

Resuscitation

of the Nurse

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Learning Objectives

Understand

Understand the cause and associated concepts of nursing burnout

Relate

Relate the phenomena of burnout to other forms of distress

Identify

Identify protective strategies to reduce distress



Images: (Articulate, 2016–2023)



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Stranded After Crisis

Rethinking burnout through a lens of survival



Images: (Articulate, 2016–2023)

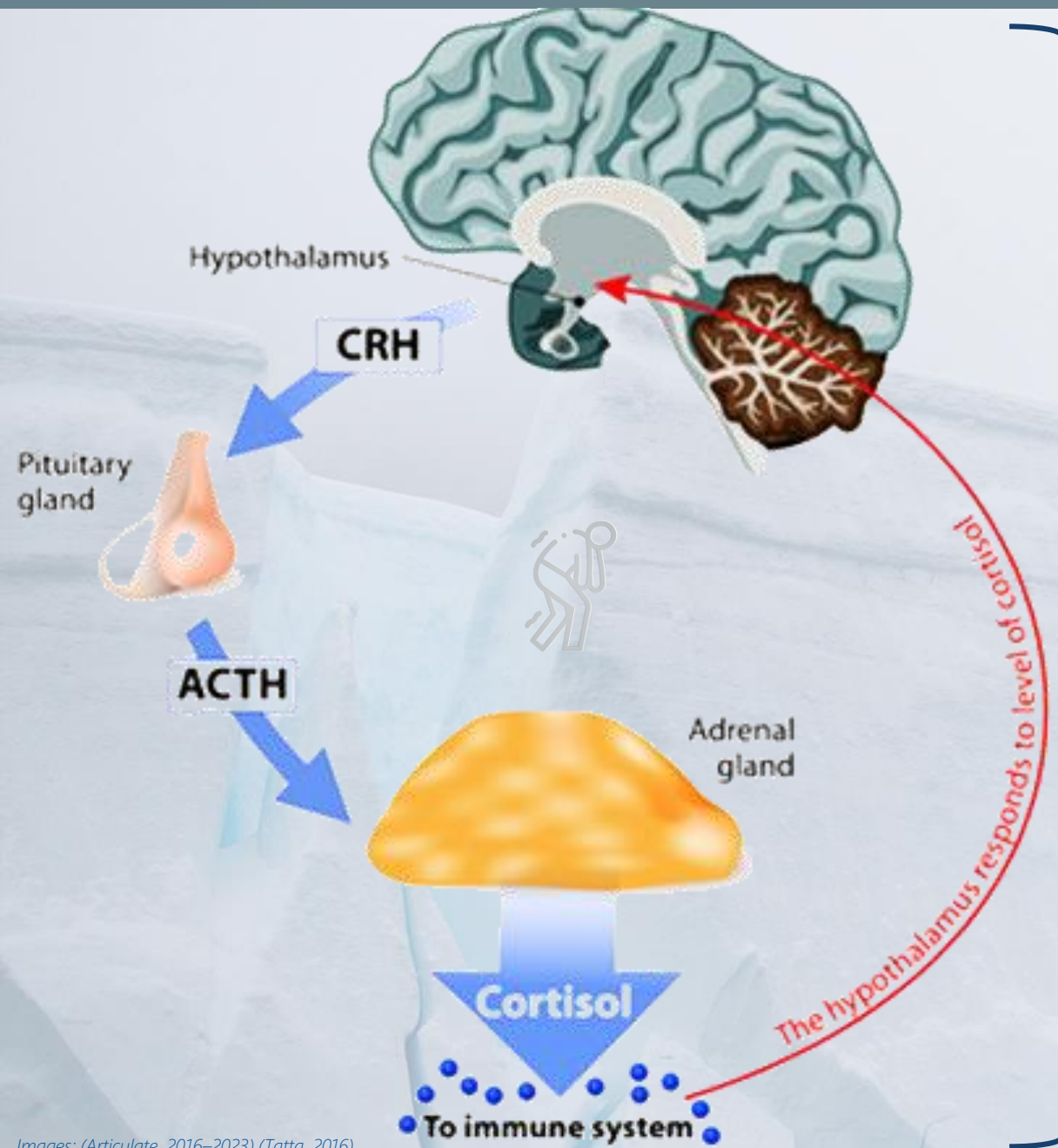
The Cost

of

Survival



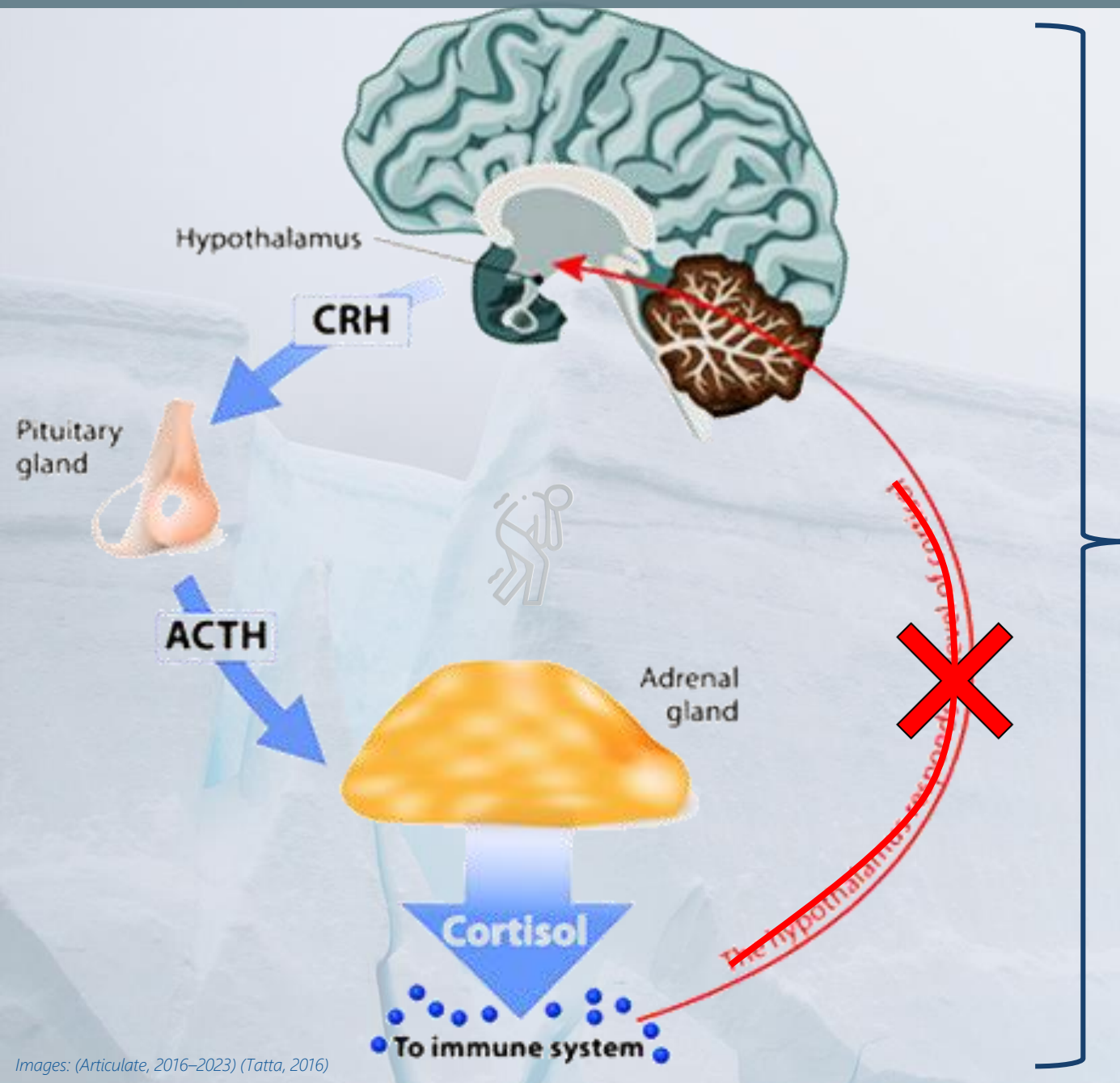
Stress and the Brain/Body: HPA Axis



ACUTE STRESS RESPONSE:

- Increase in HR, RR, BP, CBG
- Increased perspiration
- Increased inflammation
- Slowed digestion
- Improves ability to fight or flee

