Exhibit Number: 3

The following exhibit is several assorted documents that exceeds the 10-page limit therefore it cannot be scanned. A small portion has been scanned to aid in your research for information. The exhibit is on file at the Montana Historical Society and can be viewed there.

EXHIBIT 3
DATE 3-30-05
SJT 18

NEWS

HADASSAH
THE WOMEN'S
ZIONIST
ORGANIZATION
OF AMERICA, INC.

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FOR IMMEDIATE RELEASE

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MAJOR LABORATORY BREAKTHROUGH IN PARKINSON'S DISEASE RESEARCH AT HADASSAH MEDICAL CENTER IN JERUSALEM

(JERUSALEM -- December 6, 2004) -- In what is considered a major medical breakthrough, researchers at the Hadassah University Medical Center in Jerusalem have succeeded in showing that human embryonic stem cells can improve the functioning of a laboratory rat with Parkinson's Disease. Findings of the research were published in the recent edition of the prestigious magazine *Stem Cells*. (stemcells@alphamedpress.org)

Parkinson's, the second most common degenerative disease of the nervous system, afflicts more than one and a half million people in the United States, and several thousand in Israel. The disorder is caused by the selective death of a discrete cluster of nerve cells, which secrete the neurotransmitter dopamine, and whose function is to control the part of the brain that integrates motion. The disease expresses itself in the disturbance of movement – especially trembling or freezing of muscles – which severely disrupts daily functioning.

The research team, created cultures of primitive nerve cells from human embryonic stem cells and transplanted them into an area in the brain of a rat, where there were no dopaminergic nerve cells. A gradual, significant improvement in the functioning of the rats was noted. After three months it was clear that some of the transplanted human cells turned into dopaminergic nerve cells. The researchers emphasize that the percentage of transplanted cells that matured into dopaminergic nerve cells was not high and that the rats did not make a complete recovery.

The research team was headed by Prof. Benjamin Reubinoff, Director of Hadassah's Center for Human Embryonic Stem Cell Research at the Goldyne Savad Institute of Gene Therapy and the Department of Gynecology, and Prof. Tamir Ben-Hur, senior physician in Hadassah's Department of Neurology, the Agnes Ginges Center for Human Neurogenetics.

According to Reubinoff: "We are in the midst of research, in which we are trying to bring about the maturation of primitive nerve cells into dopaminergic nerve cells before we transplant them, in order to increase the number of dopaminergic cells in the implant – and to achieve complete reversal of Parkinson's disease in the rats."

Human embryonic stem cells, which can reproduce endlessly in culture and mature into any type of cell in the body, have sparked wide international interest because of their potential to serve as an endless source of cells for transplantation. They hold the promise of improving the functioning of people suffering from a wide range of disorders, such as Parkinson's, Alzheimer's, diabetes or heart failure. This is the first time that the potential ability of

transplanted human embryonic stem cells has been demonstrated in an animal model with Parkinson's disease. The research is the latest stage in a long series of trials aimed at using human embryonic stem cells to find a cure for people who suffer from Parkinson's disease.

The research was funded in part by the National Institute of Neurological Disorders and Stroke (NINDS), a component of the National Institute of Health (NIH) in the United States.

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For further research details:
Prof. Benjamin Reubinoff 972-50-7874569
Prof. Tamir Ben Hur 972-50-7874562

Cooperation Between Israel and Montana

Exports to Israel in 2003:	$1,030,507
Percentage change from 2002:	24.9
Israel's rank as trade partner:	21
Total exports since 1991:	$14,442,540
Military Contracts with Israel in 2003 Using Foreign Military Financing:	$56,985
Jewish Population in 2001:	800
Jewish Percentage of Total Population:	0.1

Partners For Change

The U.S.-Israel relationship is based on the twin pillars of shared values and mutual interests. Given this commonality of interests and beliefs, it should not be surprising that support for Israel is one of the most pronounced and consistent foreign policy values of the American people.

