

Learning from Failure with Hua Wang

Former Crick postdoc and current Glasgow University PI Hua Wang discusses funding applications, his process, and how important it is to learn from and manage failure to produce something positive.

Hua Wang completed his postdoc at the Crick with Luiz Pedro Carvalho in 2019. He then secured an independent research fellowship at the University of Glasgow, where his research focuses on tetrapyrroles, as part of the Bacteriology Group within the Institute of Infection, Immunity, and Inflammation.

By Hua Wang, with introduction by George Pyrgos

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I have failed a lot. I think successes often get the credit for the work done by failures. When I started my independent research fellowship in 2019, securing research funding felt like a research career lifeline. On the path to establishing a research programme, I know I will stumble and fail many times.

Through past failures, I have found reoccurring reminders that have allowed me to keep seeing the excitement in research. Below are some of those reminders, and I hope they can help you continue to do what you love despite the odds.

Make mental and physical health a priority in your daily life.

It is important to have a block of time in the day for yourself. Researchers are constantly in a precarious mental space, and we need to recalibrate as human beings. There are endless research questions to pursue, many funding applications to write, and there is only one of you to do it. You need to take care of yourself to make sure you can make the most of those opportunities.

I block a time in the morning for working out before anything else. It provides the mental space and time to process past events and think in the present moment. It was not easy initially; I had numerous and repetitive fails, misses, and clashes with schedules. By building on micro-steps, the days with the morning runs are now when I can appreciate and understand why my funding applications were unsuccessful and work out how to improve for the next one.

Acknowledge the work and time you have put in.

A competitive funding application takes time, resources, and a team to complete. Early career researchers are unlikely to have all three without working overtime, asking favours, and getting help. We need to remember that writing funding applications is doing the job, and they should be celebrated as a piece of literary work.

In the case of unsuccessful funding applications, I think they are similar to failed experiments that guide the research. I have learnt more about my research and had more career development from the six unsuccessful funding applications than the one that was successful.

Keep learning.

Failures are wonderful learning tools, and a great way to remember this is by imagining our past selves meeting our present selves. Your past self should be proud of where you are now because you have already faced uncertainties, learnt from failures, and created your own paths.

Successes can be subjective and fleeting, whereas failures are revolutionary. From here, I hope you will search for the rainbow after a storm. It is beautiful.