

# THE 12 DAYS OF FISHMAS



On the fifth day of Fishmas, aquatic research gave to us:

**So. Many. Fins.**

Aquatic research isn't just zebrafish. While zebrafish are a popular and important animal research model, and for good reasons - they produce hundreds of offspring on a weekly basis, they develop quickly, their embryos are translucent, and they share 70% of the same genes as humans - other aquatic animals offer advantages to medical research as well.

- A study of the stickleback fish by Dr. David Kingsley and researchers at Stanford University led to the identification of a genomic region possibly linked to modifications in human toes and feet that enabled upright walking.  
<https://med.stanford.edu/news/all-news/2016/01/tweak-in-gene-expression-may-have-helped-humans-walk-upright.html>
- Also at Stanford University, the Russell Fernald laboratory studies the African cichlid to understand how social interactions among individuals produce specific changes in the brain.  
<https://fernaldlab.stanford.edu/research/reproduction/>
- Dr. Joaquin Letelier of Universidad Mayor focuses his research on the study of diseases associated with non-coding DNA, using the zebrafish and medaka as his research models.  
<https://cib.umayor.cl/en/investigadores/joqu%C3%ADn-letelier-undurraga>
- Dr. Richard Borowsky and his research team at New York University study sleep patterns in Mexican cavefish to understand how genes control insomnia and other sleep disorders in humans. Dr. Borowsky also uses the blind cavefish model to understand human eye development and diseases.  
<https://www.sciencedaily.com/releases/2008/01/080107120911.htm>  
<https://www.wired.com/2011/04/insomniac-cavefish/>

