DEPARTMENT OF BIOLOGY McMicken-College of Arts & Sciences

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: MARCH 1, 2005

The Department of Biology is pleased to offer the following research project for the summer of 2005. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and if possible, develop a timetable for the twelve-week research period.

"Finding Home Again - How Do Fiddler Crabs Do it?"

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Nearly all animals periodically return to a place of interest such as a home or favorite foraging area. How do they find it? The strategies for accomplishing this behavior, called "homing", differ widely among different animals, and depend on factors such as how the animals' sensory systems work, its neural processing capabilities (i.e. its "intelligence"), details of the animals' behavior, and the spatial cues available in a particular habitat. I am working on a project that will discover how fiddler crabs find their homes (small holes in the sand), and in particular, what role the position and movements of their eyes have play in how they remember where they are relative to home.