



## Weismann Barrier: What Is Left of It?

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Deadline for manuscript  
submissions:

**closed (30 September 2020)**

### Message from the Guest Editor

Auguste Weismann postulated more than 120 years ago that germ cells are set apart from somatic cells very early during development. He was the first to propose a model for cell specification. His views implied that later in the development as well as during the lifetime of an organism, changes that occurred in the somatic cells would never be passed on to the germ cells. This gave rise to the theoretical concept of the “Weismann barrier”. A. Weismann rejected Jean-Baptiste Lamarck’s ideas on the transgenerational inheritance of acquired traits.

Today, a growing number of studies indicates that this barrier can be overcome and that certain aspects of our life history can be passed on to the next generation. It is also known that many organisms do not have this barrier—in other words, this strict distinction between somatic cells and germ cells.

The purpose of this Special Issue of the *Journal of Developmental Biology* is to bring together research highlights, reviews or comments on recent findings about germ cell specification, the distinction between somatic and germ lineages, and the “Weismann barrier”.





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## Message from the Editor-in-Chief

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