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**The Trouble with Germline: Using Integrated History and Philosophy to Explore a Problematic Assumption**

For nearly 150 years, the bodies of metazoans have been neatly divided into two kinds of cells: germline cells (the reproductive cells and their progenitors) and somatic cells (the rest of the cells in the body). It is commonly assumed that once the germline is specified during development, somatic cells cannot become a part of the germline cell lineage. This strict and inviolable relationship between germline and soma is called the Weismann Barrier, and has become pervasive within scientific- and policy-thinking about germline. In this talk, I will use an integrated HPS perspective to explore our understanding of the Weismann Barrier alongside challenges to it and implications that arise from it within current germline research and genome editing policy.