



## **Editor-in-Chief Pick September 2022**

By Jeffrey A. Kline, MD

### **Toward the decoding of gestalt**

Among other phenomena, two in particular invoke the idea of magic, or supernatural effect. One is the property of emergence, which is a concept that largely says a network of things can function in complex ways that cannot be predicted by its relatively simple components. Examples include the efficiency and intelligence of a colony of ants, or wetness, a property created uniquely by trillions of water molecules working together. The other example is gestalt, the beautiful, mysterious, and flawed cognitive process that contributes heavily to the equally beautiful, mysterious, and flawed “System I” thought processes that dominate emergency care decision-making.

The immediate availability of gestalt makes it an unavoidable part of thinking. Every emergency physician has made a sick/not sick decision based upon watching a patient be unloaded from an ambulance. But the neural coding of gestalt is largely a black box: currently, how it happens cannot be mapped. In contrast, structured rules, such as those used to assess acuity in triage, use transparent, relatively objective data.

In this EIC Pick of the Month, [Physician gestalt for emergency department triage: A prospective videotaped study](#), Ming-Tai Cheng and colleagues use videotaped encounters with patients at triage, and compared the triage categories from a validated computerized method, keyed in by a triage nurse in real time, with the gestalt interpretations of research physicians who later interpreted the triage levels based upon watching videos (with sound) of the same encounters. Stated another way, the nurses systematically recorded objective data, and the physicians watched and listened according to their own internal rules of importance. The findings were that both systems performed equally for overall diagnostic accuracy, but gestalt tended to correctly triage more patients toward lower levels, thus potentially conserving resources.

While this study does not provide much light into the black box, it helps make the statement that gestalt works. And it works fast, and for no additional cost beyond what we get paid per hour. Therefore, it deserves neural decoding.