The genetics of emergent phenotypes

The following is an edited excerpt.

There is now compelling evidence that disorders like epilepsy, schizophrenia and autism can be caused by mutations in any of a very large number of different genes (sometimes singly, sometimes in combinations). This is fundamentally changing the way we think about these disorders. It is no longer tenable to consider them as unitary categories. Instead, it is very clear that the underlying etiology is extremely heterogeneous – possibly more so than for any other human disease.

How can this fact be explained? Why is it that mutations in so many different genes (perhaps thousands) can give rise to the specific phenotypes associated with those disorders?

Read the full post here: The genetics of emergent phenotypes