

Special report – Embryonic stem-cell research (Faith Magazine www.FATHMag.com)

Why Dave Doyle opposes embryonic stem-cell research

By Kevin Duffy | Photography by Tom Gennara

Dave Doyle woke up one spring morning in 1998 at a Boy Scout camp-out. But something was different this morning. Dave's leg was numb. Not thinking much of it, Dave brushed it off as having slept wrong the night before. But as similar symptoms continued, Dave decided to see a doctor, which led him to see another doctor, and another. After picking up the results of his MRI, Dave sat in his car and pondered the contents of the envelope. Finally, he decided to look. "It felt like I had been punched in the stomach." Dave had been diagnosed with multiple sclerosis (MS) a debilitating disease that is estimated to affect more than two million people worldwide.

"My faith has been important in this," says Dave, whose fight with MS has forced him to rely on a cane, crutches and, finally, a wheelchair. "My faith has always been strong and that certainly helped me deal with it." Dave also credits the support of his family with helping him through the tough times. And while his struggles are certain to occasionally take their toll, Dave has an incredible outlook, "There are a lot worse things that can happen to you. I've been very lucky."



Ten years after being diagnosed, Dave serves as the spokesperson for MiCAUSE, which stands for Michigan Citizens Against Unrestricted Science and Experimentation. MiCAUSE is the ballot question committee that stands in opposition to Proposal 2, which will appear on Michigan's November ballot. If passed, it would lift restrictions on the use of live human embryos in research.

What many Michiganians may not realize is that the use of embryonic stem cells is not illegal in Michigan. In fact, stem-cell research has been in practice at one of Michigan's highest profile public universities for years. The University of Michigan's Center for Human Embryonic Stem Cell Research opened in 2003 and was initially funded with federal tax dollars from the National Institute of Health.

The biggest problem with this proposal, says Dave, is that it involves the killing of live human embryos in order to extract stem cells. "It's the beginning of life and the ending of life."

Dave says that the campaign being run by Cure Michigan, the group supporting Proposal 2, is extremely deceptive. The deception begins with the wording of the proposed constitutional amendment. "If the law were to change tomorrow to allow human cloning, human cloning would be allowed under this proposal," Dave explained. "This proposal doesn't legalize cloning, but it would allow the law to change."

A law was passed in 1998 that prohibits human cloning in Michigan. But if Proposal 2 passes and the state constitution is amended, legislation such as 2007's Senate Bill 52 would pave the way to allowing human cloning to commence in Michigan.

Another major issue with the proposal, according to Dave, is that it removes Michigan lawmakers' ability to oversee the regulation of the industry. "The Michigan Legislature would never be able to pass a law that in any way restricts or regulates that research in Michigan," explained Dave. "It would be the only sector of society that would be completely beyond the reach of the legislature and the governor."

It should come as no surprise that many members of the Michigan House and Senate are not on board with a proposal that bypasses the legislative process. High-profile opponents of Proposal 2 include Democratic Speaker of the House Andy Dillon and Republican Senate Majority Leader Mike Bishop. State Sen. Tom George serves as the co-chairman of MiCAUSE. In a recent meeting with members of the press, Sen. George used the analogy of standing at the advent of the Internet and having a constitutional amendment proposal that would leave cyberspace wide open without any restrictions. We know today that with the various hazards of the Internet, including pervasive pornography and lurking sexual predators, state and federal regulations are essential.

The specific language of Proposal 2 states that "any research permitted under federal law on human embryos may be conducted in Michigan, subject to the requirements of federal law." There's only one problem. "There are no federal laws dealing with human embryo research," says Dave.

A point of contention between the two sides of the stem-cell issue is that there are many options beyond the use of live human embryos when it comes to stem-cell research. No treatments or cures have been found using embryonic stem cells, while more than 70 treatments and cures have been found using adult stem cells. So why is there so much pressure from the scientific community to pass legislation that would allow the use of live human embryos in stem-cell research? It is essentially a guessing game, says Dave. "It's a maybe. The other side says 'Yeah, it's possible and we should do all research.'"

Other states have encountered high-profile fights to legalize the use of live human embryos. Most recently, Missouri caught the nation's attention in 2006 when politicians and celebrities on both sides of the issue waged rhetorical war. The result was the passing of new legislation the allowed researchers and scientists to kill live human embryos in order to extract stem cells. Missouri residents are anxiously awaiting a judge's ruling on whether to allow more than \$20 million in taxpayer

funds to be used in live human embryo research.

