Poll Watching

Douglas McCormick

Editorial Director, *BioTechniques*

douglas.mccormick@informausa.com

ScienceDebate and Scientists and Engineers for America have compiled invaluable data on the science policy positions of American candidates at every level. We owe it to ourselves to take this information to the polls.

On November 4, voters in the U.S. will go to the polls to elect a president, a vice president, 35 senators, 435 representatives, 11 governors, and more state and local officials than we have the patience to count.

The past eight years have been hard on basic science, from the 2001 restrictions on stem cell research to the exiling of scientists from White House policy-making to the bread-and-water funding endured by the National Institutes of Health since 2003.

Organizations like ScienceDebate 2008 and Scientists and Engineers for America (SEA) have tried to make science policy an element in this round of elections. They have had only limited success, but in the process they have accumulated invaluable information on the candidates' positions on science and related issues. (See SEA's Science, Healthcare, and Related Policies database at sharp.sefora.org.)

Those of us in the U.S. owe it to our profession and ourselves to use this information when we decide how to cast our ballots.

Presidential Positions

At the top of the ticket, John McCain's and Barack Obama's platforms are both skimpy on the subject of life-science research. The environment, energy, healthcare delivery, and information technology all command greater shares of the candidates' science-and-technology attention.

Both candidates supported the Stem Cell Research Enhancement Act of 2007 (passed by Congress and vetoed by President Bush), which would have set aside the Administration's ban on embryonic stem cell lines created after August 9, 2001. Furthermore, both candidates support expanding federal funding for human embryonic stem cell research.

Messrs. McCain and Obama both promise to end ideological interference with scientific judgments in government agencies, and strengthen the role of the executive Office of Science and Technology Policy (marginalized by the Bush administration). Mr. Obama promises to revive the President's Council of Advisors on Science and Technology as well.

Both candidates also favor making corporate research and development tax credits permanent, encouraging businesses to invest more money in R&D.

While both candidates have said that they believe in evolution, it has been reported that Mr. McCain believes intelligent design should be included in science classes, though there does not appear to be a consistent record of such support. Mr. Obama has said, "I think it's a mistake to try to cloud the teaching of science with theories that frankly don't hold up to scientific inquiry."

Differing on Research Funding

The candidates differ significantly on the mechanisms they favor for stimulating research.

Mr. McCain appears to see R&D primarily as an issue of economic competitiveness. He focuses on harnessing market forces to support research in private enterprise. In addition to a permanent R&D tax credit, Mr. McCain would lower capital gains taxes to encourage domestic investment. His overall goal is to provide "broad pools of capital, low taxes and incentives for research in America, a commitment to a skilled and educated workforce [including H1-B visas for foreign workers], and a dedication to opening markets around the globe."

Mr. Obama favors direct federal funding of basic research. Most notably, he has repeatedly pledged to double federal funding for basic research over the coming decade. (Editor's note: This works out to a 7.18% annual increase: this is still behind the 8.77% average annual growth of 1992–2001, but well ahead of the 2.02% average growth from 2003 through the 2009 budget request.) According to Mr. Obama, "sustained and predictable increases in research funding" will support high-risk, high-return research, nurture early-career scientists, and gain the knowledge needed to address the "grand challenges" of the 21st century, including energy, healthcare, clean food and water, and national security.

Fourteen Questions

At the end of August, Mr. Obama went on the record with answers to ScienceDebate 2008's "Top 14 science questions facing America." Mr. McCain followed in mid-September. The full results are available at www.sciencedebate2008.com, but here are some extracts:

To lay the foundation for reclaiming America's endangered tradition of innovation, an Obama administration would "guarantee students access to strong science curricul[a] at all grade levels." Mr. McCain puts it this way: "We must fill the pipeline to our colleges and universities with students prepared for the rigors of advanced engineering, math, science, and technology degrees."

We would like to know more, much more, about how these candidates (and the hundreds of others currently running for various offices) intend to support, or not support, science in America. But then again, we can only go into elections with the information that we have, not always with the information that we'd like to have.