system's development and use FRET and two-color TIRF microscopy to demonstrate our control of motor number and spacing in cells with nanometer precision. Second, we use a combination of live-cell TIRF imaging and automated image tracking to show that mixtures of multiple motors are highly dependent on the state of their microtubule track inside cells. Together, this cutting-edge study provides a new approach to study multi-protein behavior in cells, and will be critical for our understanding of motor-related diseases such as neurodegeneration and cancer.

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What did we find? / What will we do to answer this question?

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