Survival and the Brain/Body: HPA Axis



CHRONIC STRESS RESPONSE:

- Sleep problems
- Chronic fatigue
- Poor immune function
- CBG dysregulation
- Mood changes
- Weight change
- Decreased life span

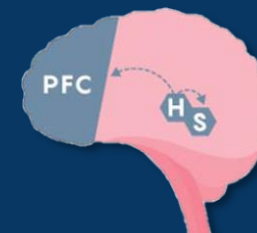
Survival & Memory:

Normal Memory Creation (overview)



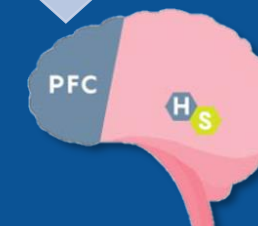
At time of event:

Multiple "engram cells" are created simultaneously, recording aspects of the event in different parts of the brain (Prefrontal Cortex (PFC), hippocampus (H) and subiculum (S))



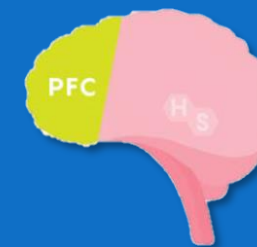
Immediately after the event:

Hippocampal/subicular engrams are consciously accessible. Engrams located in the PFC are "silent" (or inaccessible). This is **short term memory**

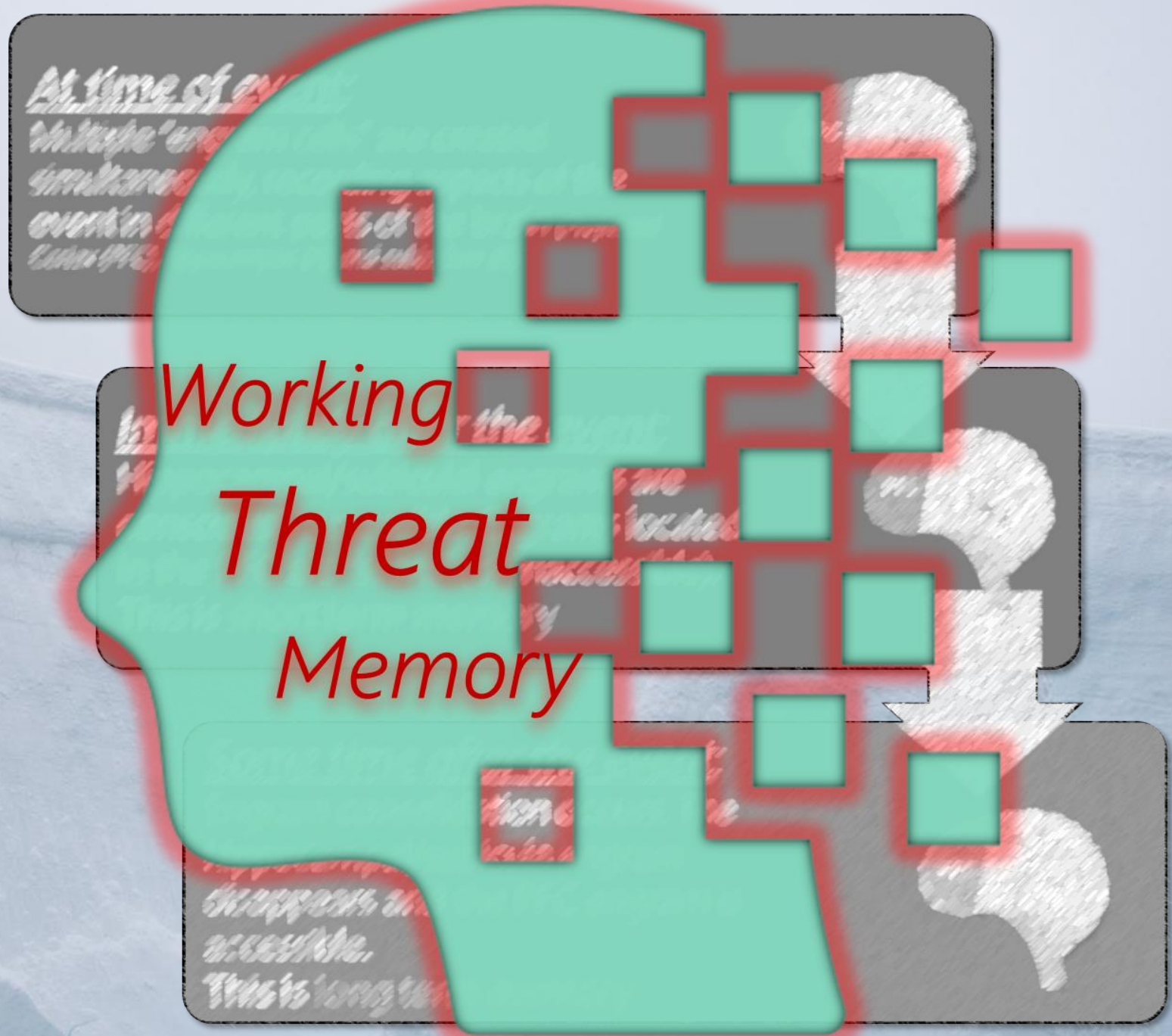


Some time after the event:

