FROM THE EXECUTIVE DIRECTOR

In September, as Fiscal 2001 was drawing to a close, we at the National Center were pleased to be looking back upon a year of great accomplishment. Several major research projects were bearing fruit, our "best practices" guidelines were completed and into production, our education and consultation efforts were moving along smoothly. But then, we were stunned and saddened along with the rest of the nation by the terrorist attacks of September 11.

We had little time to reflect and grieve, because we were called upon almost immediately to assist VA and other federal agencies and local authorities in the aftermath of the tragedy. Within hours we placed fact sheets about PTSD on our website for the public and for professionals, and up to 35,000 people per day visited the site during the days and weeks following the attacks. The website was recognized in *Forbes* magazine with a "Best of the Web" award for websites on coping with trauma. One team provided immediate consultation, training, and debriefing for the Department of Defense (DoD) personnel and their families at the Pentagon Family Assistance Center in Virginia; other teams have been working with officials in New York. Staff from all divisions participated in a large-scale public education effort by providing over 100 interviews with the print and broadcast media through VA's Office of Public Affairs.

Those who are familiar with the early history of the Center know that we have been in the disaster mental health business practically since our founding. We were thrust into it by the 1989 Loma Prieta earthquake in California, and since that time our activities in disaster mental health have ranged widely: from collaboration with the DoD in preparation for the Gulf War to crisis counseling following both natural disasters, such as earthquakes, floods, and hurricanes, and criminally-perpetrated disasters, such as the Oklahoma City bombing or the crash of Pan Am Flight #103. About a year ago, we were asked by the Department of Health and Human Services (HHS) to take the lead in developing "best practice" guidelines for emergency mental health services, and we are now one year into this multi-year project.

So, when the September 11 attacks occurred, we had acquired substantial collective experience with hands-on post-disaster interventions, training in post-disaster mental health, and assessment of the evidence-based literature on effective interventions. Of equal importance, we had become part of the federal post-disaster mental health response network.

The balance of this Annual Report reviews the accomplishments of the Center during the year ended September 30, 2001, in the areas of research, education, and consultation, beginning with an overview of the Center's work in PTSD treatment over the years. A detailed overview of our post-September 11 activities will have to await the publication of our next Annual Report, a year from now. In the intervening months we will continue to do what we can to help VA, federal, state, and local agencies cope with the aftermath of this unprecedented tragedy – while maintaining a clear focus on our major mission, serving America's veterans.

Matthew J. Friedman, MD, PhD

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THE NATIONAL CENTER FOR PTSD: MAKING STRIDES IN THE TREATMENT OF PTSD

The National Center for Post-Traumatic Stress Disorder was created in 1989 to address the needs of America's veterans with military-related PTSD. The Center's mandate was to promote research into the causes and diagnosis of the disorder, to train health-care and related personnel in diagnosis and treatment, and to serve as an information resource for professionals across the United States and, eventually, around the world. In the short 12 years since its formation, the Center has come to be viewed as a leader in PTSD research, a valuable force for educating both professionals and the lay public about PTSD, and a worldwide resource for information and consultation services. How has such a small enterprise been able to have such a large impact in so short a time?

First, the Center is uniquely structured to foster **collaboration across boundaries** of geography or professional specialty. The Center comprises seven separate geographic locations from Boston to Honolulu, each with its own area of expertise and access to resources. In addition to cooperative efforts among its own staff, the Center has forged valuable working relationships with many outside entities, including government agencies, professional associations, universities and mental health centers across the country. This structure has turned out to be one of the Center's greatest strengths.

A second factor in the Center's success has been its commitment to approaching PTSD through a three-part focus on research, education, and consultation. These three threads weave the Center's work together in a way that brings **science into practice** – and ensures that practical concerns are reflected in science.

Finally, the Center has been innovative in its approaches to **disseminating information**, including cataloguing the existing literature on traumatic stress; creating a wealth of newsletters, practice guidelines, research reports, and seminars and symposia of its own; and remaining in the forefront of new information technologies such as distance learning programs and web-based services. The Center has brought needed information quickly and efficiently into the hands of practitioners, scientists, educators, trainees, and laypersons with an interest in PTSD.

These unique features have informed all the Center's activities over the past 12 years, but nowhere have they been more evident than in the work on PTSD treatment. The sections that follow highlight just a few examples of the efforts that have had an important impact on PTSD treatment for veterans, active duty military personnel, and ordinary people in the US and around the world.

Realizing the benefits of collaboration

From its inception, the Center's structure as a consortium of multiple centers of excellence has given it the ability to bring together people and resources from many locations and many disciplines, and to focus those energies on collaborative efforts. The largest of these projects – and one of the largest studies of group psychotherapy ever conducted – has been Cooperative Study #420, a study of focus group therapy with veterans for treatment of PTSD.

Planning for this project began in 1994, and funding from VA's Cooperative Studies Program (CSP) was received in 1996. The project was a multi-site randomized clinical trial of group therapy for VA outpatients who have PTSD, comparing trauma focus group therapy and present-centered therapy. Study #420 involved a total of 10 sites, chosen from both Center and non-Center PTSD programs, and 360 patients who were Vietnam veterans, studied over a period of almost four years. The results of this project, which was just completed in 2001, will have important implications for the treatment of veterans with PTSD.