It is more difficult to devise programs that capitalize on the two nations' shared values than their security interests; nevertheless, such programs do exist. In fact, these *SHARED VALUE INITIATIVES* cover a broad range of areas, including the environment, science and technology, education and health.

Today's interdependent global economy requires that trade policy be developed at the national *and* state level.

Many states have recognized the opportunity for realizing significant benefits by seeking to increase trade with Israel. No fewer than 23 states have cooperative agreements with Israel.

Montana does not yet have a formal partnership with Israel; nevertheless, in 2003, Montana exported $1 million worth of manufacturing goods to Israel. The total value of exports since 1991 exceeds $14.4 million. In addition, Montana received $56,985 in 2003 for Foreign Military Financing (FMF) as US military aid to Israel. Israel now ranks as Montana's 21st leading trade partner.

Israel is certainly a place where potential business and trade partners can be found. It can also be a source, however, for innovative programs and ideas for addressing problems facing the citizens of Montana.

http://www.jewishvirtuallibrary.org/jsource/states/MT.html
Jewish Virtual Library
February 10, 2005

State Government Information

Governor: Brian D. Schweitzer (D)
Senate: 27 Democrats, 23 Republicans
House of Representatives: 50 Democrats, 50 Republicans
www.multistate.com

Hadassah Members in Montana: 140

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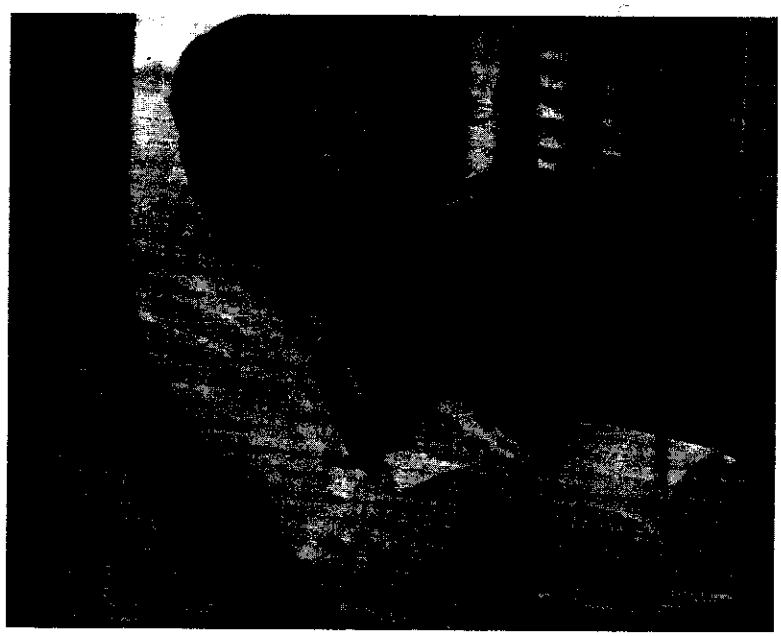
Medicine

From Cells to Cures

Hadassah is ready to move to the forefront of world stem-cell research and develop far-reaching applications in regenerative medicine.

By **Wendy Elliman**

Five years ago, before airport security was as tough as it is today, an Israeli boarded a plane in Singapore with a laboratory culture dish snug against his body. During the seven-hour flight to Melbourne, Australia, he served as human incubator to what he hoped would prove "the most precious cells derived this past century." ❦ Eighteen months later, his sabbatical at Melbourne's Monash University completed, Dr. Benjamin Reubinoff, associate professor of obstetrics and gynecology at the Hadassah–Hebrew University Medical Center at Ein Karem, returned to Jerusalem with the descendants of those cells enjoying more sophisticated incubation than the 42-year-old researcher's body warmth. In the interval, he and his team had conclusively demonstrated the worth of those cells: With them, they are helping write the prologue to a new medical era in which regenerative medicine will heal hitherto incurable disorders. Among them are spinal-cord injuries, heart disease, stroke, multiple sclerosis, Alzheimer's and Parkinson's diseases, diabetes, cancers and osteoarthritis.