When it comes to using taxpayer dollars to fund embryonic stem-cell research, California leads the way. Californians are paying \$3 billion over a 10-year span to fund the controversial field.

Dave believes that if Proposal 2 is successful, it is only a matter of time before Michigan taxpayers are footing the bill for live human embryo research. "This proposal doesn't deal with funding, but would leave open the ability to do funding in the future," said Dave. "Clearly, what they want to do is use taxpayer funding here in Michigan."

When asked whether a cure for his MS discovered using live human embryo research would change his perspective, Dave was adamant that it would not. "And there are too many loopholes and potential dangers that the legislature would not be able to fix. If there were any abuses five or 10 years down the line, they could not be stopped."

[What are the real facts about stem-cell research? Some questions and answers](#)

We asked Dr. David Thorrez, board-certified pediatrician and member of the Lansing Guild of the Catholic Medical Association, to give us some information about stem-cell research.

What is a stem cell? A stem cell is a cell that is not completely specialized to act as a specific type of cell in an organ or tissue.

We keep hearing that there are different kinds of stem cells; what are they? There are four main types of stem cells used in medical research. Adult stem cells are just that: cells extracted from adult humans. Umbilical stem cells are extracted from the umbilical cord or placenta of a newborn baby. Induced pluripotent stem cells are genetically altered adult stem cells that mimic embryonic stem cells. Embryonic stem cells are extracted from human embryos.

What kinds of medical advances and treatments have been developed using stem cells? While numerous treatments have been developed as a result of research using adult and umbilical stem cells, no treatments have been developed using either induced pluripotent or embryonic stem cells. Induced pluripotent stem cells and embryonic stem cells may have this potential, but are thought to be 10 to 20 years away from treating sick patients.

Where is the "cutting edge" research going? Of the two newest fields of stem cells research, induced pluripotent stem cells show the most potential for aiding in research. Induced pluripotent stem cells are adult cells, such as skin cells, that are injected with four specific genes that alter the cell. The result is a stem cell that is identical to an embryonic stem cell. This means we no longer need to use and kill human embryos to do the research.

Is embryonic stem-cell research making any progress? No. In fact, embryonic stem cells often develop tumors or are rejected outright by the body's immune system during research.

Dr. Thorrez is one of a number of medical professionals who believe the use of live human embryos in research crosses a moral line. Dr. James Thompson, widely considered a pioneer of embryonic stem cell research, has said he plans to focus the majority of his resources on induced pluripotent stem cells in order to avoid the moral dilemma, but also because he believes pluripotent stem cells are the most viable option.

Likewise, Ian Wilmut, the British doctor who in 1996 made worldwide headlines by cloning a sheep named Dolly, has abandoned cloning research in favor of induced pluripotent stem cell research.



Dr. Thorrez says he and his Catholic Medical Association colleagues were proud that the bishops of Michigan began educating the laity even before the human embryo research issue was placed on the ballot.

"All human embryos are part of the human family, they are just at an earlier stage," says Dr. Thorrez. "We were all once embryos."

[Here are some diseases being successfully treated by adult stem cells:](#)

1. Brain cancer
2. Retinoblastoma
3. Ovarian cancer
4. Skin cancer: Merkel cell carcinoma
5. Testicular cancer
6. Tumors of abdominal organs
7. Non-Hodgkin's lymphoma
8. Hodgkin's lymphoma
9. Acute lymphoblastic leukemia
10. Acute myelogenous leukemia
11. Chronic myelogenous leukemia
12. Juvenile myelomonocytic leukemia
13. Chronic myelomonocytic leukemia
14. Cancer of the lymph nodes: angioimmunoblastic lymphadenopathy
15. Multiple myeloma
16. Myelodysplasia
17. Breast cancer
18. Neuroblastoma
19. Renal cell carcinoma

20. Various solid tumors
 21. Soft tissue sarcoma
 22. Ewing's sarcoma
 23. Waldenstrom's macroglobulinemia
 24. Acute heart damage
 25. POEMS syndrome
- There are currently NO diseases being successfully treated by embryonic stem cells.