

MEDICAL RESEARCH

If you wonder about your personal debt to medical science, think about the past.



By Dr. William H. Danforth

If you go to an old graveyard, you see the graves of many babies. You do not in modern graveyards. If you go to an old graveyard, you see the graves of many young women who died during the child-bearing years. You do not see them any more. When I was an intern during the summer of 1951, I saw the results of a polio epidemic. One of my earliest patients, a young man about my age, went into an iron lung, never to come out alive. Young physicians do not see polio any more. And so it goes.

I remember exploratory surgery. Now doctors learn more from MRI and CAT and PET scans than they ever learned from exploratory surgery. When a disease can no longer be halted, we have hospice care that helps us through our final illness with dignity and greatly diminished suffering.

Comforting the sick and healing the afflicted are among the highest of human callings. Those

who do so are honored by every society and every religion. Yet along the way advances in medicine have been opposed for religious and philosophical reasons.

About 200 years ago, the then-president of Yale University, an ordained minister, opposed vaccination for small pox for, as he said, "If God since the beginning of time decreed that those children should die, man should not intervene." In the 19th century, good people in St. Louis opposed human dissection.

Closer to our own time we have seen strong and principled opposition to animal experimentation, blood transfusions, organ transplantation,

vaccination to prevent cervical cancer, in vitro fertilization and stem cell research. Certainly, if the past predicts the future, good people will continue to oppose future advances. But, again if the past predicts the future, we will see the advances gradually accepted as a boon and blessing for humankind.

Advances in the last 50 years

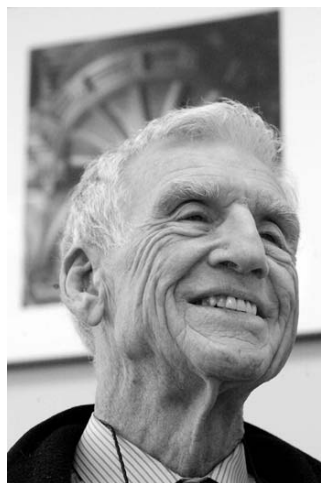
have been especially spectacular. Science continues to advance at a seemingly ever faster rate. Scientists have new tools and new possibilities for addressing the suffering and premature deaths caused by disease.

And science keeps shedding new light on old problems. It turns out that ALS now is seen as one of a family of diseases, sometimes called neurodegenerative diseases. They include multiple sclerosis, Parkinson's disease and Alzheimer's disease. That new understanding changes the approach. Now it makes sense for more scientists and physicians to come together around common central facilities and databases for a family of diseases rather than a single disease. They can draw more effectively from advances in more fields such as genetics and immunology.

To make the most of this opportunity, Hope Happens has partnered with Washington University first to build and now to strengthen the Hope Center for Neurological Disorders that will concentrate on these diseases. The Hope Center puts together the right world-leading scientists, with the right vision, and the right infrastructure to mount an attack on these crippling diseases.

My dream is that those who come after us will bless us for this undertaking.

The preceding text was excerpted from a speech given May 14 by Dr. Danforth after receiving the Christopher Hobler Spirit of Hope Award from Hope Happens, an organization supporting the Hope Center for Neurological Disorders at Washington University. Dr. Danforth is the Chancellor Emeritus of Washington University.



Dr. William Danforth



Research assistant Bryan Kennedy displays an image of a neuron in a live mouse brain at the Hope Center for Neurological Disorders in 2004. Andrew Cutraro | Post-Dispatch

Scientists have new tools and new possibilities for addressing the suffering and premature deaths caused by disease.