From the Presidents of the Society for Integrative and Comparative Biology

An open letter to President Barack Obama,

Members of the Society for Integrative and Comparative Biology are biologists from throughout the U.S. with the broadest possible perspectives—from microbes to whales, from molecules to ecosystems. The undersigned current and past presidents of the Society have watched with increasing dismay the deterioration of the life support system of our planet, threatening all life as we know it. It has long been known that one product of burning fossil fuel, carbon dioxide, is a powerful greenhouse gas, and more recently that this gas has been associated with drastic climate variations in Earth's past. Consequently, it is no surprise that prodigious worldwide burning of fossil fuel is creating large-scale climate change with increasing disruption of life on the planet. While many in the western developed nations still enjoy relative prosperity – despite the horrific storms experienced in the U.S. in recent years – it is in poor nations around the world that the impacts of climate change are currently most destructive. Pacific Island nations are disappearing beneath the tides as sea level rises. Desertification is destroying agriculture in northern Africa and massive floods have devastated Pakistan, Bangladesh and Thailand in the last two years.

It is too late to avoid substantial disruption, but further damage can be reduced if we act immediately to keep remaining fossil fuel deposits in the ground, out of the air and sea. A most immediate decision is yours: whether or not to approve the Keystone XL pipeline. More important than the fact that the pipeline itself will endanger aquifers and life along its length, the pipe will deliver the dirtiest, most CO2-producing petroleum source known to the refineries of the Gulf Coast. Additionally, the Athabasca tar-sands mine is destroying vast regions of northern Alberta that have been home and hunting and fishing grounds for First Nations peoples for thousands of years.

Even before fossil fuels are burned, releasing climate-altering greenhouse gases, the extraction phase itself produces environmental disasters, including toxins in water supplies due to hydraulic fracturing for natural gas, degradation of watersheds by mountain-top coal mining, and the loss of marine life from offshore drilling. Permits for all of these activities lie in the hands of agencies of your administration.

Alternative sources of energy are at hand. We do have the individual and collective intelligence and technology to see the urgently needed transition through to better times. What we require is sufficient political will on a global scale to meet the challenge. The U.S., for the last three federal administrations, has been a major impediment to ratification of international climate treaties. Clearly, the future demands that we – through your administration – reverse this pattern and join with leaders of other nations to ratify agreements that will quickly and drastically reduce greenhouse gas emissions.

Mr. President: you are arguably the most powerful person in the wealthiest and most powerful nation on the globe. To be clear: change will come, one way or another. Your task is no less than to steer the course of history away from its current devastating trajectory toward a sustainable existence for humankind.

## Signed by:

Billie Swalla, University of Washington\* President, 2013-2014

Peter Wainwright, University of California, Davis\* President-elect, 2013-2014

Ken Sebens, University of Washington\* Past President, 2010-2012

Rich Satterlie, University of North Carolina, Wilmington\*
Past President, 2009-2010

John Pearse, University of California, Santa Cruz\* Past President, 2007-2008

Sally Woodin, University of South Carolina\* Past President, 2005-2006

Marvalee Wake, University of California, Berkeley\* Past President, 2001-2002

Alan Kohn, University of Washington\* Past President, 1997-1998

Mike Hadfield, University of Hawaii\* Past President, 1995-1996

David Wake, University of California, Berkeley\* Past President, 1992 Lynn Riddiford, University of Washington\* Past President, 1991

Albert Bennett, University of California, Irvine\*
Past President, 1990

Stephen Wainwright, Duke University\* Past President, 1988

William Dawson, University of Michigan\* Past President, 1986

Patricia Morse, University of Washington\* Past President, 1985

Edwin L. Cooper, University of California, Los Angeles\* Past President, 1983

F. John Vernberg, University of South Carolina\*
Past President, 1982

Mary E. Rice Past President, 1979

Approved by the Executive Committee of the Society for Integrative and Comparative Biology, 5 February 2013, as was the Society's Resolution on Climate Change and Ocean Acidification, which was approved on 1 March 2012:

http://www.sicb.org/resources/resolutions.php 3#climate

<sup>\*</sup> Affiliations for identification only and do not represent endorsement by the organization".