Random Harvest *Dr. Reubinoff hopes to cure the incurable: spinal-cord injuries, Alzheimer's, Parkinson's, Huntington's, cancers.*

"Before I got involved in stem-cell research, my main research interest was male and female infertility, particularly *in vitro* fertilization," says Dr. Reubinoff. "In IVF treatment cycles, there are surplus embryos never implanted into prospective mothers and eventually they are discarded. As a research topic for my sabbatical, I decided to investigate stem cells derived from these human embryos."

EMBRYONIC STEM CELLS, THE MOST BASIC FORM OF human cell, are blank slates. Primed to turn the embryo into a fetus, they specialize into the many different cell types that build the 200-plus human organs. Dr. Reubinoff's aim was to harness human embryonic stem cells, make them reproduce themselves infinitely as stem cells and, on demand, differentiate into any human cell type required, thus creating a constantly renewable bank of cells from which to create healthy tissue.

"This, however, was eight years ago, and no research was then published on human embryonic stem cells, not only because of technological hurdles but also because the area was an ethical minefield," says Dr. Reubinoff.

Because the embryo stops developing after removal of its stem cells, those who view these early embryos as human beings consider stem-cell harvesting to be human experimentation.

Fortunately, Judaism teaches that the soul enters the embryo only after 40 days. As embryos used for re-

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search are five days old, the size of a pinhead and created in the laboratory, Judaism does not consider them human beings.

The vast therapeutic potential of human embryonic stem cells convinced Dr. Reubinoff to venture into the minefield.

He applied to Monash University to work under renowned Australian embryologist Dr. Alan Trounson, but as Australia forbade research on human embryos, he obtained the vital cell lines in Singapore. This cooperation between Hadassah, Monash and the National University of Singapore was later formalized in a commercial undertaking named ES Cell International Pte Ltd. (ESI).

Judaism teaches that it takes 40 days before a soul enters the embryo. Therefore at only five days, the research embryos are not yet viable.

ESI, however, was two years off when the team began work in 1998. "At first our chances seemed very slim indeed," says Dr. Reubinoff. "We began with stem cells from mice and primates, trying to develop the culture conditions and know-how that would coax them to do what nature never intended: to keep reproducing as stem cells without differentiating into specific cell types. That took about six months. I then went to Singapore to extract human embryonic stem cells and persuade them, too, to proliferate into infinitely reproducing cell lines."

Six IVF embryos were donated to Singapore's National University for the project by couples who had completed infertility treatment; Dr. Reubinoff successfully derived initial stem-cell cultures from four of them. Two weeks later, he flew them back to Melbourne, nestled against his body. "By the time I got to the lab at Monash, they seemed dead," he recalls. "A week later, still with nothing apparently growing, I was on the point of throwing the dish out, when I identified a colony of cells on the very rim of the dish!"

MONTHS OF PAINSTAKING testing followed to learn the best conditions under which to preserve and propagate the precious cells. "The work went well, and we were preparing to publish our breakthrough results when a team from Wisconsin got there first," says Dr. Reubinoff. "We'd thought we were the only people in the world to develop human embryonic stem-cell lines, but the Wisconsin group, using a very similar technique, had not only done the same, but was in print before us...."

Rather than publish their own work as simple confirmation, the Israel–Australia–Singapore team decided to go a step further. In 2000, they published a paper in *Nature Biotechnology* that created a sensation in the scientific world. It described how, for the first time ever, stem-cell lines grown in the laboratory and exposed to specific culture conditions had been made to develop into a specific cell type—in this instance, primitive human brain cells.

"Left to their own devices, embryonic stem cells differentiate chaotically into any of the body's many cell types, with only a few in every hundred becoming a brain cell," says Dr. Reubinoff. "We got 95- to 98-percent pure brain cells, which means we could produce unlimited human brain cells as an endless source to cure disorders ranging from Parkinson's, Huntington's and Alzheimer's to spinal cord injuries."

