university of washington

OFFICE OF RESEARCH

**ESCRO Changes**

*(plus a little background)*

**What is UW’s Embryo and Embryonic Stem Cell Research Oversight?**

* Why does ESCRO exist – what makes it unique?
  + ESCRO addresses unique ethical issues specific to stem cell research, such as the use of human embryonic stem cell lines created from the destruction of a human embryo.
* In late 2007, [GIM 36](https://www.washington.edu/research/embryonic-stem-cell-research-oversight-escro/) was born: UW’s policy and guidelines on human embryonic stem cell research.
  + Then-President Bush allowed very limited federal funding for research on a set of established hESC lines.
  + UW responded by creating [GIM 36](https://www.washington.edu/research/embryonic-stem-cell-research-oversight-escro/) in anticipation of further regulation and protection of UW interests:
    - Use of equipment, supplies, buildings for research involving hESCs ineligible for federal funding;
    - Types of research that could occur at the UW;
    - ESCRO Committee composition and review;
    - Establishment of registry of hESC lines at UW.
  + President Obama allowed more federal funding for research using established hESCs and the creation of an NIH human embryonic stem cell registry still in effect today.
* [GIM 36](https://www.washington.edu/research/embryonic-stem-cell-research-oversight-escro/) is based on the below federal regulations, national and international guidance:
  + [NIH Guidelines on Human Stem Cell Research](https://stemcells.nih.gov/research-policy/guidelines-for-human-stem-cell-research)
  + [Executive Order, March 9, 2009](https://www.gpo.gov/fdsys/pkg/FR-2009-03-11/pdf/E9-5441.pdf)
  + [National Academies of Science (NAS) Stem Cell Information Guidelines and Amendments](https://www.nationalacademies.org/our-work/guidelines-for-human-embryonic-stem-cell-research)
  + [International Society for Stem Cell Research](http://www.isscr.org/), known as the [ISSCR Guidelines for Stem Cell Research and Clinical Translation](https://www.isscr.org/guidelines)

[**GIM 36**](https://www.washington.edu/research/policies/gim-36-human-embryonic-stem-cell-research-policy-and-guidelines/) **updates**

UW’s policy [GIM 36](https://www.washington.edu/research/policies/gim-36-human-embryonic-stem-cell-research-policy-and-guidelines/) has been revised. Some of the major additions to the policy (in place since 2007) include oversight of research involving human induced pluripotential stem cells (hiPSC). These stem cells in many ways function like human Embryonic Stem Cells (hESCs) although they are not derived from embryos. Other oversight now includes organoids that have the potential to form neural networks or gametes and *in vitro*-developed embryos using hESCs or hiPSCs. Scientific advances in these fields were informed by the [guidelines at ISSCR](https://www.isscr.org/guidelines) and are reflected in the updated GIM 36 in 2022.

Detailed changes include:

* + Significantly shortened GIM 36 to take out procedural/process information – much of which will be placed on the ESCRO webpage.
  + Oversight still includes:
    - Studies involving *in vitro* passage or differentiation of hESC lines.
    - Studies involving destruction of human embryos for research.
    - Generation of embryos for research. Transplantation of hESCs, hiPSCs, or cells derived from either; into non-human research animals.
  + New oversight added (based on ISSCR guidelines):
    - Development of complex embryo models (e.g., blastoids, gastruloids, assembloids), brain organoids, or gametes from either hESCs or hiPSCs;
    - *In vitro* culture of human embryos for research from 12 to 14 days after fertilization, or until the formation of the primitive streak, whichever occurs first.

View [ESCRO webpage](https://www.washington.edu/research/embryonic-stem-cell-research-oversight-escro/) for ESCRO policy and procedures. The webpage includes step-by-step instructions on when and how to submit applications. We invite you to contact us if you’d like us to provide a brief presentation.

Contact us at [escro@uw.edu](mailto:escro@uw.edu) with questions or for more guidance.