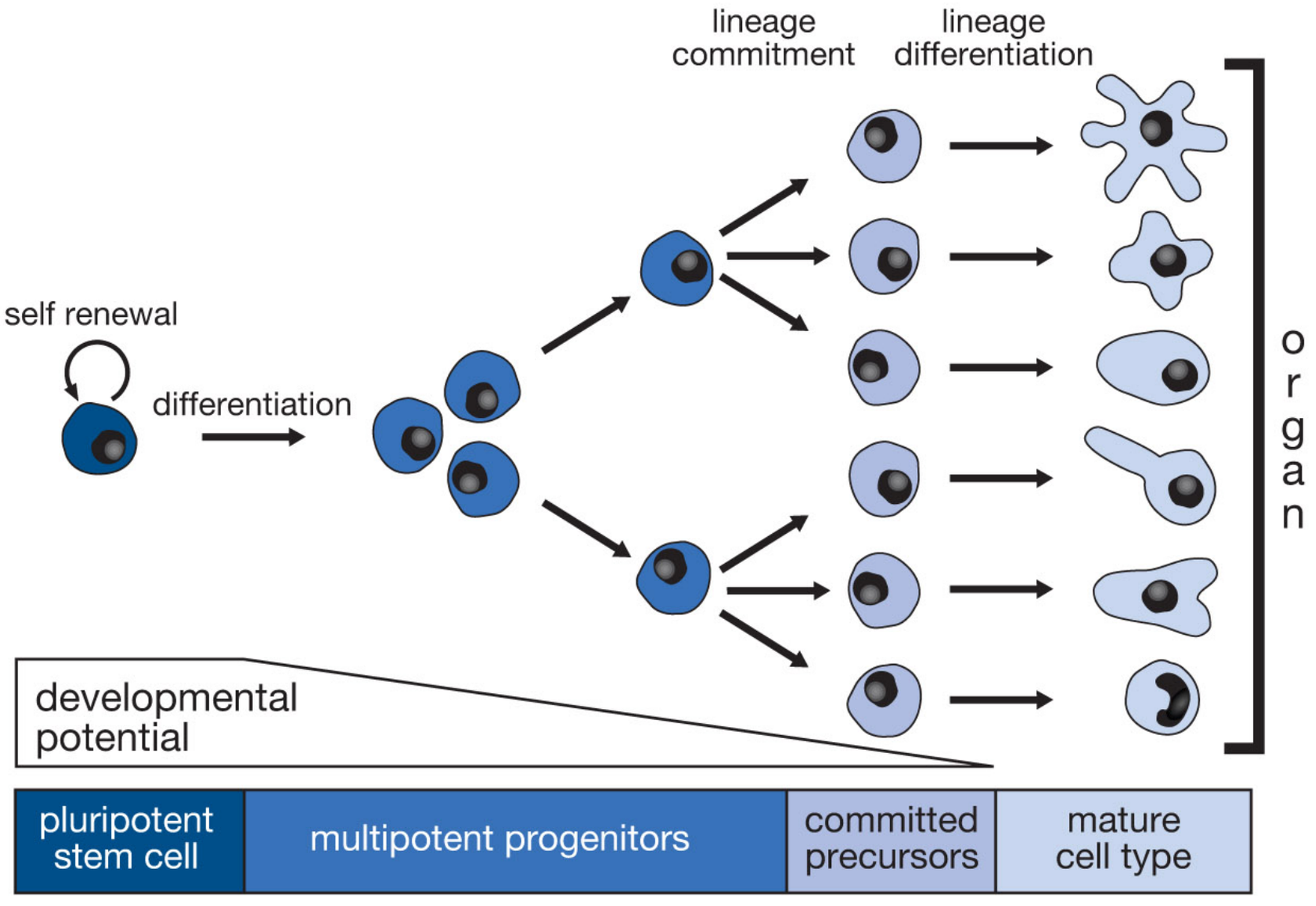

Figure 1. Schematic Diagram of Organ Development from a Single Stem Cell

The development of an organ is initiated by tissue-specific stem cells, which have extensive self-renewal capacity and are pluripotent, thus giving rise to all cell types of the organ. The stem cells first differentiate into multipotent progenitors (also known as transit-amplifying cells) with increasingly restricted developmental potential. These progenitors subsequently undergo commitment to one of several lineages and then differentiate along the selected pathway into a functionally specialized cell type of the organ.