Engram consolidation occurs. The hippocampal/subicula engram disappears and the PFC engram is accessible. This is **long term memory**

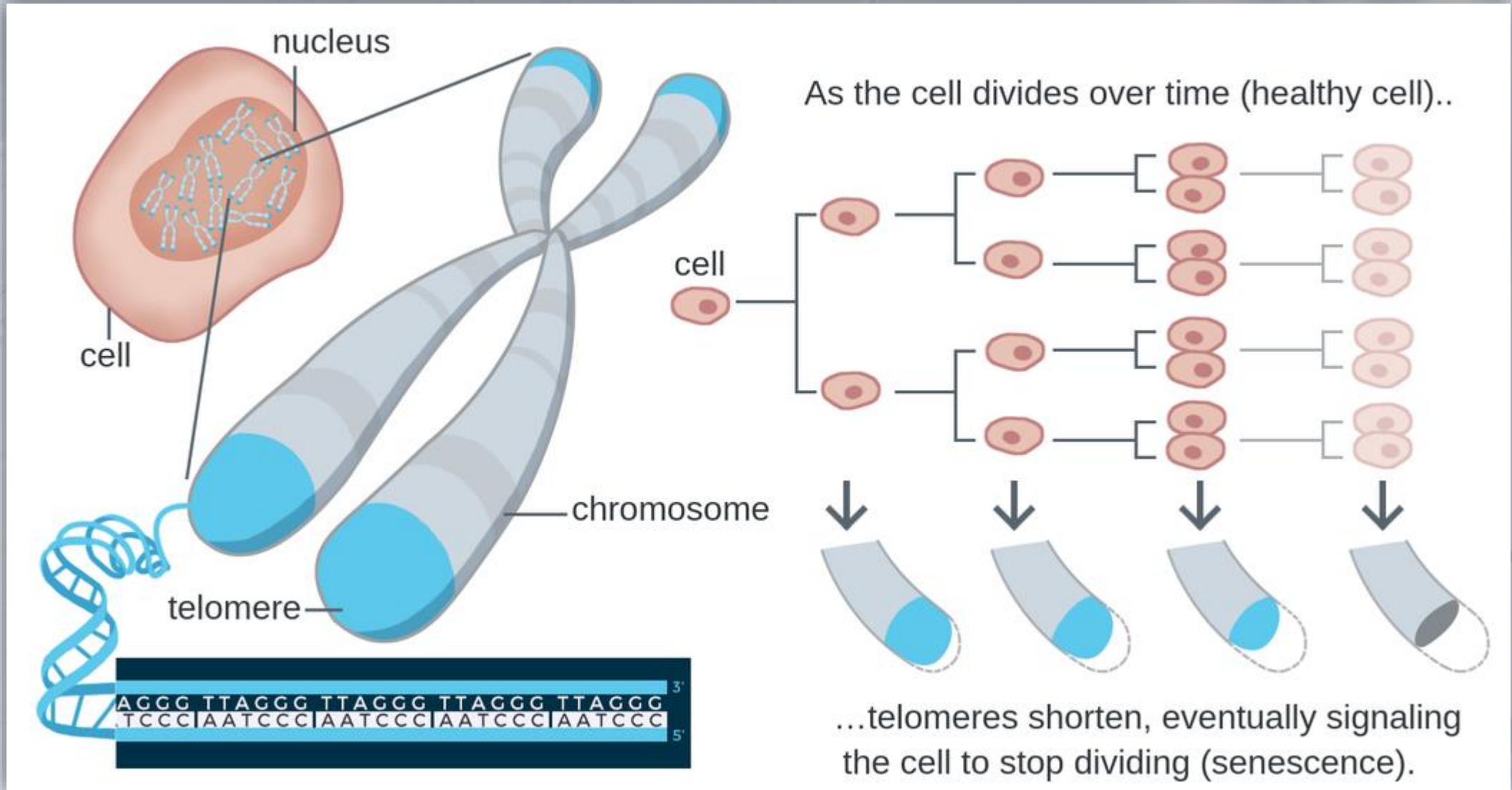


Survival & Memory: Traumatic Memory Creation



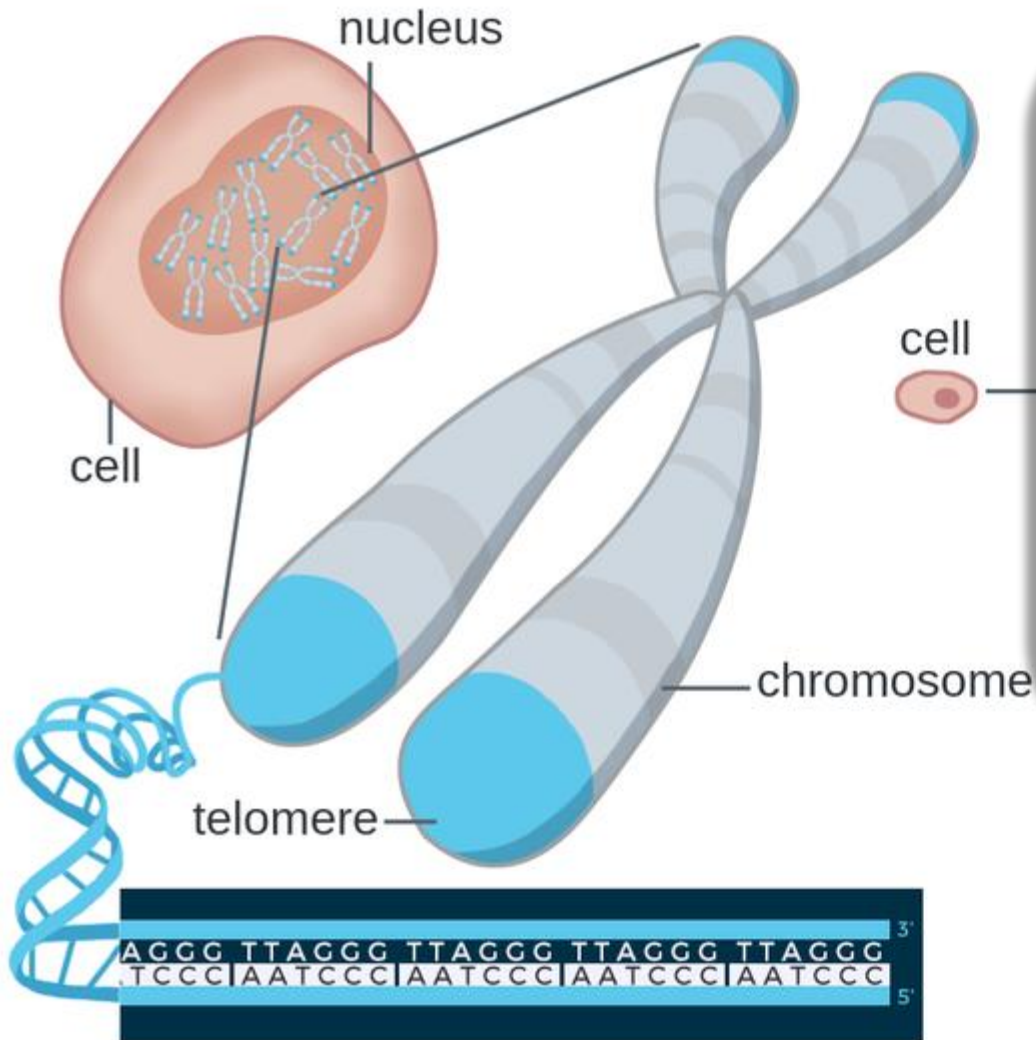


Survival & Cellular Life





Survival & Cellular Life



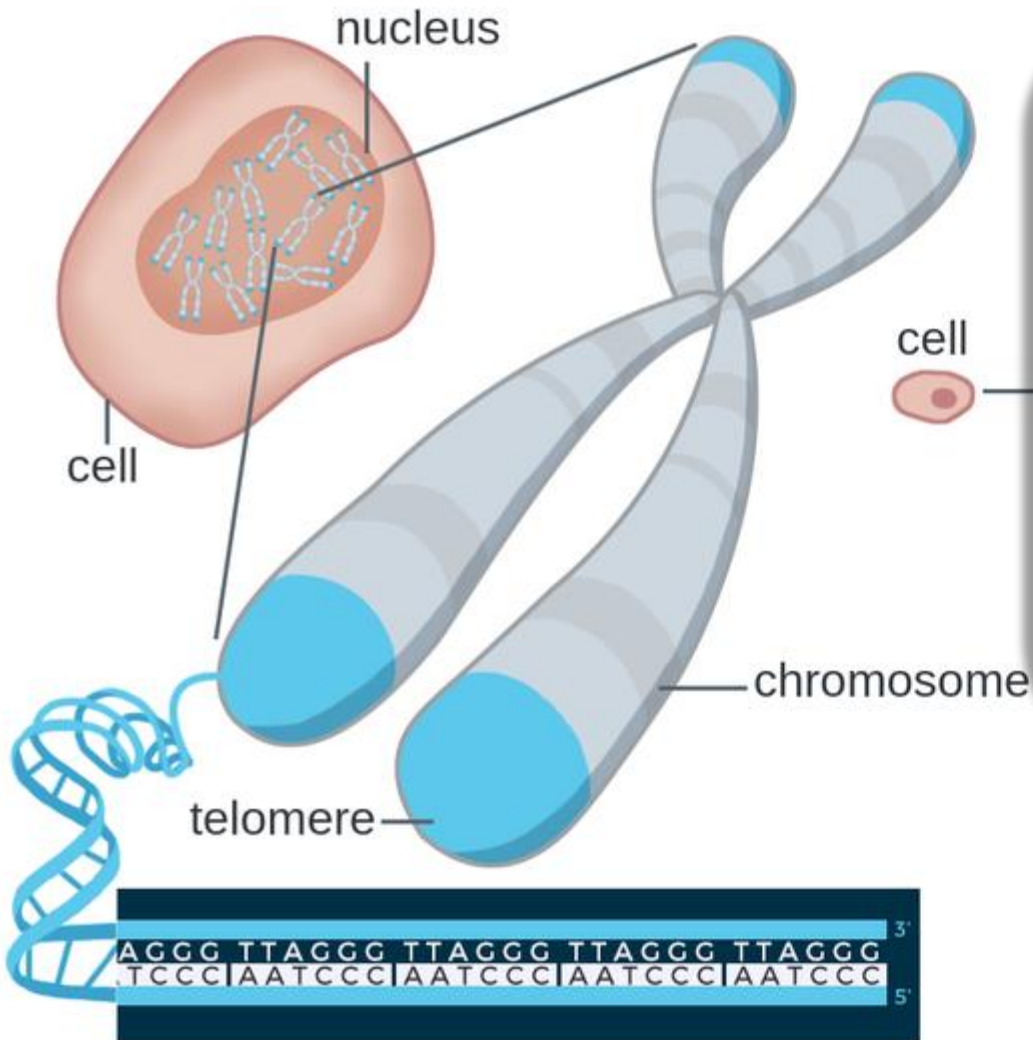
*"The two biggest factors are chronological aging and genetics, but **stress** is now on the map as one of the most consistent predictors of shorter telomere length. The type of stress determines how big its effect is."*

Elissa Epel, PhD (American Psychological Association)

