Unlocking Yeast's Frozen Secrets

🕰 Join Our Research into Fission Yeast starvation! 🛷

Are you a motivated and enthusiastic master's student with a passion for molecular biology, live imaging, and computational analysis? If so, we invite you to join our research group and embark on a thrilling journey to uncover the secrets of cytoplasmic freezing in fission yeast!

About the Project: We are seeking a talented master's student to contribute to our cutting-edge research project focused characterizing <u>cytoplasmic freezing (CF)</u> in fission yeast. CF is a fascinating biological phenomenon where the inner workings of a yeast cell come to a standstill after a phase transition in the cytoplasm. This intriguing process is the focus of research aimed at understanding how and why it occurs, how it can be used to advance other fields of studies, such as <u>diseases onset</u> by phase separation and to use the system for <u>biotechnological potential</u>. This project offers a unique opportunity to engage in interdisciplinary research, encompassing wet lab experimentation, live imaging techniques, and computational analysis.

Specifically, the project focuses on identifying a <u>live marker</u> for cytoplasmic freezing in fission yeast and trying to characterize the <u>biophysical properties</u> of the cell. This will involve <u>genetic manipulation</u> of yeast strains, imaging using <u>a confocal microscope</u>, visual <u>data analysis</u> and the use of various <u>nanomaterials</u> to probe the system.

What You'll Gain: By joining our project, you will:

- Develop a deep understanding of fission yeast biology and cellular processes.
- Gain hands-on experience in molecular biology techniques and live cell imaging.
- Sharpen your computational skills in data analysis and image processing.
- Contribute to groundbreaking research

Dualifications: To be considered for this exciting opportunity, you should:

- Be enrolled in a master's program in biology, molecular biology, biochemistry, or a related field.
- Have a strong foundation in molecular biology techniques and a willingness to learn new skills.
- Possess excellent problem-solving abilities and attention to detail.
- Be a team player with effective communication skills.

Start Date: We are looking for a motivated student to join our team as soon as possible.

How to Apply: If you are excited about the prospect of making groundbreaking discoveries in the world of fission yeast biology and want to contribute to this exciting project, please send a cover letter outlining your motivation and relevant experience to : <u>tim.weber2@uzh.ch</u> . Please include "Fission Yeast Master's Student Application" in the subject line.

Learn more about us: <u>https://www.mls.uzh.ch/en/research/brunner.html</u>

For more information and a lab tour feel free to contact: tim.weber2@uzh.ch