

Pegasus and the Chimera ***Ethical Issues in Stem Cell-Based Animal Research***

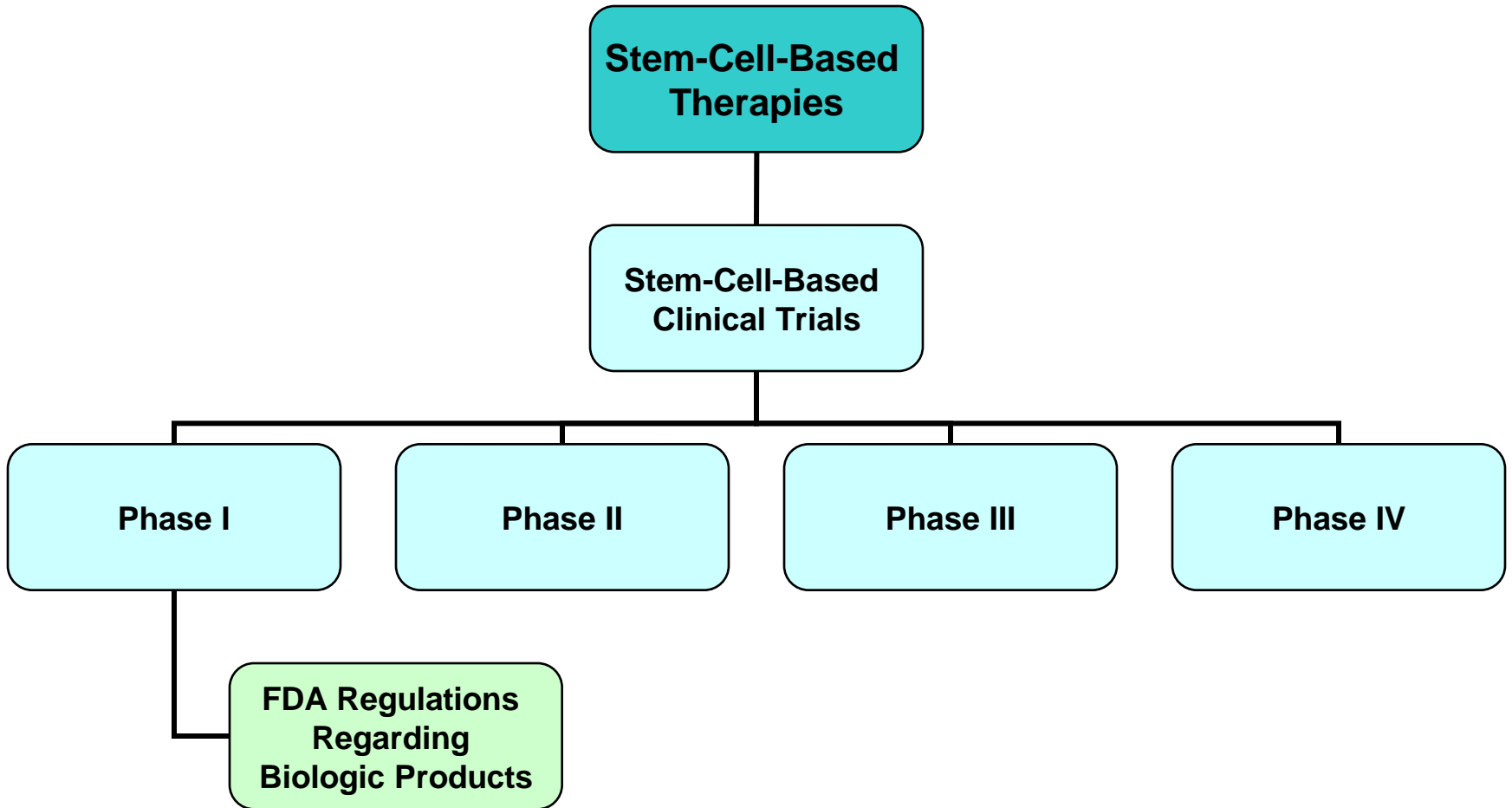
Insoo Hyun, PhD

Department of Bioethics
