
What's Surprising about Stem Cell Research?

Jane Maienschein*¹

¹Arizona State University (ASU) – School of Life Sciences 874501 Arizona State University Tempe, AZ
85287-4501, United States

Abstract

Session:

”Session: Asking the Hidden Questions Raised by Stem Cells: History, Philosophy, and Biology”

(Jane Maienschein, Melinda Fagan, Lucie Laplane, Michel Vervoort)

Even before 1998 brought human embryonic stem cell research and expanded public awareness, stem cell research has generated surprising observations and has challenged cherished assumptions. This talk will explore historical examples of such challenges and will lay out key steps in stem cell biology before 1998. At first, discoveries challenged understanding of how development and differentiation work. Then new observations undercut core assumptions about cell determination. And each new major research innovation with stem cells adds to other research on embryos that challenges social assumptions about what makes up an individual developing organism. The history illuminates our understanding today and calls for a different and more complex understanding of what an individual developing embryo really is.

*Speaker