1135-VJ-2546 **Mel Henriksen*** (henriksenm@wit.edu), **Gary Simundza** (simundzag@wit.edu) and **Emma Smith Zbarsky** (smithzbarskye@wit.edu). *Discovering Calculus through Pasta.*

We present an overview of several exercises for an introductory calculus class designed to engage students in active learning using spaghetti or other pasta to investigate applied contexts. In one exercise, to refresh students' knowledge of functions, students measure the buckling force for a number of different lengths of spaghetti "columns," plot these forces against the column lengths and generate a regression function. In another exercise students gather data for the position of the tip of an oscillating, cantilevered spaghetti noodle, plot these data in a position vs. time graph and fit an appropriate function to the data. They then calculate the average velocity from the position data, plot these new data points vs. time and postulate an instantaneous velocity function that fits the data. Students empirically explore the effect of various function parameters using the online graphing application Desmos as they adjust their functions to best fit the data. Students later explore the chain rule and product rule using these data. (Received September 26, 2017)