

Outreach and Online Training Services

Kevin MacPherson 3/27/17

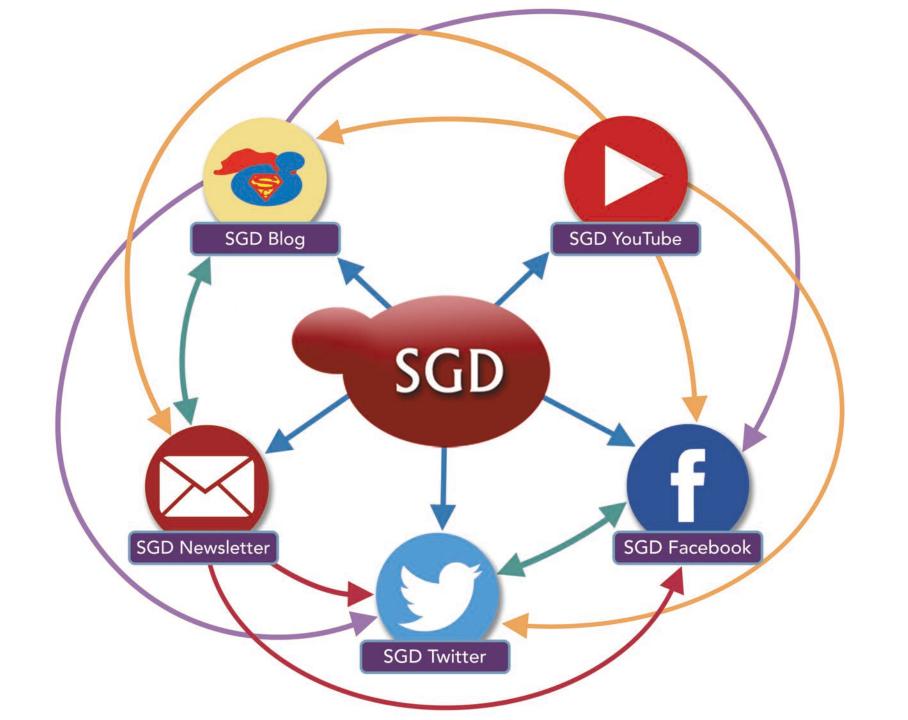


SGD Outreach

 News & updates from SGD come regularly

 How does this info reach our community?





SGD implements a new tool...



New & Noteworthy Updated Genome Browser

March 27, 2016



Blog posts direct users to tutorials

In an effort to provide a comprehensive view of sequence-based functional elements in Saccharomyces cerevisiae, we have upgraded our genome browser, and added new data tracks, to allow users to quickly and easily browse the information-rich yeast genome. We invite authors to work with us to integrate published data into our new JBrowse genome viewer pre-and/or post-publication. Please contact us if you are interested in participating or have questions and comments. Watch for the regular addition of new tracks to SGD's JBrowse in the fitting!

Take a look at our newest video tutorial to get acquainted with JBrowse, and let us know if you have any questions or suggestions.



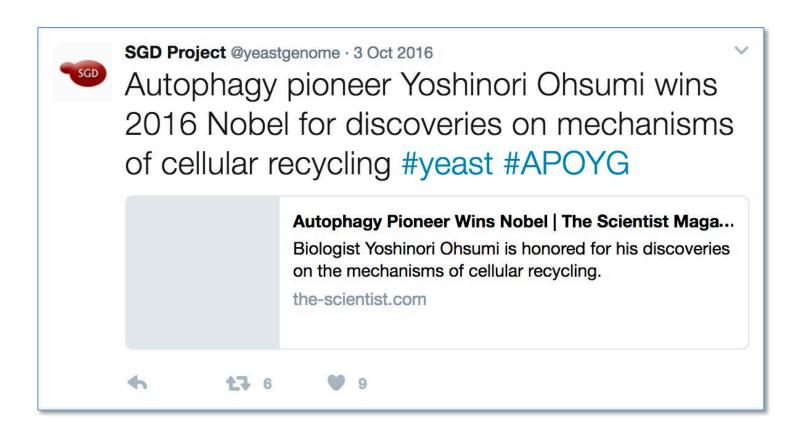
For more SGD Help Videos, visit our YouTube channel &, and be sure to subscribe so you don't miss anything!







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New & Noteworthy

In Yeast, Being Old Can Be a Good Thing

March 13, 2017

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A square slab can make an excellent door stop. Over time, though, the corners can get chipped, making the slab a bit rounded. This new bit of rock makes a less useful doorstop, but a much better wheel! The chipping and aging of the original stone has made it worse in some situations, but better in others.

A new study by Frenk and coworkers ♂ in Aging Cell ♂ shows that something similar can happen in yeast. Young yeast are much better at utilizing glucose, but older yeast have them beat with galactose ♂ (as well as with raffinose 2 and acetate).

One way to think about this is that age turns yeast from a glucose & specialist into a sugar generalist. Aging chips away at a yeast cell's ability to use glucose, but this loss results in a gain in its ability to use galactose.

So at least in the right environment (i.e., when there's lots of galactose around), with our old friend Saccharomyces cerevisiae, there can be advantages to getting older.

What makes this particularly fascinating is that at least in yeast, this suggests that there may be a positive selection of for aging because of the advantage it can give in certain environments. Those yeast who are ageless would compete less well compared to their aging counterparts when their glucose was taken away. The aging process wins out over immortality!

Frenk and coworkers used a relatively simple experimental set up. Take young cells and old cells, mix them together, and see which outcompetes the other using various sugars.



Like this marathon runner, some older yeast are able to win out over their younger counterparts. In the right environment, that is! Image from Wikimedia Commons.

They used yeast that had been aged for 6, 24, and 48 hours in glucose. This is a nice range as 6-hour "old" yeast are fully viable, 24-hour "old" yeast are starting to suffer a bit in the reproductive viability department, and the 48-hour "old" yeast have passed the median lifetime of a yeast cell. Young adult, middle aged, and elderly yeast.



J. Michael Cherry

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Thank you!

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YouTube Channel youtube.com/SaccharomycesGenomeDatabase

