

This letter is in response to the invitation for public comments on the above consideration. I have strong objections and many questions. A few of these: How does gaining knowledge about human diseases justify the above-mentioned research? True, the diseases cited in an interview by an NIH scientist, Alzheimer's, Parkinson's, diabetes, are indeed terrible. Not mentioned, though, is the strong cultural component of diabetes development. It is well-documented that populations living in hunter-gatherer or primitive agricultural societies develop diseases such as diabetes in short order when they change to a modern diet. Why are the risks inherent in such genetic manipulation lauded as worthwhile when we cannot even apply our current knowledge to control the disease? Why are the complications of and the potential hazards of the proposed research not explained to the public? Knowledge of genetic manipulation is so new and so limited that only in 2013 was a paper published establishing that 15 percent of the codons in human DNA specify both amino acids and transcription factor recognition sites. Therefore, any changes introduced through genetic engineering can potentially result in altered regulation of any genes affected. The possibilities for unwanted side effects are endless and not under our control. What ethical questions have been considered other than the one about blurring the line between species? The deformed transgenic pigs produced in 1985 seem to support an assumption that animal suffering in the cause of any human end is justified. The moral implications of Brave New World pale in comparison. What does it mean to "make sure that there's an extra set of eyes on these projects" (words from an interview with an NIH scientist)? These words are extremely vague and do not reassure me at all. In short, I am horrified at the lifting of the ban on these proposals. My husband, who suffers from two genetically influenced diseases, type 1 diabetes and congenital hydrocephalus, agrees. Every other member of "the public" I have spoken with shares my concern. In spite of the fact that the NIH hopes to start funding experiments by early next year and that these plans have received little publicity, I am sending you this very

brief outline of my concerns. Sincerely, Connie Reeves