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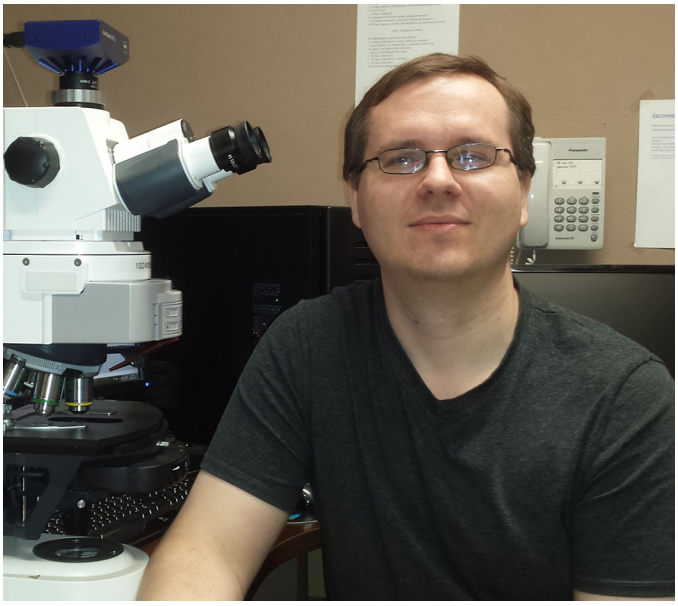
FIRST PERSON

# First person – Kamil Król

First Person is a series of interviews with the first authors of a selection of papers published in Journal of Cell Science, helping early-career researchers promote themselves alongside their papers. Kamil Król is first author on 'Lack of G1/S control destabilizes the yeast genome via replication stress-induced DSBs and illegitimate recombination', published in JCS. Kamil is a postdoc in the lab of Adrianna Skoneczna at the Institute of Biochemistry and Biophysics, Polish Academy of Sciences, investigating genome stability, vesicular trafficking and the hidden connections between them.



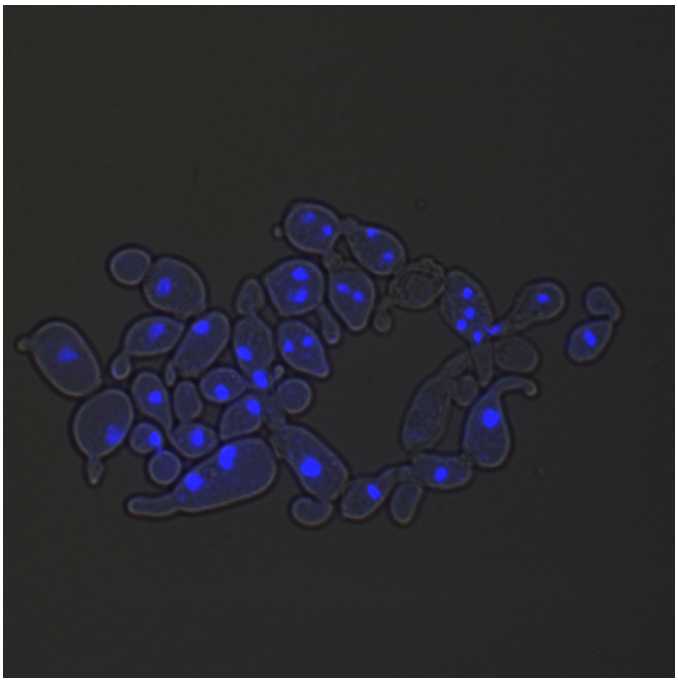
Kamil Król

**How would you explain the main findings of your paper in lay terms?**

Protein Swi6 is an extremely interesting protein. It is a transcription cofactor that is necessary for budding yeast cells to live. But even more amazing is what cells can do to survive the lack of this protein, and what they can sacrifice to stay alive. In this case, to counteract the Swi6 deficiency, cells overproduce another protein, Rad51, thereby abandoning the chance to maintain a stable genome, just for the smallest chance to survive a little longer without an essential cog in the machinery of life. What we observed, is probably a very similar to processes to what happens in cancer cells.

**Were there any specific challenges associated with this project? If so, how did you overcome them?**

Yeast cells devoid of Swi6 protein are very fragile and unstable, but at the same time work hard to look for opportunities to suppress their deficiencies. So the biggest challenge I had to overcome was to design my experiments in a way that I could efficiently and reproducibly work with this yeast strain.



***swi6*Δ synchronized with nocodazole and stained with DAPI under 1000× magnification.**

**When doing the research, did you have a particular result or 'eureka' moment that has stuck with you?**

There were a few such moments. The one I remember the most is when I saw that the level of Rad51 protein on the western blot was so much higher in the *swi6* deletion strain compared to the wild type.

**Why did you choose Journal of Cell Science for your paper?**

We chose Journal of Cell Science because we wanted our research to become widely known, and because of the fast speed of manuscript processing.

**Have you had any significant mentors who have helped you beyond supervision in the lab? How was their guidance special?**

All of the people that helped me to make progress and develop are special and I am very grateful to them. I want to especially thank Prof. Adrianna Skoneczna, whose dedication allowed this project to be successfully completed. I want to thank all my co-authors who spent a lot of time and effort to make this paper as good as possible.

**What motivated you to pursue a career in science, and what have been the most interesting moments on the path that led you to where you are now?**

From my childhood, I was interested in nature and living organisms. That interest determined the direction of my studies. My fascination and awe with the excellence of every living cell, and also the cell's ability to adapt to changing environments, always motivates me to try to reveal its secrets.

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**What's next for you? (If you are planning on leaving academia, please tell us why!)**

I want to continue studying the mysteries hidden from us in every living cell. I am looking forward to new challenges and developing my scientific career.

**Tell us something interesting about yourself that wouldn't be on your CV**

When I am not in the lab, I love to observe miracles of life in the bosom of nature.

Reference

**Krol, K., Antoniuk-Majchrzak, J., Skoneczny, M., Sienko, M., Jendrysek, J., Rumienczyk, I., Halas, A., Kurlandzka, A. and Skoneczna, A.** (2018). Lack of G1/S control destabilizes the yeast genome via replication stress-induced DSBs and illegitimate recombination. *J. Cell Sci.* **131**, jcs226480.