

University of Maryland Brain and Tissue Bank Department of Pediatrics

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Words of Hope from an ALS Clinic Director

We are often asked by our ALS patients and their families, how can we help to find a cure for ALS? There are many ways that patients diagnosed with ALS have helped in the fight to find a cure, but one of the greatest contributions that patients can and have made is through tissue donation. Many of the advances in our understanding of the biology of ALS come from studies of brain and spinal cord from ALS patients. It is because of the generosity of these patients that seminal discoveries, such as the role of TDP-43 in ALS, were made. This singular finding has led to groundbreaking understanding of the relationship between ALS and other brain diseases. Mutations in TDP-43 can cause familial ALS. This finding may lead to the identification of mechanisms that contribute to motor neuron degeneration. Tissue donation by individuals with ALS is more important than ever as we discover new genes that cause ALS and recognize that not all individuals with ALS are the same. It is important to recognize the similarities and differences between ALS patients which may help to determine responses to potential treatments. Using human tissues to conduct experiments is important because ALS is unique to human beings. While animal and cellular models of ALS have provided excellent platforms to further our understanding of this disease, investigations in tissues from ALS patients remain critical.

So how can ALS patients help to find a cure? We ask that patients diagnosed with ALS consider donating their brain and spinal cord for ALS research because it may be the gift of life for future ALS patients.

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