Review of: "Is gastrulation the most important time in your life?"

Somya Mani

Potential competing interests: No potential competing interests to declare.

In textbook, and the general literature, gastrulation is described as a defining event that sets up the germ-layers, establishes constraints on cell-fates, and sets up the body axis. Through many examples, the author challenges each of these strong claims, and allows a more nuanced view to emerge. I especially appreciate the brevity and clarity of the piece, which makes the topic so approachable for non-specialists.

I think the article additionally connects well with more general research on the plasticity of development, which demonstrates how differentiation routes to cell-types are not fixed within an organism [1], or over evolutionary timescales [2]. It would be illuminating to broaden the conversation here by adding a comment about developmental plasticity without diluting the main focus on gastrulation, neuromesodermal progenitors and setting of the body-axis.


Minor Comments:

1. page2, line3: invagination of blastula’s inner layer

2. page3, line1: space missing in ‘the adult’

3. page4, line3: change to ‘tissue invagination being one of several mechanisms…’

4. last reference: ‘axial sten m cell zones…’ → ‘axial stem cell zones…’