His sabbatical now over, Dr. Reubinoff returned to Israel with six cell lines to establish the project at home, confident that "Hadassah's expertise in neurology, endocrinology, oncology and gynecology would move the medical center rapidly to the forefront of world stem-cell research."

The 14-member research group he assembled at Hadassah's Goldyne Savad Institute of Gene Therapy is, he hopes, a first step toward establishing an embryonic stem-cell research center at Hadassah, as already exists at Johns Hopkins and Stanford University schools of medicine.

Given the facilities such a center could provide, he is confident that Hadassah could develop far-reaching applications in basic scientific research, pharmacology and regenerative medicine. All that's lacking is the necessary funding.

Within months of Dr. Reubinoff's return to Israel, Monash, Singapore University and Hadassah jointly established ESI to attract venture funding for developing and eventually marketing therapies derived from human embryonic stem-cell research.

Each of the ESI partners has its own specialty area. For Hadassah, neural applications is one major focus. With neurologist Tamir Ben Hur, Dr. Reubinoff continued his work begun in Australia.

The doctors implanted the embryonic nerve cells they had derived from stem cells into the brains of newborn mice. These implanted laboratory-grown cells behaved exactly as the mice's own brain cells, took part in the development of the brain, responded to cues from the host brains and laid to rest researchers'

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fears they would go awry and turn into, say, heart cells or tumors.

This was a stunning result, but more vigorous and longer-term studies to confirm the safety of cells for transplantation were clearly needed. Building on this work, Drs. Reubinoff and Ben Hur are now directing the differentiation of the stem cells into specific types of brain cell, such as dopamine-creating cells to replace those damaged in Parkinson's patients and myelin-producing cells for patients with multiple sclerosis.

ANOTHER FOCUS OF INTEREST for Hadassah stem-cell researchers is developing insulin-producing pancreatic cells; endocrinologist Gil Leibovitz and Dr. Reubinoff are hoping this will ultimately spell a cure for diabetes. Other key issues include stabilizing cell lines in culture and deriving new cell lines for clinical trials. (Current ones are unsuitable as they've been grown with nutrients derived from mouse cells.) ESI is also working with the Israeli company Quark Biotech, Inc., to identify the genes that signal human embryonic stem cells to differentiate into specific cell types, and to understand how they function.

Meanwhile in the United States, the ethics of stem-cell research came to a boil. Under increasing pressure about federal funding from pro-lifers on the one hand and scientists on the other, President Bush compromised. In August 2001 he announced that research on the 72 existing stem-cell lines would be financed by the National Institutes of Health, but no new lines could be created with government monies.

