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Protect and Conquer: Treating cryptococcosis with vaccines and targeted drug delivery

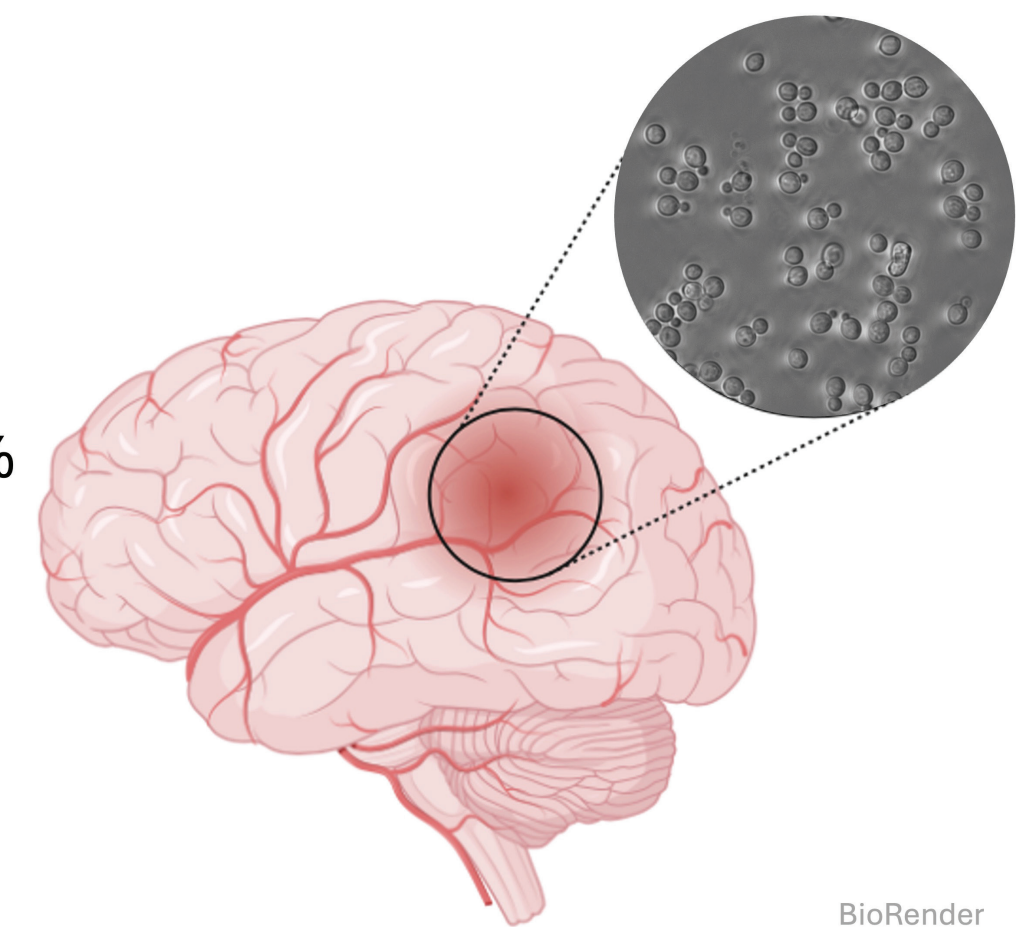
Treating cryptococcal meningitis is challenging due to the limited antifungal drugs, and there is no preventative measure against this deadly disease. I am working on developing a whole-cell vaccine and improving the antifungal drugs by creating a targeted drug delivery method to combat this deadly illness.

If you are....

- Immunocompetent
- Immunocompromised
- HIV/AIDS
- Organ transplant patients

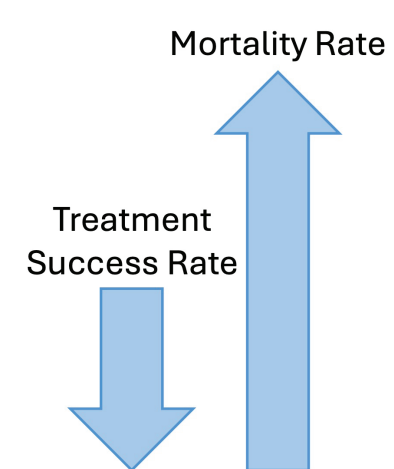
.... you can develop cryptococcal meningitis.

