Stem Cell Research

Examining Moral, Policy, and Economic Issues

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Stem Cell Research Background

- Why are stem cells important?
  - Proliferation
  - Unspecialized
  - Differentiation

Stem cells could be the theoretical replacements for damaged specialized cells, which are otherwise unable to renew themselves.
Critics of Stem Cell Research

An embryo cannot develop outside of the uterus; therefore, it is acceptable to use lab-created embryos for stem cell research

Pro-Life

Anti Stem Cell Research

Any research requiring the destruction of an embryo is morally wrong

United Kingdom and Stem Cell Research

- 1990: National Stem Cell Bank established
- 1991: 1st human embryonic stem cell line created
- 1994: Human Fertilisation & Embryology Authority (HFEA) established
- 1995: UK 1st Country to allow limited cloning of human embryos
- 2001: 1st license granted to clone human embryos
- 2002: 1st human embryonic stem cell line cloned
Stem Cell Research Policy and Funding in the U.S.

- **Federal policy**
  - Set by George W. Bush (August 2001)
  - Stringent funding requirements
  - $25 million awarded in 2003

- **State policies**
  - Some states permit funding
  - California, New Jersey and 8 others
  - 5 states have banned stem cell research

- **Approved Funding**
  - $3 billion in California (November 2004)

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Stem Cell Research Economic Considerations

**Financial Projections for California**
- Total Revenue: $6.4-$12.6 Billion
- ROI: 120-236%
- Cost: $3 Billion
- Job Creation: 5,000 – 22,000 per year

**Breakdown by Revenue Source**

- Direct Income and Sales Tax Revenue: 3%
- Royalties: 8%
- Additional income and sales tax revenue: 35%
- Health care cost savings: 54%
THANK YOU!