

TODD B. ALDER



Dr. Alder holds a Ph.D. in biology from the University of Utah, is a registered patent attorney, and is a member of the Utah State Bar. Dr. Alder's graduate work focused on neuronal mechanisms underlying temporal processing in the auditory midbrain. His work has been published by numerous sources, including peer-reviewed journals such as *Nature Neuroscience* and the *Journal of Comparative Physiology*, as well as the Smithsonian Institution Press. Dr. Alder has presented his work at numerous national and international scientific meetings, including meetings of the Society for Neuroscience and the International Society for

Neuroethology.

Dr. Alder has a very broad scientific and technical background. His graduate coursework consisted of genetics, biochemistry, and molecular biology. This experience, combined with various laboratory rotations, gave Dr. Alder a solid understanding of the concepts and techniques involved in the fields of biochemistry and molecular biology. Following this initial coursework he entered the lab of Dr. Gary Rose in the Department of Biology, where the rigorous requirements of auditory neuroscience gave Dr. Alder an extensive background in acoustics, noise suppression, auditory neurobiology, neuroethology, animal neurosurgery, neural processing, and various histological procedures.

A major part of Dr. Alder's work consisted of the design and integration of software with acoustic hardware to generate complex auditory signals. As a result, he has programming experience in several computer and script languages, as well as extensive experience building PC computers. He also has experience building audiometric rooms, amplifiers, electronic data manipulation devices, filtering devices, and complex acoustic signal generation systems. Additionally, Dr. Alder has experience with analog to digital conversion and filtering devices, as well as their integration with data manipulation and analysis systems such as Signal and Spike2.

Subsequent to his scientific work, Dr. Alder graduated from the S.J. Quinney College of Law, at the University of Utah. Dr. Alder's legal practice focuses primarily on the preparation and prosecution of United States and foreign patents in the chemical, pharmaceutical, medical, and biological fields. Dr. Alder also has experience with nutraceuticals, semiconductors, superabrasive tools, diamond coatings, explosives, anti-counterfeiting, ink-jet inks, and print media technologies, as well as drug formulations for oral, transmucosal, ocular and transdermal delivery. Dr. Alder's practice also encompasses freedom to operate, validity, and patentability opinions, as well as trademark and copyright related matters.