...telomeres shorten, eventually signaling the cell to stop dividing (senescence).



Survival & Cellular Life



*"When we look at groups of people with **psychiatric disorders** related to dysregulated emotional responses, especially **depression**, and compare them to controls who have never experienced these disorders, they **consistently have shorter telomeres**"*

Elissa Epel, PhD (American Psychological Association)

...telomeres shorten, eventually signaling the cell to stop dividing (senescence).

Survival & Cellular Life

RESEARCH ARTICLE

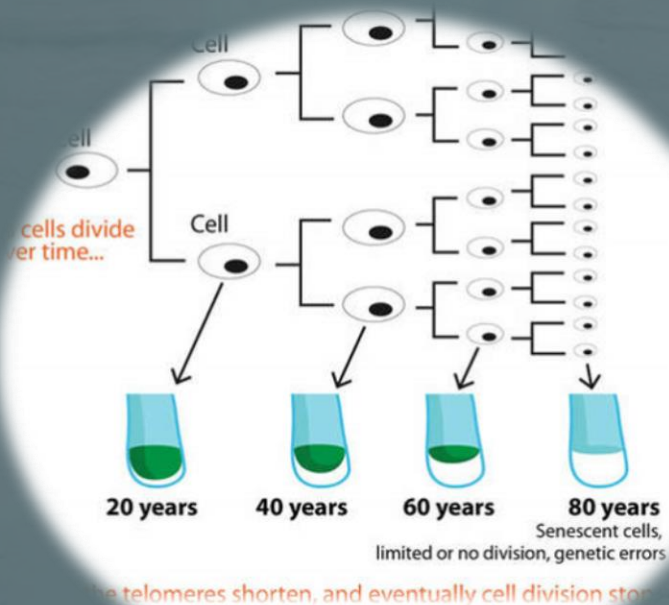
The prevalence of nurse burnout and its association with telomere length pre and during the COVID-19 pandemic