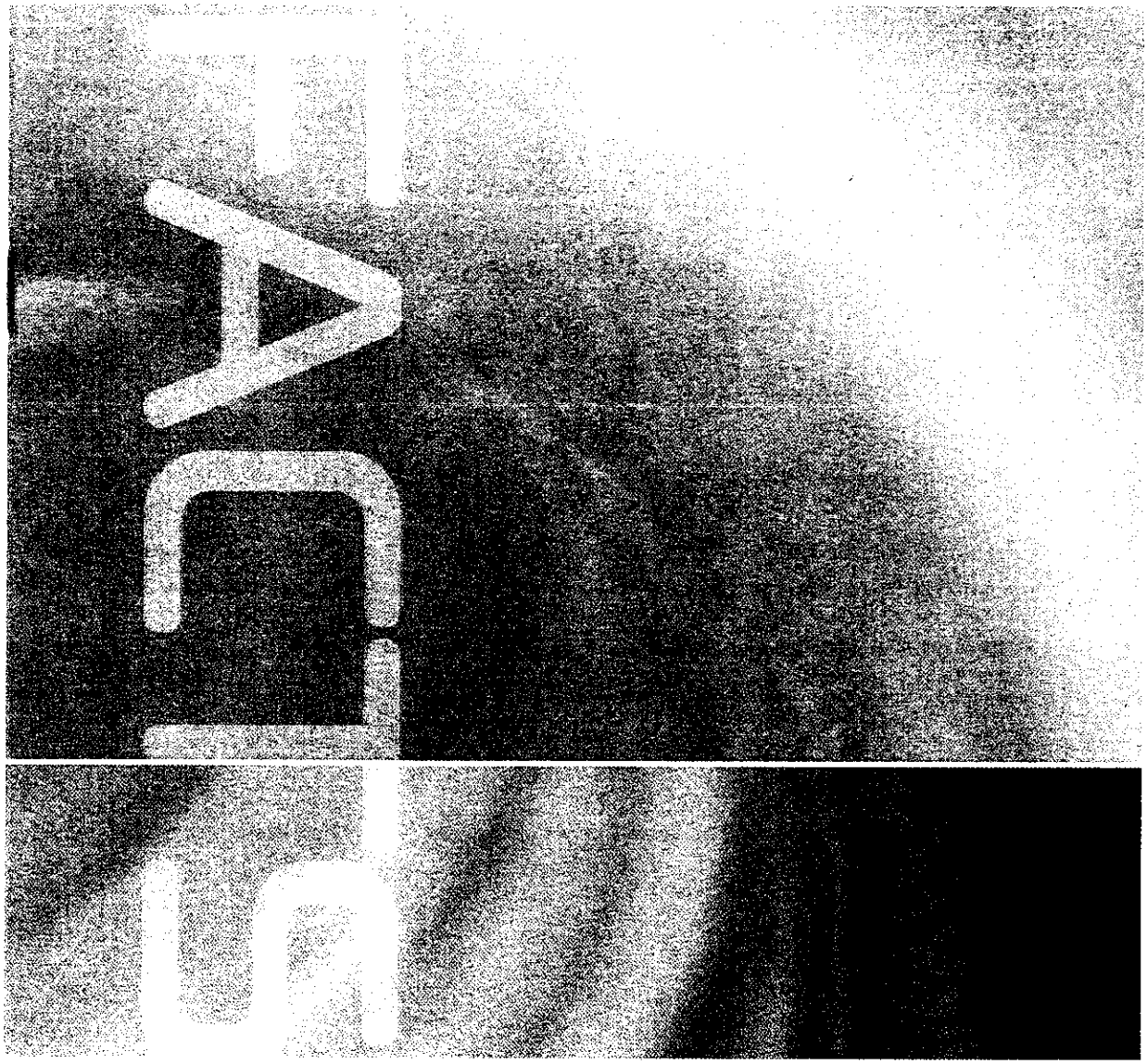
With ESI's six cell lines among the 72, it became one of four groups to receive a National Institutes of Health grant to distribute cell lines to the scientific community. "We've gladly distributed cells to boost research, and we provide training and technical support to aid scientists worldwide establish human embryonic stem-cell cultures," Dr. Reubinoff says. "Today some 30 groups worldwide are working with our cell lines."

Despite the number of researchers now involved, Hadassah remains at the forefront of stem-cell research. "We have all necessary facilities under one roof—a large IVF unit, expertise in stem-cell derivation and culture, and a fully equipped facility, which meets health ministry standards for contamination-free manufacture of stem-cell products," Dr. Reubinoff explains.

"We're also part of a large, advanced, multidisciplinary institution, so while our primary goal is taking stem cells from the laboratory to the patient, we can also investigate stem cells from many angles."

Those angles include studying human embryogenesis, researching the growth and differentiation of embryonic cells, screening for toxic and teratogenic effects, creating an unlimited source of donor cells for transplantation, developing ways of genetically modifying cells and transferring them to target organs, and finding genes that regulate early human development for the development of new drugs.