Cryptococcal meningitis is 100% fatal and it has a 60% mortality rate even with antifungal intervention.



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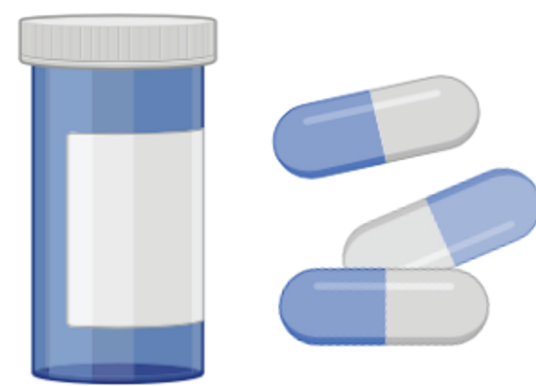
Success rate is low while mortality rate is high



No available vaccine



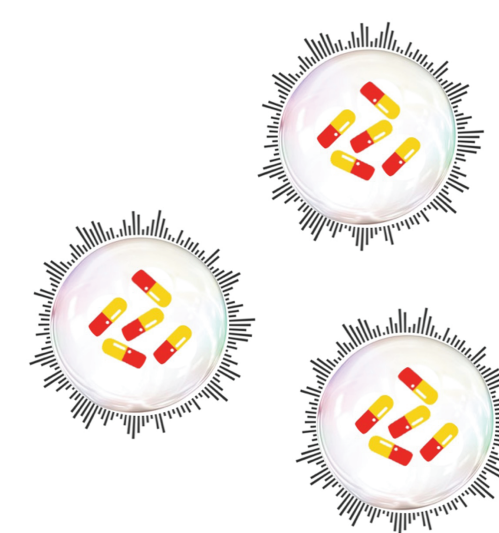
Limited antifungal drugs



There is an urgent need to improve cryptococcal meningitis treatment and prevention.

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Ways to improve cryptococcal meningitis treatment or prevent it



