

findings

THE NEWSLETTER OF NEBRASKANS FOR RESEARCH



MARCH 2004

Legislature Bumps Cloning Prohibition Act off Agenda:

Nebraskans for Research Work to Educate State Senators

On January 22nd, the Human Cloning Prohibition Act was taken off the Legislature's Agenda after its sponsor, Senator Adrian Smith, failed to get enough votes to end debate.

The Legislature's rules require 33 votes for cloture (ending debate) and say that after a failed cloture motion, debate on the bill must end for the day. It is then the Speaker's decision whether to return the bill to the agenda.

LB 602 would ban the reproductive and therapeutic cloning of human embryos and would make it a felony to perform cloning, derive products from human cloning or implant a cloned embryo.

During debate on January 22, the ban on therapeutic cloning, or somatic cell nuclear transfer to create pluripotent stem cell lines, was the most contentious issue. Ban proponents contend that the 150-200 cells from which stem cells are extracted constitute a human being morally equivalent to a Parkinson's or Alzheimer's patient. Ban opponents, who favor a legally enforceable ban on reproductive cloning, point to the broad diversity of religious and moral views on the status of the pre-implantation embryo and the promise that embryonic stem cell research has to alleviate suffering. Senator Smith contended during his opening that a ban solely on reproductive cloning would be unenforceable without including therapeutic cloning.

Leaders in opposition to LB 602 in-

cluded Senator Joel Johnson from Kearney, Senators Pam Brown and Ernie Chambers from Omaha and Lincoln Senators DiAnna Schimek and Chris Beutler. Senator Brown stated, *"We are talking about criminalizing the possibility of medical miracles. All the reports that I have read from the scientific community about emerging research opportunities and their ethical considerations advise us to move forward slowly, but to move forward."*

The failure to end debate on January 22nd should have ended LB 602's chances during the 2004 legislative session. But on February 9, Senator Chip Maxwell designated the bill as his priority bill for the 2004 session, pushing it back onto the list of Senator priority legislation. At this point the bill remains behind other very controversial legislation and it remains questionable whether it will be debated again this session.

Sanford Goodman, Nebraskans for Research Public Policy and Advocacy Chair, concluded:

"We want to be able to educate lawmakers and their constituents on the reasons why this research is critical to future generations. If we can hold off debate this session, we have eight months to work on educating and elevating this discussion. We hope we can bring together more Nebraskans to get involved for the future of medical research and hope for many families."

Please join us
in recognizing

**Dr.
Michael
Sorrell**



Monday, April 26, 2004

11:30 a.m. to 1:00 p.m.

Happy Hollow Club

1701 So. 105th Avenue

Omaha, Nebraska

Dr. Sorrell is Chief of Gastroenterology and Hepatology, Medical Director of the Liver Transplant Program and the Robert L. Grissom M.D. Professor of Medicine at the University of Nebraska Medical Center. For ten years, he served as chairman of UNMC's Department of Internal Medicine. He is known nationally and internationally for his work in the area of liver disease and has been named one of "America's Top Doctors" and "Best Doctors in America" in those national guides. Throughout his career, Dr. Sorrell has made tremendous contributions to research through his own research and by fostering the growth of many young scientists.

He has been funded continuously for the past 30 years by the National Institutes of Health and by Veterans Affairs. He has published more than 200 papers, edited five books and is a member of more than 20 professional organizations, serving as president of several of them, including the American Association for the Study of Liver Diseases and the International Liver Transplant Society. His work has improved the health of Nebraska and beyond and has brought national and international attention to our state.

Stem Cell Pioneer Sees Promise In Continued Research

A leading expert on stem cell research says scientists are only beginning to understand the tremendous potential of therapeutic cloning and banning such research would halt seeking new knowledge that could improve the health of millions.

Irving Weissman, M.D., director of the Institute of Cancer/Stem Cell Biology and Medicine at Stanford University, discussed the promise of stem cell research Thursday with an overflow crowd at the Eppley Science Hall Amphitheater. His visit to UNMC was co-sponsored by the UNMC Graduate Student Association and Nebraskans for Research.

Dr. Weissman has become the national champion of stem cell research, said Jim Turpen, Ph.D., professor and vice chairman of the department of genetics, cell biology and anatomy, and principal investigator of NE-BRIN.