Dr. Reubinoff estimates it will be five to 10 years before embryonic stem-cell transplant therapy is available for patients, but he believes that exploitation of the vast potential of human embryonics will without doubt become reality to the benefit of millions of people all over the world. **H**

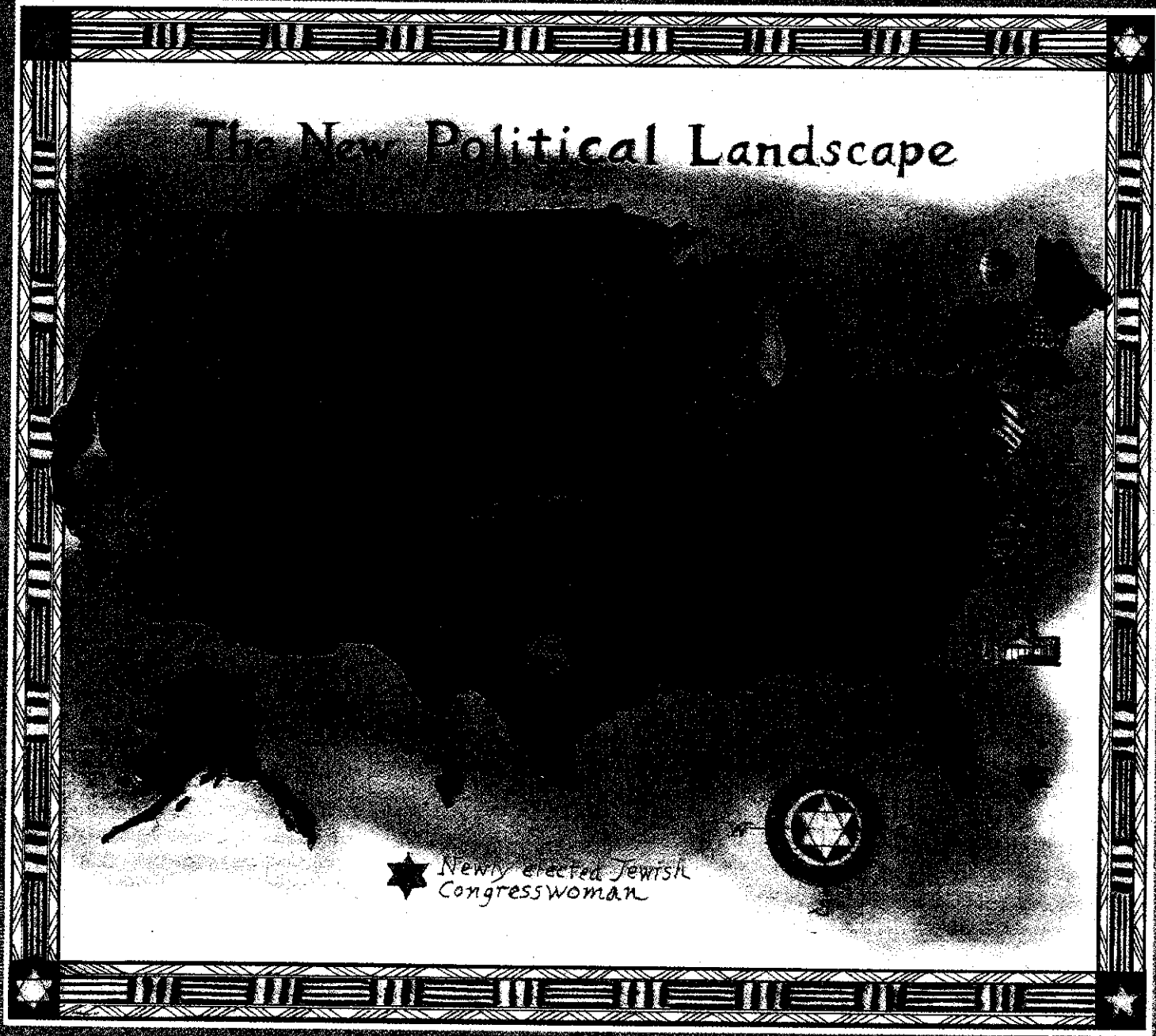


ABOUT HADASSAH

A SUPPLEMENT TO HADASSAH MAGAZINE

SPRING 2005

THE AMERICAN SCENE



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