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Scientific Management Review Board
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Statement by Senior Comparative Medical Scientists at Major Academic Centers to the National Institutes of Health Scientific Management Review Board

As senior Comparative Medicine scientists in several major research institutions, we have followed the deliberations of the Scientific Management Review Board (SMRB) with great interest. We appreciate the compelling need for an Institute or Center within the NIH framework to advance the development of therapeutics by coordinating these efforts and providing critical infrastructure. We also are well acquainted with many of the stakeholders in academia, private research institutions and industry whose work could be facilitated by the SMRB's decisions. For these reasons, we would like to share our expertise and our perspective of the impact your deliberations will have on the NCCR's Division of Comparative Medicine.

Comparative medicine programs are a key component of many medical schools, veterinary schools and academic (or other) research institutions that focus on biomedical research. As comparative medical scientists in major research institutions, we bring a comparative, integrated approach to biomedical research; this means that we are typically the front line for translational research. All translational research, whether it begins as basic science, medical device development, imaging technology, bioengineering, etc., at some point attempts to translate new, theoretical knowledge into an intact animal system before it can be utilized in humans. This translation, this "one medicine", is what we in comparative medicine do every day. We do not live or work in silos. Comparative medical scientists come from many disciplines: veterinary pathology, laboratory animal medicine, toxicology, pharmacology, basic sciences, and human medicine. We use our broad expertise to develop and utilize a range of animal models to identify ways to alleviate human suffering by developing new therapeutic and diagnostic approaches. Comparative medicine programs train many scientists in basic research. We provide our expertise and advice to our professional colleagues to help them navigate the development and regulatory process to create new therapies. Our former trainees, whose training was supported by NCCR's Division of Comparative Medicine, work at other biomedical research entities, in government positions at the NIH, CDC, FDA, USDA or in the pharmaceutical industry where they are responsible for the safety assessment of new compounds in the development pipeline. It is these partnerships to conduct and support biomedical research in academia and industry which make

comparative medicine such a critical part of translating new discoveries into real therapies and makes NCRR's Division of Comparative Medicine so vital to translational medicine.

The constituency that NCRR's Division of Comparative Medicine serves is far too broad for a single categorical Institute. In addition to the vitally important comparative medicine research and training programs, the NCRR also supports comparative medicine infrastructure needs and other shared resources used by many biomedical scientists engaged in translational medicine. Examples of some of these resources include: the Mutant Mouse Resource Centers, the Knockout Mouse Project, the Zebrafish Resource Center, the Drosophila Stock Center, *Caenorhaditis elegans* Genetic Stock Center, and the National Primate Research Centers. These are only a few of the resources provided through NCRR which do not fit easily into any categorical Institute. In fact, it was the recognition of comparative medicine's global impact on all the categorical Institutes and Centers that led to the creation of the original Division of Research Resources and why it was removed from the Institute of General Medical Sciences many years ago. We believe that decision was appropriate in its time, and we hope that an equally wise decision will result from the current deliberations in the new era of translational science.

As the Scientific Management Review Board continues its deliberations, we ask that appropriate veterinary input be included from comparative medical scientists as it considers the status of NCRR and also that the broad scientific community have the opportunity to comment on the proposed re-organization.

Sincerely,



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