Name of UAB Grand Challenge:  
**Confronting the Challenge of Post-traumatic Stress Disorder**

Principal Point of Contact Name & Contact Information:  
Stacey Nichols  
Development Coordinator, Operations  
Stacey.Nichols@childrensal.org  
205-317-3576

There is a need for a comprehensive and multidisciplinary approach to helping individuals impacted by emotional trauma and post-traumatic stress disorder in our community. One could argue that no other issue of our time is more far-reaching or more complex.

PTSD is a disabling condition associated with structural and functional changes in the brain. Symptoms include reliving the event through intrusive memories or nightmares, emotional numbness, difficulty concentrating, intense worry and anger, feeling “on edge” or easily startled, and avoiding thoughts and situations that are reminders of the trauma.

It is estimated that five percent of the U.S. population—more than 13 million people—is struggling with the disorder at any given time, but the actual figure may be even higher. Experiencing or being a witness to any emotionally traumatizing event places a person at risk of developing PTSD. The risk of developing PTSD is estimated to be highest among rape and sexual assault survivors, but millions of people across the world have also developed the disorder because of war, natural disasters, random acts of violence, terrorism, abuse, long-term illness, or other catastrophic events. PTSD symptoms can develop at any age, including during childhood. The effects of post-traumatic stress can last a lifetime, so early intervention and trauma-informed therapy are essential.

People with PTSD have among the highest rates of healthcare service use. There is evidence linking PTSD to cardiovascular, gastrointestinal, and musculoskeletal disorders. Research has even shown that intense psychological trauma can be passed down to future generations by altering genes associated with depression and anxiety disorders. More clinical research on the subject of PTSD is needed.

The consequences of emotional trauma and/or PTSD touch each one of us in one way or another. An individual suffering from PTSD is at a higher risk for developing anxiety disorders or major depression, experiencing job loss, resorting to substance abuse, and committing suicide. Friends and family members of the individual experiencing PTSD are also negatively impacted. Many individuals who endure extreme emotional trauma and develop PTSD will have periods of joblessness, and studies have indicated that unemployment is the biggest predictor of symptom severity in PTSD. As of today, a privately owned employment service specifically for those living with PTSD or other mental and neurological disorders does not exist. State agencies and nonprofit
organizations are overburdened, and there is great need for such a service.

The economic impact of PTSD is startling. The out-of-pocket cost to the individual suffering from the disorder is immense, and many do not seek or receive the treatment they need as a result. PTSD costs employers untold amounts of money each year due to increased absences and loss of productivity.

A multipronged approach to solving the problem of PTSD may need to include education, a job-placement service with corporate partnerships, additional clinical research, social support groups, comedy therapy, nutritional support, music therapy, and exercise therapy. Education will serve to inform patients, their families, caregivers, and the community. Simply getting the discussion going will help reduce the stigma. Regarding exercise therapy, perhaps offering group exercise classes developed specifically for people with challenges would be beneficial. Providing as many services as possible under one roof would be ideal.

There is immense healing power in bringing like-minded individuals living with similar challenges together. Oftentimes, people with PTSD will isolate or withdraw from others, and this behavior tends to exacerbate symptoms. A primary goal will be to fight back against isolation and offer ways for individuals to connect and receive the support they need. Think of an old quilt once delicately stitched together now coming apart at the seams—individuals suffering from PTSD have in a sense been ripped away from the fabric of society and are struggling to find their place again. Their plight is especially lonely. The instinct to isolate and protect the self only adds to the difficulties associated with this disorder. Those seeking recovery from PTSD should have a place to focus on restful relaxation, health, and positive connection with others. If we can work to facilitate the coming together of these individuals, just imagine what can become possible!

Potential Team Members:

Lynn Dobrunz, Ph.D., Neurobiology UAB School of Medicine
UAB doctoral student Nathaniel Harnett, and his PhD mentor, Dr. David C. Knight, UAB Department of Psychology
Laura Stoppelbein, PhD, UAB Department of Psychology
UAB Department of Psychiatry
Meg McGlamer, Crisis Center Birmingham
Psychiatric Intake Response Center (PIRC), Children's of Alabama Emergency Department
Martin Juarez, Rock Steady Boxing Birmingham
Brian Sandroff, Ph.D., UAB Department of Physical Therapy
Positively Funny, Improvisational Comedy Troupe, Birmingham
UAB’s Medical Music Therapy Program
Dr. Godehard Oopen, Grayson & Associates
Dr. Aftab Khan, Grayson & Associates