Holly Wei^{1†*}, Julia Aucoin^{2†}, Gabrielle R. Kuntapay^{2†}, Amber Justice^{2†}, Abigail Jones^{3†}, Chongben Zhang^{4†}, Hudson P. Santos, Jr.^{5†}, Lynne A. Hall^{1†}

1 University of Louisville School of Nursing, Louisville, KY, United States of America, **2** University of North Carolina REX Healthcare, Raleigh, NC, United States of America, **3** Piedmont Athens Regional Medical Center, Athens, GA, United States of America, **4** Biobehavioral Lab, University of North Carolina Chapel Hill, NC, United States of America, **5** Biobehavioral Laboratory and Health Resilience & Omics Science (HEROS) Hub, University of North Carolina Chapel Hill, NC, United States of America

Conclusions

Nurse burnout is a prevalent phenomenon in healthcare, and this study indicates that nurses currently experience high levels of burnout. **Nurses' cellular biomarker, telomere length, is shorter in the group of nurses during the COVID-19 pandemic than before.** Appropriate measures should be implemented to decrease nurses' burnout symptoms and improve nurses' psychological and physical health. Nurses, especially those younger than 60, report higher burnout symptoms, particularly emotional exhaustion. This study indicates the need for intervention to promote nurses' health during the pandemic and beyond. If not appropriately managed, nurse burnout may continue to be a significant issue facing the healthcare system.








Images: (Articulate, 2016–2023)



*A
Framework
for
Surviving*



A photograph of a wooden walkway leading through a large, clear ice cave. The walkway is made of wooden planks and leads towards a bright opening at the end of the cave. The ice walls are thick and translucent, with some light reflecting off the surfaces. The overall atmosphere is cold and mysterious.

Surviving in the Wilderness



Surviving
in the
Wilderness

?

?

?

Surviving Burnout

Creating Warmth
(through movement)
Sparking Inspiration
(empowering each other)

Building Fire

Identifying Ourselves
(using our voice)
Owning our story
(confronting narratives)

Drawing Attention

Partnering together
(strength in numbers)
Protecting ourselves
(seeking recovery)

Finding Shelter



Building Fire

*Creating Warmth
Sparking Inspiration*



Dave Killen | The Oregonian/OregonLive

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February snow

A car is abandoned in a ditch alongside Northeast Lombard Street in the Cully neighborhood Thursday morning, Feb. 23, 2023. Nearly a foot of snow fell Wednesday in Portland.

Building Fire

Creating Warmth



Exteroception



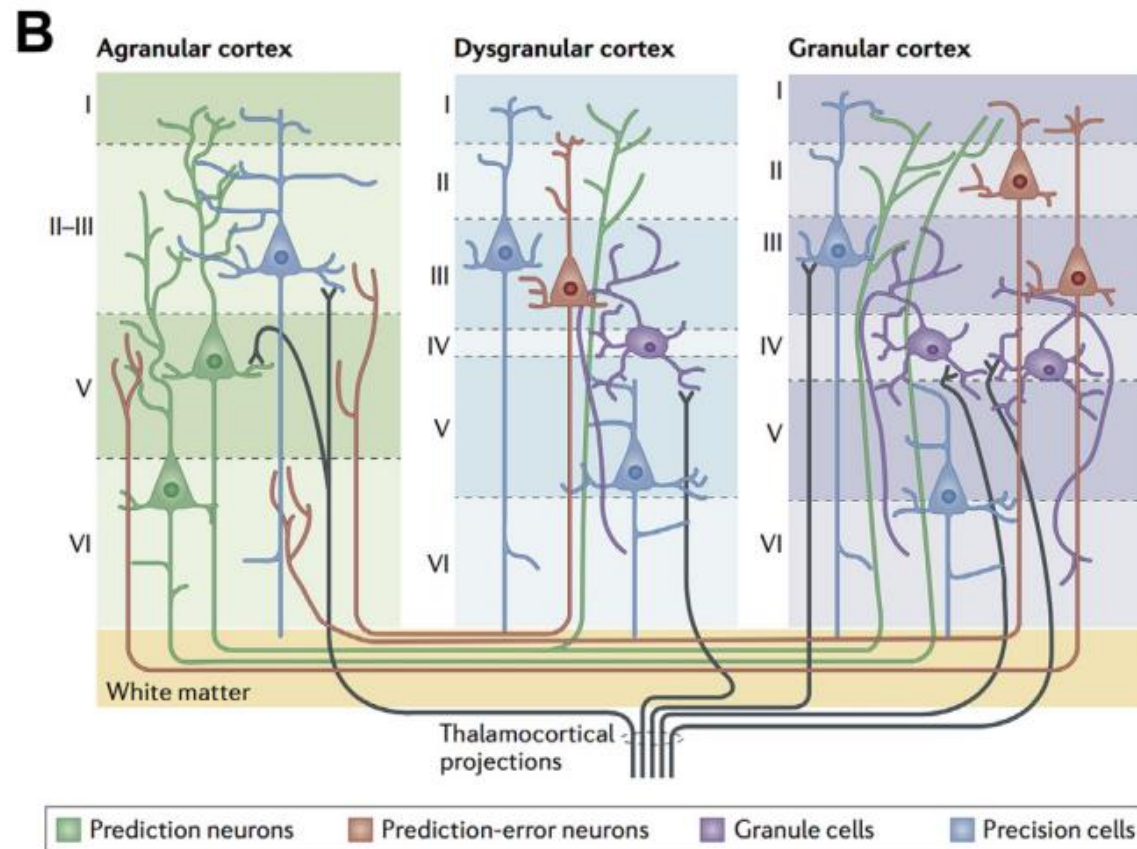
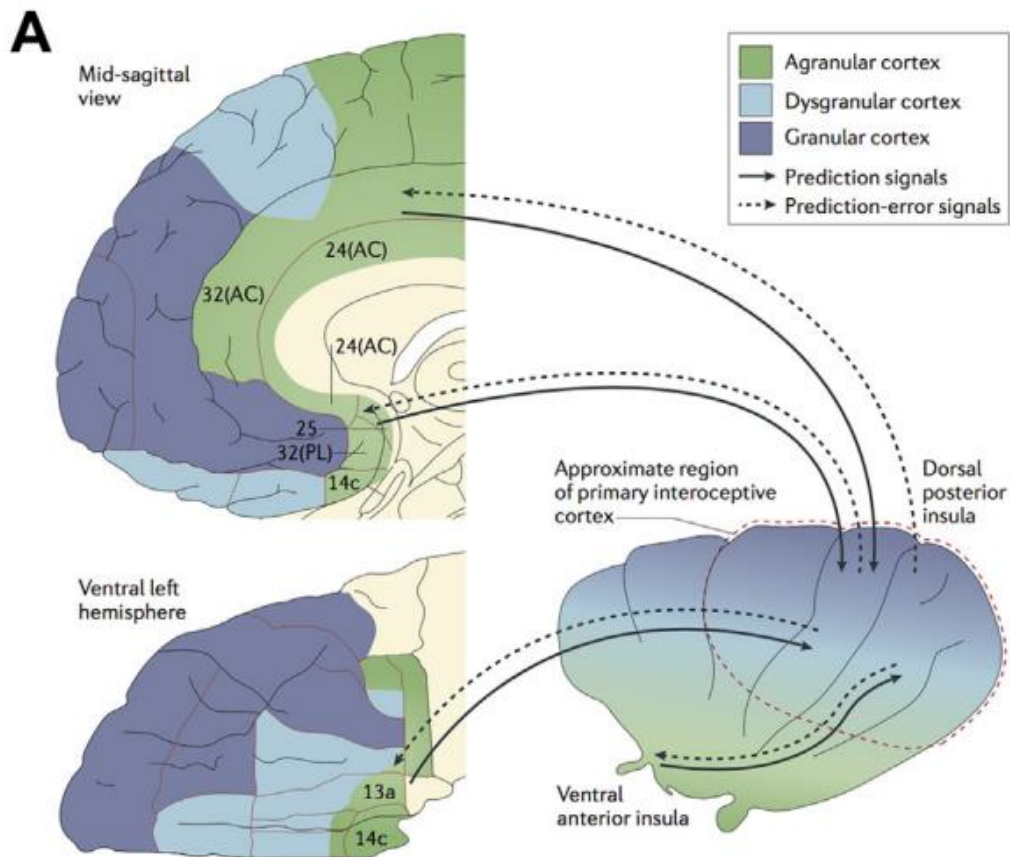
Proprioception