His vision for the therapeutic potential of stem cells, his scientific leadership in this field, and his eloquent advocacy for continuation of this research in the arena of public policy, will have a profound impact on society for generations to come.

Dr. Weissman is opposed to human reproductive cloning, but said by generating stem cells through therapeutic cloning, also known as somatic cell nuclear transfer, scientists have the potential to develop new stem cell lines that carry DNA with disease-causing mutations. As researchers study how these new cell lines grow, divide and respond to outside influences they may be better able to understand and treat a variety of diseases.

It would allow us to understand how defects of certain genes lead to certain known human diseases, Dr. Weissman said. Once that is known, researchers could ask which of the genes that are implicated in the disease play a causative role in the disease, or pathogenesis.

Passing legislation against all forms of cloning would ban the most promis-



Irving Weissman, M.D., director of the Institute of Cancer/Stem Cell Biology and Medicine at Stanford University (far right), talks with, from left, James Turpen, Ph.D., professor of genetics, cell biology and anatomy; Robert Arpke, president of the Graduate Student Association (GSA); and David Crouse, Ph.D., associate vice chancellor for academic affairs.

ing new technology applicable to a very large fraction of human disease, he said.

An overflow crowd heard the presentation of Irving Weissman, M.D., director of the Institute of Cancer/Stem Cell Biology and Medicine at Stanford.

During a legislative briefing Thursday, Dr. Weissman told state lawmakers there should be a ban on reproductive cloning, but not therapeutic cloning. California and New Jersey have laws specifically allowing such therapeutic research; similar measures are pending in New York and Illinois. The University of Nebraska has a policy prohibiting researchers from doing cloning. The university has taken a neutral stance on LB 602, which would make it illegal to clone human beings. The bill does not differentiate between reproductive cloning and cloning for therapeutic treatment and research.

If the state of Nebraska, specifically, would ban that form of therapeutic and basic research but the state of California lets it go forward, then lets say we make cell lines which are from and cause Lou Gehrig's disease, multiple sclerosis, Type 1 or Type 2 diabetes, early onset heart attack, stroke or any of those

cell lines, medical scientists in Nebraska would not be allowed to work on it. Where would those scientists go to work on it? And where would the patients benefit from those therapies?

In 1988, Dr. Weissman's lab was the first to isolate the hematopoietic stem cell, the cell type that forms all other blood cells, from mice. In 1992, Dr. Weissman isolated the hematopoietic stem cell in humans also, and its discovery has opened new avenues for research and treatment of many different kinds of cancers.

Stem cells are important because they can produce many different types of specialized cells instead of just replicating themselves like most cells do.

During his presentation, Dr. Weissman said his own research could not confirm the theory that adult stem cells can become other cell types in the body, casting doubt on whether these observations by some other scientists can be generalized. His research has shown that the cells found in other tissues are often the result of cell fusion between the transplanted stem cell and

Continued on next page

Stem Cell Pioneer (cont'd.)

the cells already present in the recipient.

Dr. Weissman urged scientists, students and the public to ask three questions in determining whether a discovery is a scientifically acceptable fact:

- Has it been published in a peer-reviewed journal?
- Has the science been replicated in independent laboratories?
- Is the phenomenon that's discovered so powerful that any way you go at it, it's true?

That is not just stem cells, Dr. Weissman said. Think of cold fusion in Utah some eight or 10 years ago. One laboratory did it, no other laboratory could replicate it and any way you went at it, it wasn't true. If you ask those three questions that will be a guide. You should always ask the people who make the claim.

Dr. Weissman said research in his lab and elsewhere suggests that in some cancers, such as leukemia, the cancer cells grow and proliferate in much the same way as stem cells. Basic and clinical scientists at the Stanford Institute are using stem cell biology and cancer biology to develop new cancer treatments, as well as treatments for illnesses such as diabetes, Parkinson's disease and cardiovascular disease, he said.

"What we're doing is examining these two fields that we thought were separate and looking at the overlap that exists between them," he said. In addition, they have focused on the purification, biology, transplantation and evolution of stem cells.

The Religious Argument

Background: During floor debate on LB602, sponsor of the bill, Senator Adrian Smith of Gering, continued to use information that seemed on its face to be scientific in nature, when in reality there continued to be a religious context. Printed below is the e-mail message sent to Senator Smith after the debate to put the record straight.

