

Comments on Eunice Kennedy Shriver National Institute of Child Health and Human Development's Scientific Vision Workshop on Plasticity

The **American Occupational Therapy Association (AOTA)** represents over 140,000 occupational therapists, occupational therapy assistants and students of occupational therapy. As the national association representing occupational therapy, a profession dedicated to maximizing independence and function for people across the lifespan, AOTA lauds the participants of the plasticity workshop for considering basic science, clinical science, and translation.

AOTA commends the authors of the white paper for emphasizing the mechanisms of different forms of plasticity so that we can better understand complex disorders and develop effective treatments. While it is important to examine how therapies, such as occupational therapy, can manipulate plasticity through functional and therapeutic activities, we must be cognizant of other variables that can also influence plasticity. For example, age, sensitive periods, genetics, and environments may influence the degree of plasticity or related outcomes.

We agree that improved clinical trial designs could enhance plasticity-based therapies and optimization research should be supported and recognized as critically important pieces of the “translation” puzzle. In rehabilitation and possibly other fields, considering **disease severity** may be important when examining the efficacy and effectiveness of plasticity-based clinical interventions.

AOTA supports the need to evaluate the effects of **combination therapies** on plasticity (scientific opportunity 5). In addition to drugs, assistive technologies, rehabilitation therapies, and environmental supports may greatly influence plasticity.

Finally, **process opportunities** include examining rewards and incentives for the research that's needed. Some early career scientists are being advised against conducting some types of research because it would take too long for the promotion and tenure cycle. For some, tenure focuses on the individual's accomplishments and expertise, not necessarily being an integral member of a research team conducting important research. Although NICHD cannot influence academia, are there ways to encourage universities to update their tenure criteria and processes? Also, NICHD may want to consider working with professional organizations so that specialty certifications could require knowledge or clinical expertise with new therapies, as a means of facilitating implementation of **new therapies** by clinicians.

Thank you for providing this opportunity to comment.

Submitted: June 9, 2011