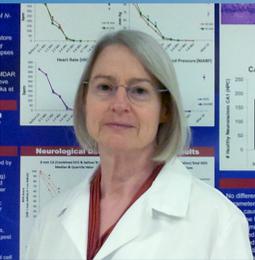


The State Committee for Research honors Alaska's

Northern Innovators



Kelly Drew

Northern Innovators Hall of Fame Member

As a biomedical scientist in neuropharmacology, Dr. Kelly Drew has demonstrated that identifying and understanding unique animal adaptations can lead to solutions for some of our most vexing biological problems.

Drew discovered receptors that regulate the onset of hibernation and now she's building on that knowledge to pursue a medical solution for human victims of stroke, cardiac arrest, and spinal-cord injury. She is developing compositions and methods to induce these people into a hibernation-like state to ward off negative effects of the injury and minimize permanent damage until proper and complete medical service is available. This innovation will be highly valuable among, for example, rural and remote Alaska victims who sometimes must

wait hours before arriving at a fully-equipped hospital. Drew's innovation will improve survival rates and quality of life. The technology developed in her laboratory is the subject of a pending patent, US20150238513A1.

Drew has been at the University of Alaska Fairbanks for over 27 years. In her laboratory, she and her students have revealed the workings behind unprecedented resistance to brain injury during mammalian hibernation, identified cold tissue temperature as the most efficacious adaptation, and defined a mechanism used by hibernating mammals to lower body temperature. She has contributed to the scientific fields of neuropharmacology, cerebral brain injury, and ischemia.

Drew holds a BS in psychology from the University of Alaska Fairbanks and a PhD in Neuropharmacology from

Albany Medical College, Albany, NY, and she was a postdoctoral fellow in Neuropharmacology at the Karolinska Institute, Stockholm, Sweden.

Drew has been the recipient of many awards including the UAF Dennis Demmert Award for supporting Native and rural students (2005); the UAF Emil Usibelli Distinguished Teaching Award for her ability to recognize scientific aptitudes in underrepresented students who may otherwise have chosen different careers and fields of study (2006); and The NIH Sidney A McNairy, Jr. Mentoring Award (2014). Drew also was nominated for the NSF Presidential Mentoring Award (2012).

Drew, who grew up in Fairbanks, is an Alaskan putting Alaska on the "innovation map" as she contributes to global advances in biomedical research.