Interoception



Building Fire | *Creating Warmth*



“One hypothesis of the role of interoception in mental illness is that interoceptive input (i.e., posteriors) becomes increasingly decoupled from interoceptive predictions issued by the agranular visceromotor cortex (priors), leading to increased interoceptive prediction error signals. This decoupling may present in the brain as “noisy afferent interoceptive inputs” - Khalsa, et al 2018 (from “Interoception and Mental Health: A Roadmap”)



Building Fire | *Creating Warmth*

"...mindfulness-based stress reduction, yoga, and other meditation/movement-based treatments may be aimed at improving metacognitive awareness of mind–body connections by systematically attending to sensations of breathing, cognitions, and/or other modulated body states (e.g., muscle stretching)" - Khalsa, et al 2018 (from "Interoception and Mental Health: A Roadmap")





Building Fire | *Creating Warmth*





Building Fire | *Sparking Inspiration*





Building Fire | *Sparking Inspiration*



Shared Decision-making
with our patients

Looping experiences in
other specialties

Shared Governance
Structures

Retaining Veteran
Mentors



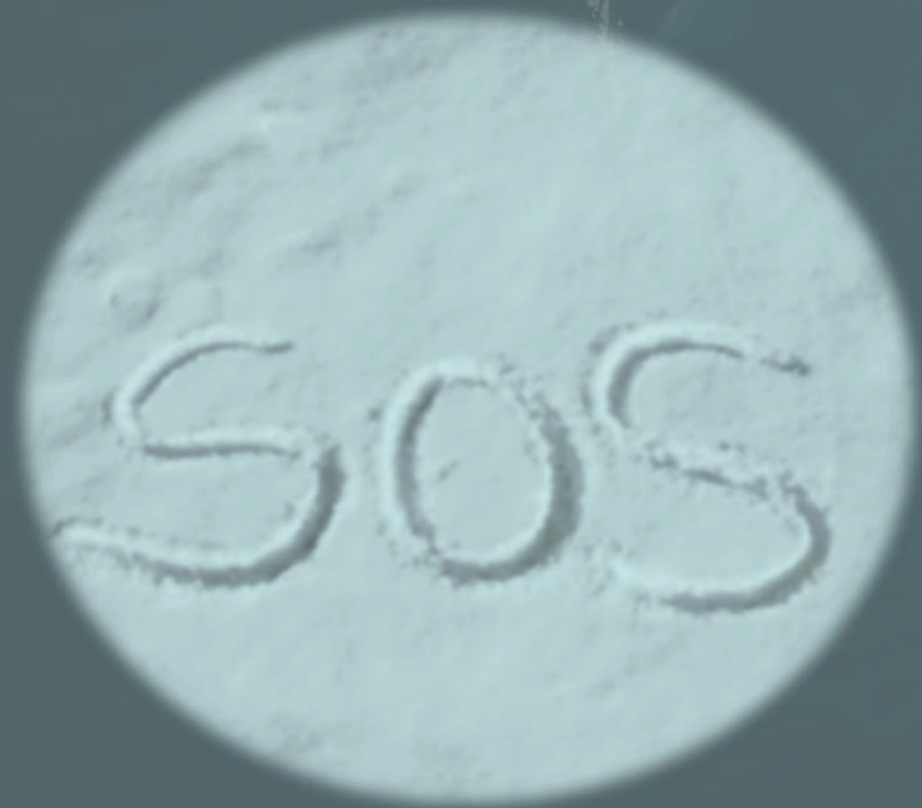
SOS

Drawing Attention

*Identifying Ourselves
Owning our story*

Drawing Attention

*Identifying ourselves &
owning our narrative*



Bills safety Damar Hamlin in critical condition after cardiac arrest; game suspended

Jay Skurski Jan 3, 2023 Updated Jan 10, 2023 34



Buffalo Bills players stand by as medical personnel tend to Damar Hamlin who collapsed after making a tackle during the first quarter at Paycor Stadium in Cincinnati, Monday, Jan. 2, 2023.

Harry Scull Jr./Buffalo News

“Current media images and public perceptions of nursing are **outdated** and have contributed to perpetuating many of the **erroneous social constructions** in and of nursing. These ideas have inadvertently **contributed to disempowerment and devaluing the profession.**” *Garcia, et al (2021).*

Nurse identity: Reality and media portrayal.