Case Western Reserve University
School of Medicine

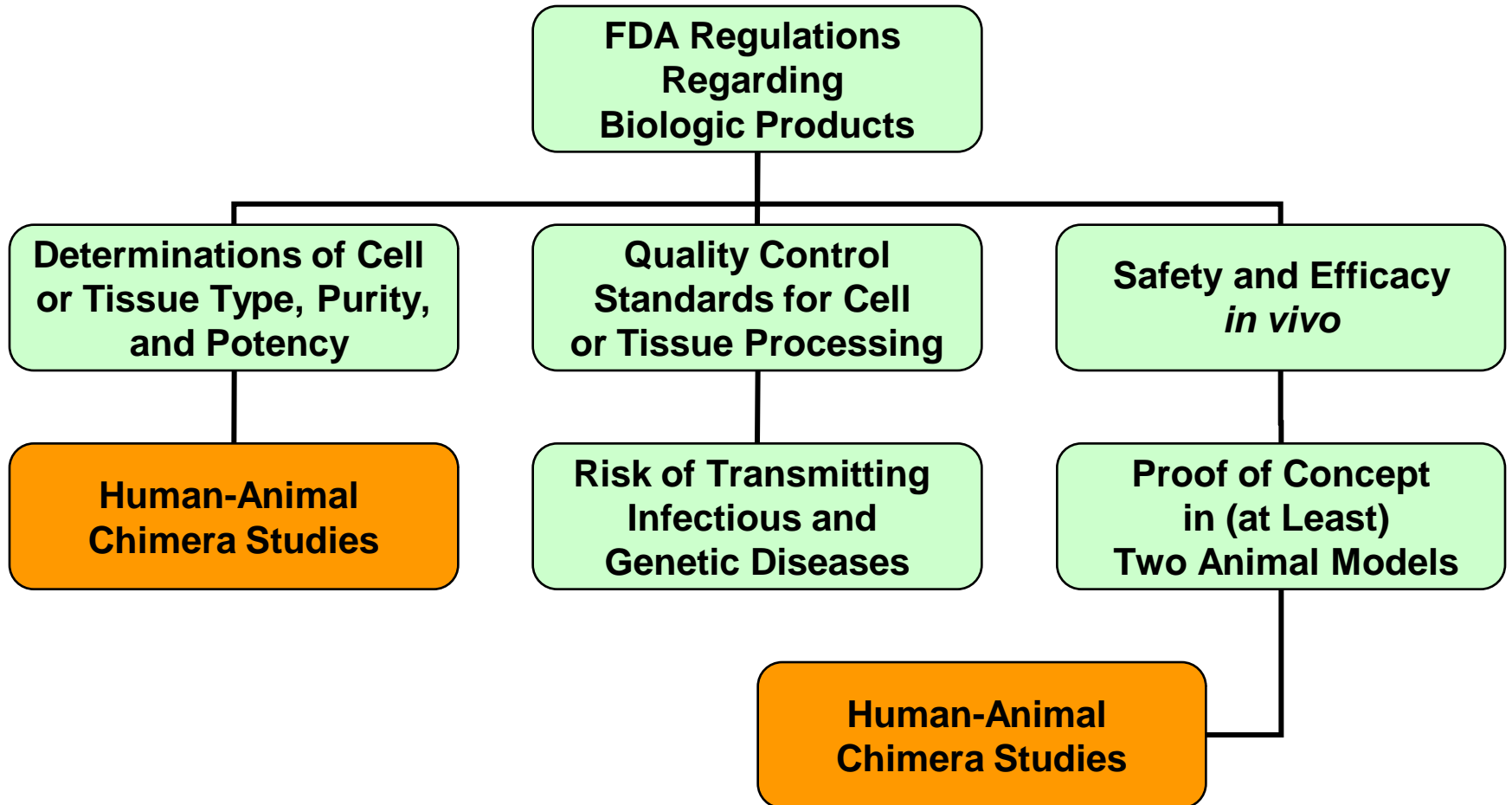
3rd Regional Conference on Stem Cell Research:
Current Controversies
AUB, Sept. 14-16, 2012



