Programmed Forgetting

November 12, 2023

Dear Residents,

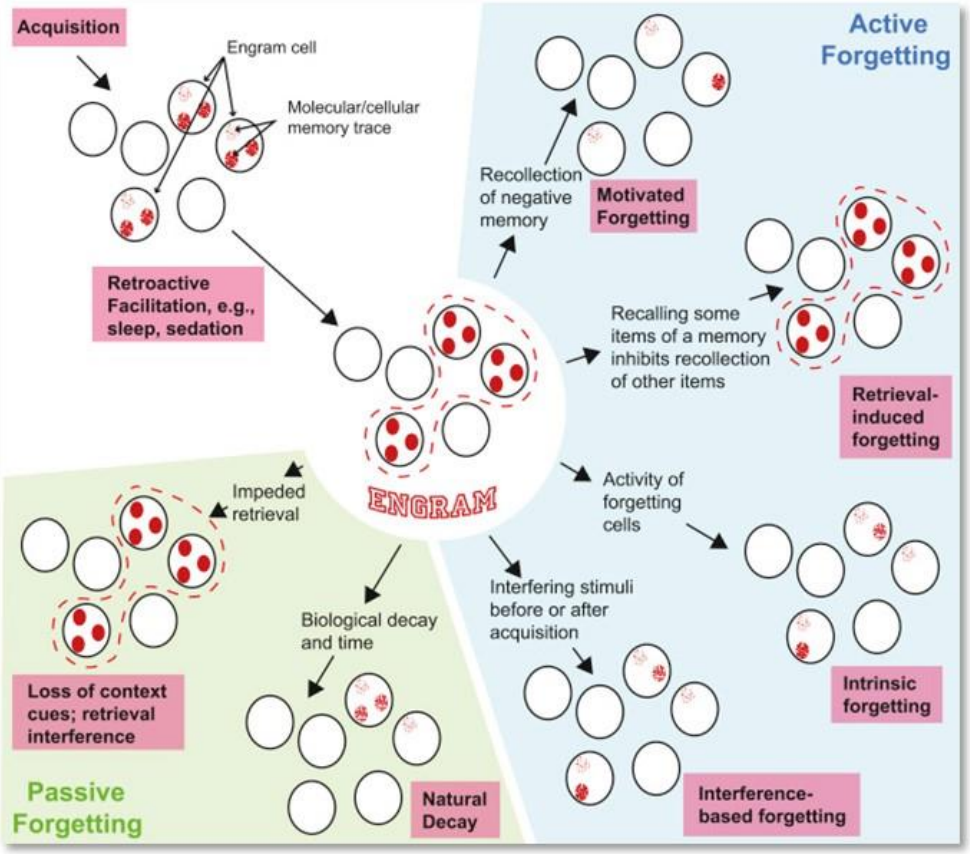
Happy Diwali to all who celebrate. Now more than ever, we must honor and celebrate each member of our family and cherish their rich backgrounds.

Each day we forget things – often because they haven't been used (decay) or are no longer needed (obsolete). Sometimes, they are needed and are useful, and forgetting leads to an important omission or error. But forgetting has an additional important function – creating space for unlearning the things that are coming in the way of new learning. For example, I must forget where I parked my car yesterday so that I can remember where I parked it today.

Our healthcare system keeps adding new things to keep track of or to perform (mandatory compliance/ACLS/vaccines/board recertification/license renewals, etc.). There is no doubt that most of these are useful but last time I checked there were still only 24 hours in a day. Unfortunately, resistance to change despite evidence that such change is needed, is often a property of a complex system (system inertia). We also know that complexity grows over time, and I expect most organizations have people building complexity rather than seeking simplicity. Management gurus often attribute such unneeded and messy complexity to siloed processes. Those in the QI space refer to this as suboptimization from intergroup competition vying to get the most attention and resources to *their* problems. "Solving" one problem can make another area function suboptimally.

You may have heard about the concept of a **learning healthcare system**. It is the mechanism by which we improve healthcare service delivery (quality/value/safety). It incorporates safer and more effective ways of delivering healthcare but importantly it also needs to "forget" outdated information and obsolete practices. One of you recently reminded us of the outdated list of orderable supplies in CPRS. This is an example of the need to "learn" current information and to "forget" outdated stuff. Despite all the advances in artificial intelligence, logistics and automation, there needs to be a deliberate effort to keep information systems (and by extension our practices) current and updated. Not removing obsolete or unnecessary information can lead to adverse outcomes in patient care delivery.

Residency programs must also make concerted efforts to "forget" so that we may learn new things. In neuroscience, programmed forgetting has a biological basis.



The Engram, Engram Cells, Molecular and Cellular Memory Traces, and Constructs of Forgetting from Experimental Psychology

Complex systems such as the electronic health record, residency training and the human body are all process centric systems and need continuous maintenance. The human body is simply marvelous in how it balances growth and death to maintain and steady state. Without programmed cell death, we would be one big neoplasm. Without cell renewal we would be aplastic. The body serves as an important model for the learning healthcare system. Autophagy, necrosis, and apoptosis are critical pathways for homeostasis. And stem cell renewal provides a continuous supply of new cells ready to do new things. Both must work in concert to preserve homeostasis.

To prevent residency training from becoming unwieldy, we probably need to decommission some rotations, consolidate compliance training, and streamline annual vaccination. We are also burdened with legacy information systems which are absorbing a lot of human resources. The new notewriter will eventually replace legacy methods of documentation. I recognize that the transition is difficult, and it takes some time to forget traditional ways of writing notes.

I want to thank those of you who have agreed to log all your required compliance training. At the end of this data collection period, I will have a much better understanding of how much time you spend in these endeavors, and this will help me calculate the human cost of institutional and hospital compliance. My aim would be to negotiate taking some of this away.

I hope you have a great week!
Dino Kazi