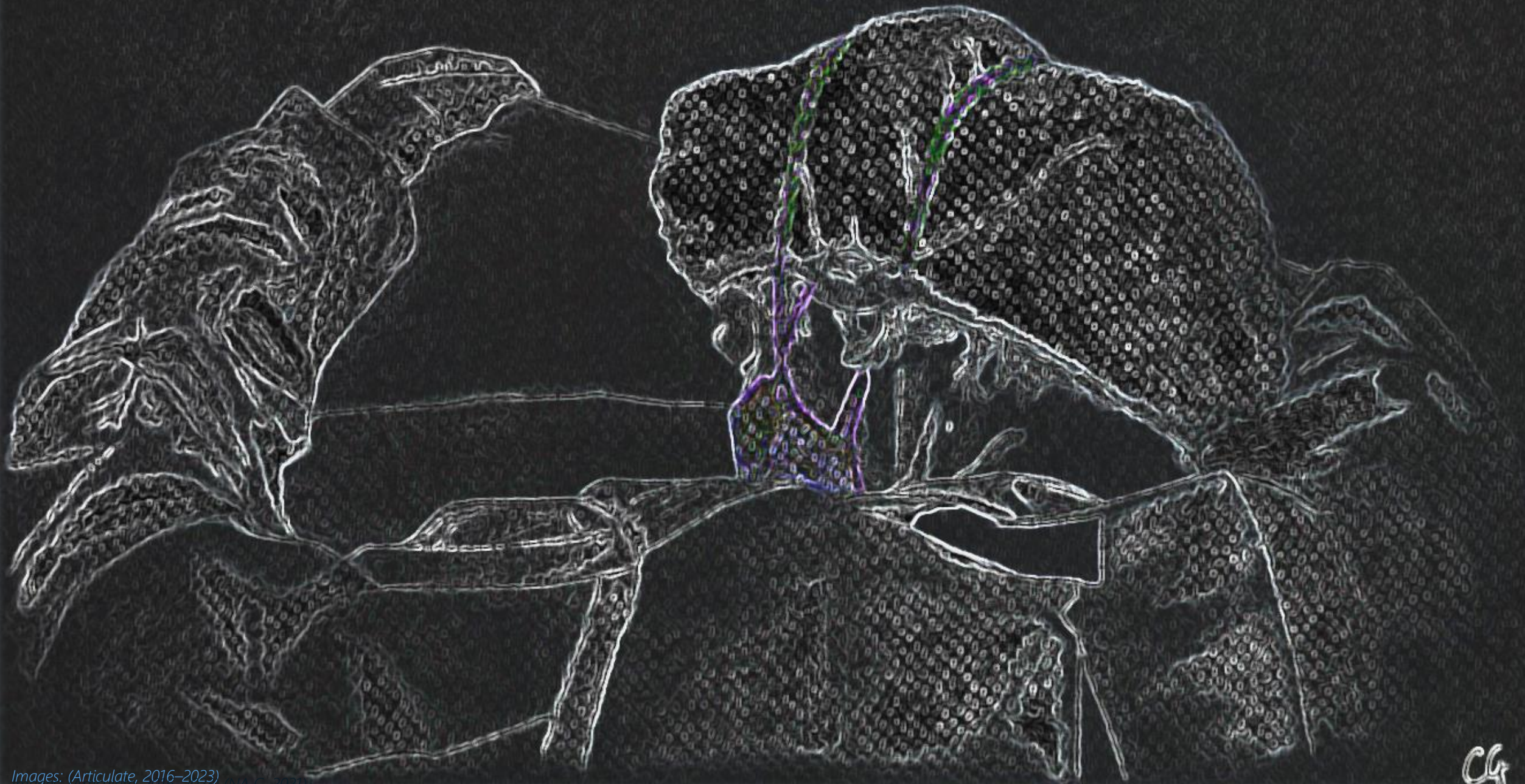
Images: (Articulate, 2016–2023) (NA C, 2021)

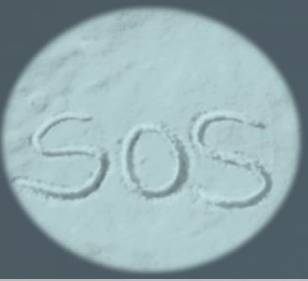
“The public perception and paucity of understanding of nursing, coupled with a **lack of appreciation of the scientific nature of nursing** conflicts with the autonomous, highly qualified, and skilled, evidence-based practitioners that nurses are. **The gendered and negative nursing stereotypes of nursing perpetuate the poor public understanding of the nurse’s true role** and levels of responsibility.” – Garcia, et al (2021). *Nurse identity: Reality and media portrayal.*



“Make Nursing central to health policy in every country and raise the profile of the nurse profession. Increase recruitment of nurses in education and training. Develop nurse leadership skills. Enable nurses to work to their potential. Obtain evaluations on the impact of nursing on access, cost and quality. Develop nursing to have a triple impact on health, gender equality and economies” - - Garcia, et al (2021). *Nurse identity: Reality and media portrayal.*








Drawing Attention





Finding Shelter

*Partnering Together
Protecting Ourselves*



Finding Shelter

finding strength in numbers

"Shackleton made everyone feel as if they were one. It was a team - not a them and us situation"

- Peter Wordie (son of James Wordie - who served as geologist on Shackleton's epic Trans-Antarctic Expedition 1914-1916) `



Finding Shelter

Seeking recovery



Finding Shelter

Seeking recovery



CBT

(cognitive behavioral therapy)

DBT

(Dialectical Behavior Therapy)

EMDR

(Eye Movement Desensitization And Reprocessing Therapy)

