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## Cytokinesis Defects in Budding Yeast

Katherine Stockstill

*Missouri University of Science and Technology*

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## **Katherine Stockstill**

Department:	Biological Sciences
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Research Advisor:	Dr. Katie Shannon
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### ***Cytokinesis Defects in Budding Yeast***

Budding yeast are a very good research organism, because they are similar to humans in many ways. One of the research opportunities with budding yeast is that there are many genes that are uncharacterized, and it is not known what their cellular function is or what their functional role is. One way to study gene function is to knock out the gene. We focused on uncharacterized genes that have been identified in genomic screens as interacting with cytokinesis proteins. Another way to study gene function is to tag genes on the chromosomes. The purpose of tagging genes is to allow monitoring of protein localization in live cells without affecting the upstream regulatory regions. Cytokinesis is the division of a cell into two daughter cells. Our research lab is interested in cytokinesis, because cytokinesis defects can lead to polyploidy in the cell. This defect can lead to cancer or cell death.

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*Katherine Stockstill is a junior at the Missouri University of Science and Technology where she is majoring in Biological Sciences. On campus, Katherine is the president of Kappa Delta Sorority; she is also a member of Helix and Phi Sigma. She also has an OURE for her research in the Cytokinesis Lab. Katherine is also a waitress at Applebee's. After she graduates, Katherine plans to pursue a career in research.*