Senator Smith:

During the LB 602 debate, you made reference to an anti-cloning document that was apparently associated with the Mayo Clinic in some way, authored by MD's and PhD's. You claimed it was totally secular and belied the claims that opposition to SCNT to create pluri-potent stem cell lines boils down to religion.

I have attached a copy of what I believe to be the article you are referring to. It is a guest commentary published in the Mayo Clinic Proceedings, not a statement of position of the Mayo Clinic. Of the eight co-authors, six are affiliated with the Center for Bioethics and Human Dignity (<<http://www.cbhd.org>>www.cbhd.org), which was formed "in mid-1993, [when] more than a dozen leading Christian bio-ethicists gathered to assess the noticeable lack of explicit Christian engagement in the crucial bioethics arena. This group sponsored a major conference in May 1994, *The Christian Stake in Bioethics*, and concurrently launched The Center for Bioethics and Human Dignity."

Of the other two, one, Kevin Fitzgerald is a priest and the other, C. Everett Koop, is a prominent evangelical Christian who has addressed a number of issues from a religious perspective.

Rather than countering the claim that religious beliefs underlie the vast majority of those who oppose SCNT, the article buttresses the claim. If this is not the article to which you referred, please let me know.

Sanford M. Goodman, Chair
Public Policy & Advocacy Cmte, NFR

2004 Membership

Nebraskans for Research takes pride in its commitment to educate Nebraskans through a variety of programs and initiatives during the past year. Some highlights include:

- A Research Forum held in Lincoln, Nebraska in February of 2002.
- A Candidate Forum co-sponsored by NFR and the League of Women Voters in October 2002 gave voters a chance to meet candidates and learn their views of numerous issues, including research.
- A Public Opinion Poll conducted in June of 2002 with results released in July of 2002 showing that Nebraskans were to be leaders in research and overwhelmingly support fetal cell research and support embryonic

stem cell research, although it is not conducted in Nebraska.

In April 2002, Nebraskans for Research honored Chuck Durham for his countless contributions to research, and NFR is planning its second tribute for April 2004, honoring the esteemed Dr. Michael Sorrell.

Nebraskans for Research had a tremendous impact on the legislative session in January 2003 by testifying against three anti-research bills under consideration by the Nebraska Legislature and providing valuable information and insight to the senators about the effect the passage of these bills would have on research and, ultimately, the health of Nebraskans. The three bills — LB 512, LB 566 and LB 602 — were held over until the 2003-2004 legislative session. This

was viewed as a huge success.

NFR is committed to its goals in education, honoring outstanding supporters of research and maintaining a presence in the legislative process. These goals cannot be accomplished without your financial support. Please consider increasing your membership amount this year. Enclosed you will find a membership form (*on page 4*). Please complete and return it today!

Nebraska is a leader in life-saving medical research, and with your continued support, we will continue to be the positive voice in this life-affirming work.

Sincerely,
Carol Russell, President

findings

The Newsletter of
Nebraskans For Research

P.O. Box 81901
Lincoln, NE 68501-1901

(402) 397-9295
www.NebraskansForResearch.org

Research Today for Healthier Tomorrows

ADDRESS SERVICE REQUESTED

PRSR STD
US POSTAGE
PAID
LINCOLN, NE
PERMIT NO. 579

2003 Outstanding Volunteer Fundraiser

Congratulations to Carol Russell, President of Nebraskans for Research. In November, she was honored by the Association of Fundraising Professionals as Outstanding Volunteer Fundraiser for 2003. She received the honor at the association's annual Philanthropy Day Luncheon and was recognized for her generosity and her dedication to enriching the quality of life for all Nebraskans.

Nebraskans for Research Board applauds Carol for her tremendous contributions to all the Nebraska organizations that have benefited from her involvement over the years.

MEMBERSHIP

If you are already a member, renew your membership by completing the form below. If you are not yet a member, please join.

NAME _____

ADDRESS _____

CITY/ST/ZIP _____

WK PHONE _____ HOME _____

E-MAIL _____

Please send a newsletter to my friend:

NAME _____

ADDRESS _____

CITY/ST/ZIP _____

Contributions are tax-deductible.

Check one: Renewal New Member

Membership Level: Basic (\$25 +) Silver (\$250 +) Platinum (\$1000+)
 Bronze (\$100+) Gold (\$500 +) Other _____