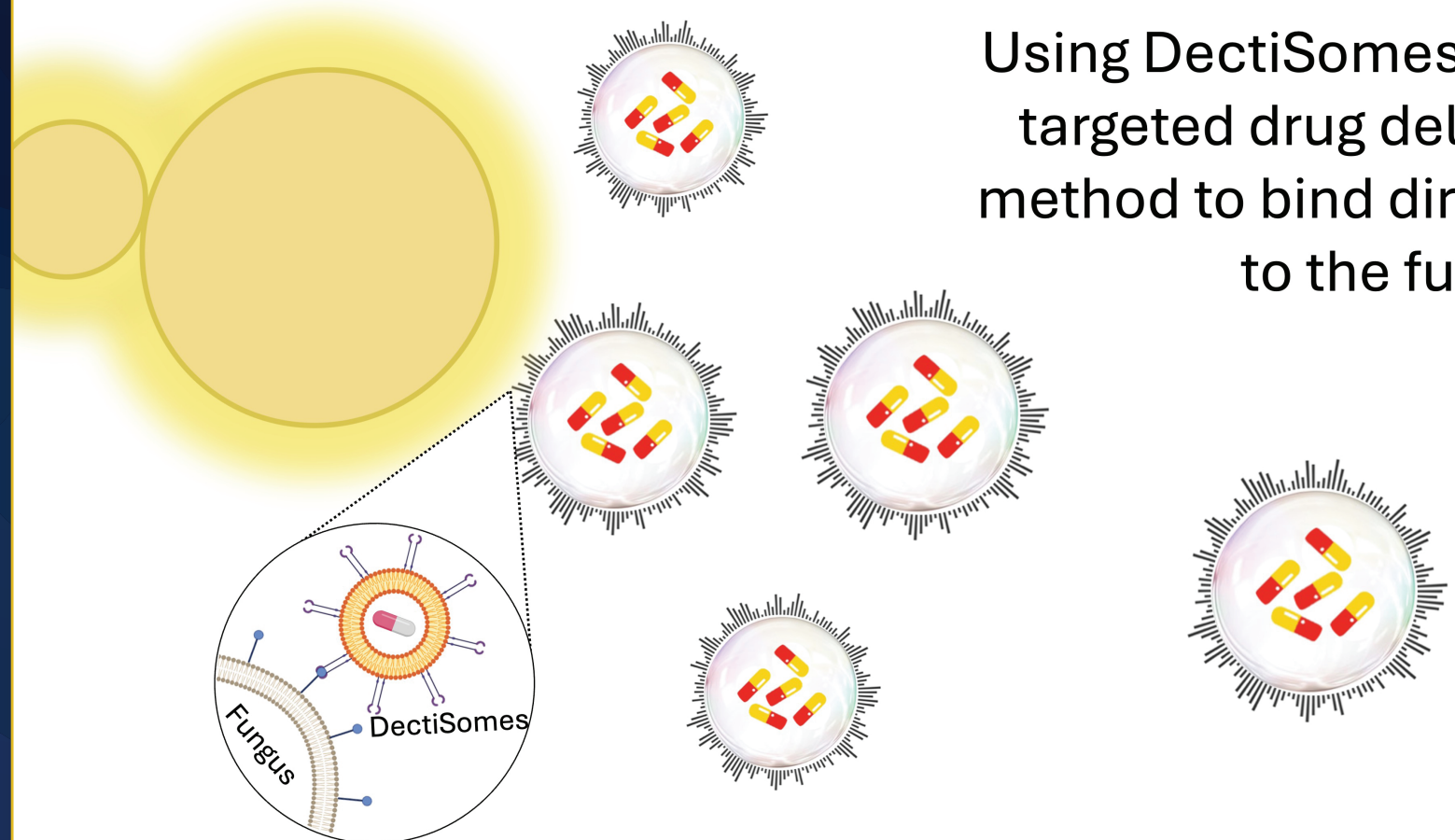
Targeted Drug Delivery



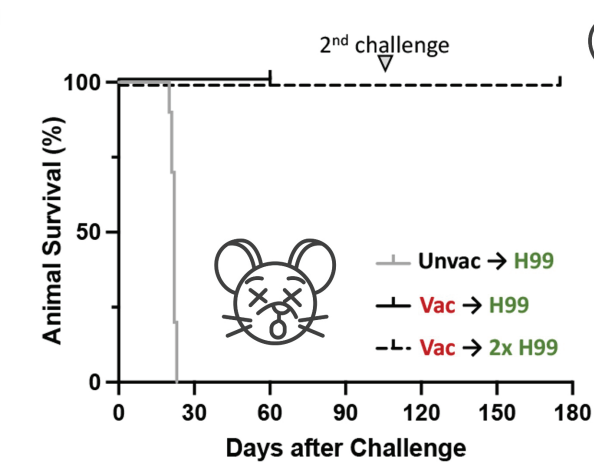
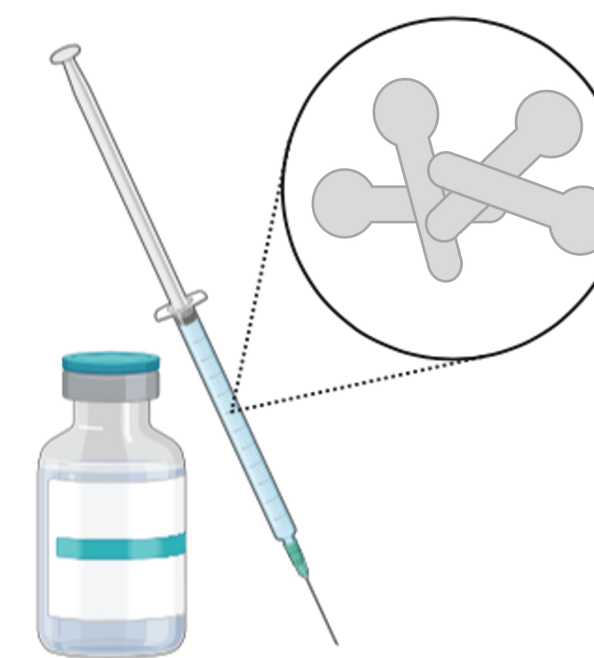
Cryptococcal Vaccine

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Using DectiSomes as a targeted drug delivery method to bind directly to the fungus



Using a heat-inactivated whole cell vaccine to prevent mice from developing cryptococcal meningitis



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