

## National University

College of Letters and Sciences

Undergraduate Research Opportunity Procedures

The student will assist with current projects examining the transformative effects of brain-coupling and intersubjective story elaborations on traumatic intrusive recollection of trauma. The study integrates multiple domains of psychology, including neuropsychology, Intersubjective Psychoanalysis and Gestalt psychotherapy. The project entails a phenomenological research focus exploring intersubjective empathically attuned listener-speaker interactions to create what neuropsychology researcher Uri Hasson has described as joint, temporally coupled neural response communication patterns (2012). Based on the evolving work of Hasson , and the latest work of Erving Polster in the area of Gestalt Psychotherapy and Life Focus (2006 ), this study applies Gestalt Psychotherapy methodologies of focus and therapeutic communality via Intersubjective Psychoanalytic strategies (Stolorow, 2007) to the process of trauma therapy specific to patients with intrusive traumatic recollections. Hasson has demonstrated that story telling creates synchronized neural attunement, and Polster asserts that in the Gestalt Life Focus process, individuals interact in a communal process via story telling which creates transformative and positive experiences for both listener and storyteller. Intersubjective Psychoanalytic approaches have further demonstrated the importance of connection, “dwelling with” and shared meaning as important components of the healing process for trauma survivors. Meichenbaum’s recent applications of narrative elaborations in trauma recovery have demonstrated significant applications of intersubjective approach to recovery and resiliency in clinical cases of complex trauma. The current research hypothesizes that such brain coupling created via speaker listener elaborated stories, can have profound and transformative effects on the neurological and interpersonal state of the traumatized patient. The researcher has thus far initiated preliminary examination of such phenomenon of speaker and listener in the context of traumatic recollections in therapy via descriptive and phenomenological observation of individuals and groups. This study seeks to describe the process in which these neural attunements transform trauma experience via intersubjective story elaborations with patients experiencing traumatic recollections. This study has not been previously funded.

**Hasson, U.,** Ghazanfar, A.A., Galantucci, B., Garrod, S., Keysers, C. (2012) Brain-to-brain coupling: mechanism for creating and sharing a social world.Trends in Cognitive Science 16(2):114-121.

**Polster, E.** (2006). Uncommon Ground: Harmonizing Psychotherapy and Community to Enhance Everyday Living. Zieg, Tucker and Theisen Inc.

**Stolorow, R.** (2007)Trauma and Human Existence. Psychoanalytic Press, NY