Mentalization-Based Therapy

Exposure Therapy

Interpersonal Therapy

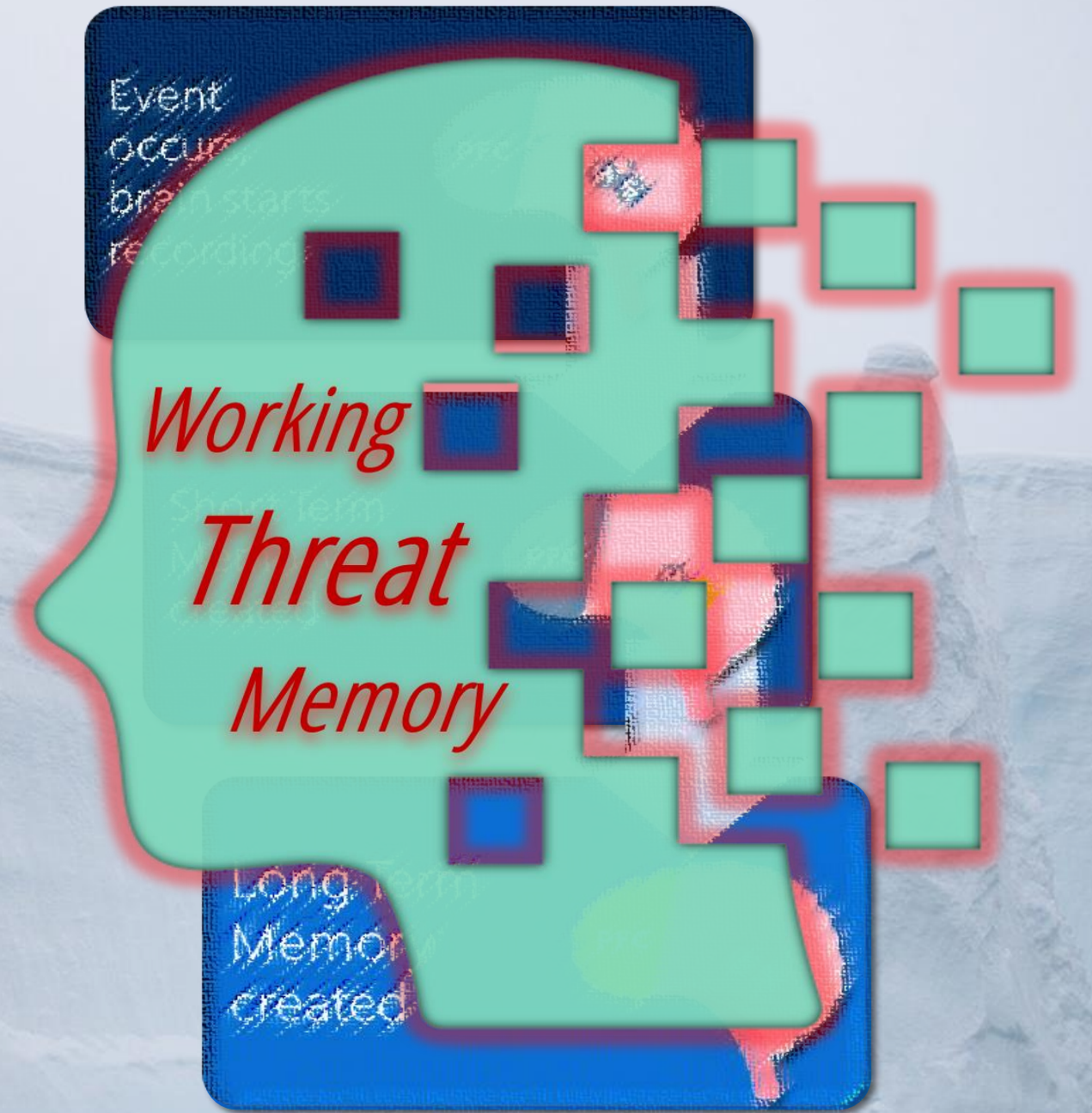
Pet Therapy

Psychodynamic Psychotherapy

Psychedelic-Assisted Therapy

Consolidating Traumatic Memories

Seeking recovery



Consolidating Traumatic Memories

Seeking recovery



Consolidating Traumatic Memories

Seeking recovery



Consolidating Traumatic Memories

Seeking recovery







References

- Alexander, C., & Dorman, J. (2001). *The Endurance: Shackleton's Legendary Antarctic Expedition*. WGBH Boston; White Mountain Films; Discovery Channel Pictures.
- Articulate. (2016–2023). Content Library 360 (Build 3.62.27443.0) [Dataset]. Articulate.
- BBC. (2015, November 20). *Stark images of Shackleton's struggle*. BBC News. Retrieved January 31, 2023, from <https://www.bbc.com/news/magazine-34856379>
- Damasio A. R. (1996). The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 351(1346), 1413–1420. <https://doi.org/10.1098/rstb.1996.0125>
- Garcia, R., & Qureshi, I. (2021). Nurse identity: Reality and media portrayal. *Evidence Based Nursing*, 25(1), 1–5. <https://doi.org/10.1136/ebnurs-2021-103480>
- Guo, J.-W., Tay, D. L., & Litchman, M. L. (2019). Hashtags and heroes: Perceptions of nursing on Twitter following a high profile nurse arrest. *Journal of Professional Nursing*, 35(5), 398–404. <https://doi.org/10.1016/j.profnurs.2019.02.005>
- Khalsa, S. S., Adolphs, R., Cameron, O. G., Critchley, H. D., Davenport, P. W., Feinstein, J. S., Feusner, J. D., Garfinkel, S. N., Lane, R. D., Mehling, W. E., Meuret, A. E., Nemeroff, C. B., Oppenheimer, S., Petzschner, F. H., Pollatos, O., Rhudy, J. L., Schramm, L. P., Simmons, W. K., Stein, M. B., ... Zucker, N. (2018). Interoception and mental health: A roadmap. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 3(6), 501–513. <https://doi.org/10.1016/j.bpsc.2017.12.004>
- Lu, S. (2014, October). How chronic stress is harming our DNA. *Monitor on Psychology*. Retrieved January 31, 2023, from <https://www.apa.org/monitor/2014/10/chronic-stress#:~:text=Telomeres%20are%20a%20protective%20casing,dies%20or%20becomes%20pro%2Dinflammatory.>
- Maddox, S. A., Hartmann, J., Ross, R. A., & Ressler, K. J. (2019). Deconstructing the gestalt: Mechanisms of fear, threat, and trauma memory encoding. *Neuron*, 102(1), 60–74. <https://doi.org/10.1016/j.neuron.2019.03.017>
- Medeiros, M. (2019). Improving outcomes, sharing innovations, celebrating excellence. *Nursing Management*, 50(1), 10–11. <https://doi.org/10.1097/01.numa.0000550446.71633.28>
- NA, C. (2021, June 27). A tired nurse by CrazyMind96 on DeviantArt. by CrazyMind96 on DeviantArt. Retrieved March 1, 2023, from <https://www.deviantart.com/crazymind96/art/A-tired-nurse-883917703>
- NA, T. (2022). thinking relaxing a lot on my mind gif. Retrieved March 13, 2023, from <https://tenor.com/view/thinking-relaxing-a-lot-on-my-mind-gif-14718778>
- NAMI. (2023). Psychotherapy. NAMI. Retrieved January 31, 2023, from <https://www.nami.org/About-Mental-Illness/Treatments/Psychotherapy>
- NPR. (2022, December 23). Memory and the brain. NPR. Retrieved January 31, 2023, from <https://www.npr.org/programs/tes-radio-hour/1144403373/memory-and-the-brain>
- Skurski, J. (2023, January 10). Bills safety Damar Hamlin in critical condition after cardiac arrest; game suspended. *Buffalo News*. Retrieved March 1, 2023, from https://buffalonews.com/sports/bills/bills-safety-damar-hamlin-in-critical-condition-after-cardiac-arrest-game-suspended/article_e5123d76-8b0c-11ed-b2e2-bfcb027143c8.html
- Tatta, D. J. (2016, March 22). Hpa Axis and pain. INTEGRATIVE PAIN SCIENCE INSTITUTE. Retrieved March 13, 2023, from <https://integrativepainscienceinstitute.com/how-your-brain-changes-with-pain/>
- Wei, H., Aucoin, J., Kuntapay, G. R., Justice, A., Jones, A., Zhang, C., Santos, H. P., & Hall, L. A. (2022). The prevalence of nurse burnout and its association with telomere length pre and during the covid-19 pandemic. *PLOS ONE*, 17(3). <https://doi.org/10.1371/journal.pone.0263603>