The Road to the Clinical Translation of Stem Cells



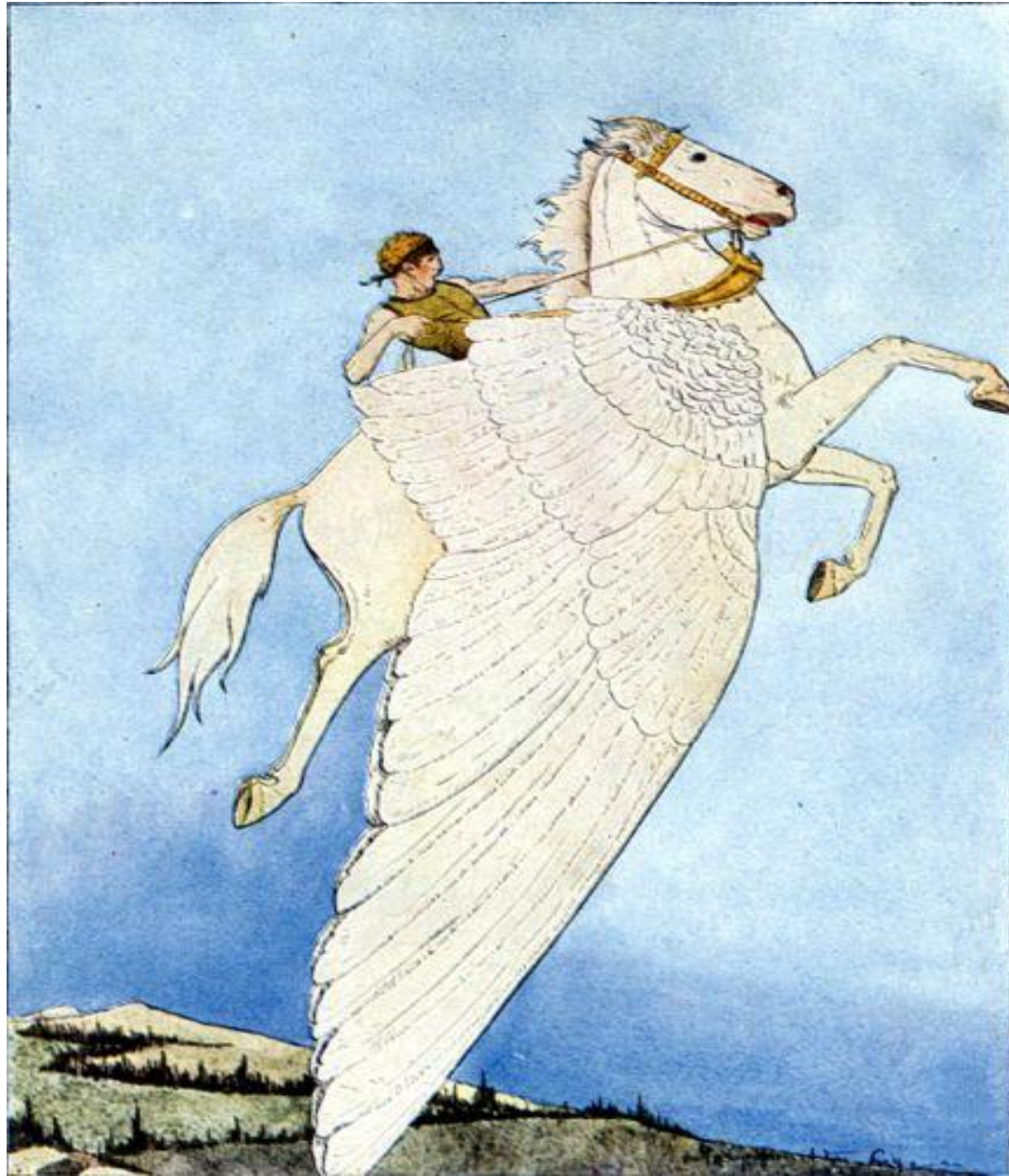
The Road to the Clinical Translation of Stem Cells



The Chimera Myth









What Does It Mean For a Chimera Study To Be *Unethical*?



- Building on current ethical standards for basic science research and animal research.
 - Scientific and humanitarian importance of study.
 - Animal welfare.
 - Informed consent of human materials donors.

- What else is left?

The Public's Commonly-Held Concerns (and Assumptions)



The Public's Commonly-Held Concerns (and Assumptions)



- Human/animal chimera research *per se* violates **human dignity**.
- Neuroscientific chimera studies involving the CNS could produce human-animal chimeras with **uniquely-human psychological characteristics**, thus creating “morally-ambiguous” creatures.



The “Limit” Case

- Acute neurological chimerism of non-human primates.
- Examine the limit case and then reason back down to chimerism in other, “lesser” species.

Searching for “Factor X”



- What morally relevant characteristics do non-human primates lack that chimerism could imbue?
- Human-like mental faculties?
- Human-like cognitive faculties?
- Human-like beliefs?
- Self-consciousness?



The “Limit” Case

- Methodological and philosophical challenges to addressing the limit case.
- What does the limit case teach us?



“Man might be described fairly adequately, if simply, as a two-legged paradox. He has never become accustomed to the tragic miracle of consciousness. Perhaps, as has been suggested, his species is not set, has not jelled, but is still in a state of becoming, bound by his physical memories of a past of struggle and survival, limited in his futures by the uneasiness of thought and consciousness.” - *Steinbeck and Ricketts*



Thank You

insoo.hyun@case.edu