This large research project illustrates the benefits that have been gained from the Center and its unique structure and skills. The project capitalized on the Center's experience in managing multi-site consortiums, and brought together a diverse group of individuals with different medical specialties and treatment orientations – all bringing their expertise to bear on a common issue.

Another type of collaboration has been the remarkably fruitful relationship with the DoD. The collaboration began during preparations for the Gulf War when DoD, the Center, and other VA clinicians worked closely to prepare for treatment of military casualties from the Desert Storm theatre of operations. Work with returning personnel led to groundbreaking research on the importance of starting treatment as soon as possible after the occurrence of trauma.

Current projects with active duty personnel in Kosovo and at Tripler Army Medical Center in Hawaii continue to explore early-intervention strategies, by collecting data even prior to the individuals' deployment for military operations. The Center and DoD are currently working to plan a consensus conference on the theme of early intervention, scheduled to take place in early FY 2002. All these efforts will have important implications for treatment of the veterans of tomorrow.

Putting research into practice – and practice into research

The Center's commitment to forge a bond between treatment research and clinical practice began early in its history with the development of the Clinician Administered PTSD Scale, or CAPS.

At the time the Center was formed in 1989, there was no "gold standard" interview instrument specifically designed for diagnosing PTSD. The instruments that did exist had limitations, and did not fully satisfy the needs of either researchers or clinicians. At the Center staff's very first meeting, there was immediate and complete agreement that the highest priority was to develop a structured interview for assessing and diagnosing PTSD. The Center immediately assembled a team of researchers from many disciplines and multiple sites around the country. The group began to develop and field-test a new diagnostic instrument, and in 1990 CAPS was born.

CAPS assesses 17 symptoms of PTSD, as well as eight PTSD-associated symptoms, and assesses both the frequency and severity of each symptom; this level of precision in measurement allows more accurate diagnosis and permits evaluation of a person's situation over time. In the years since CAPS was created, it has been used with thousands of patients and has become a valuable and practical tool in both clinical and research settings. Most recently the Center, in collaboration with the Employee Education System (EES) and one of the Mental Illness, Research, Education, and Clinical Centers (MIRECCs), developed a CD-ROM that instructs mental health professionals in CAPS administration.

Another example of the link between research and practice is the Center's work in evaluating mental health care for veterans at medical centers across the entire VA system. In the mid-1990s the Center developed a National Mental Health Program Performance Monitoring System that evaluates both PTSD care and mainstream mental health care provided at each VA medical center and in each of VA's 22 Veterans Integrated Service Networks (VISNs). This system generates an annual "report card" that evaluates the performance of every VA mental health program and every VISN in terms of access to services, quality of both outpatient and inpatient care, efficiency of service delivery, and veterans' satisfaction with services. The data have been used in making programmatic changes as part of VA's commitment to continuous improvement in the cost-effectiveness of service delivery.

Disseminating information about PTSD treatment

From the outset the Center has been innovative in its efforts to get information about PTSD treatment into the hands of the practitioners who can put the information to use with patients. At the time the Center was established, simply finding information about traumatic stress was a problem for both researchers and clinicians. Because of the multidisciplinary nature of PTSD, relevant information could be found in literature from medicine, sociology, psychology, criminology, law, and a variety of other fields.

Creation of a resource library and bibliographic database to index the traumatic stress literature became one of the first projects of the fledgling Center. The database was established as "Published International Literature on Traumatic Stress," or PILOTS, and made available online in 1991. PILOTS has emerged as the most comprehensive bibliographic database on traumatic stress in the world with over 20,000 articles, books, reports, and other materials.

The Center's educational activities encompass a wide variety of communications: two regular newsletters; seminars and training conferences; regularly scheduled conference calls with clinicians around the US; VA teleconferences and satellite broadcasts; a wealth of videos and treatment manuals. The Center was quick to take advantage of the emerging technology of the Internet, and the Center's website, incorporating not just PILOTS but also information of relevance to clinicians and the general public, was launched in 1995.

One of the most recent efforts to get information into the hands of practitioners is the coordination of an international project to develop empirically based "best practice" guidelines for PTSD treatments. This effort was carried out under the aegis of the International Society for Traumatic Stress Studies (ISTSS), a mutidisciplinary professional organization devoted to the study and treatment of trauma, and involved Center staff and other national and international experts. The practice guidelines were published in book form during FY 2000, and will be a significant step forward in the use of empirically-based treatment in the VA and beyond.

Treatment themes for today and tomorrow

Research, education, and consultation about treatment of PTSD will remain among the top priorities for the Center in the years ahead. The major focus of activity has been and will continue to be America's veterans, of course, but the Center's expertise will increasingly be sought by profes-

sionals and agencies that deal with natural disasters, violent crimes, and terrorist acts around the world.

Cooperative research projects: Major cooperative projects on PTSD treatment will continue to occupy a prominent place in the Center's research portfolio, providing opportunities to take advantage of the Center's unique multi-site, multidisciplinary structure to advance the understanding of PTSD. The Center recently received funding for its fourth major cooperative study, CSP #494, which is studying different treatments for female veterans and active duty personnel with PTSD.

Psychobiology: Center researchers have contributed greatly to the understanding of the biological bases of PTSD and the efficacy of various therapeutic strategies, including extensive research on drug treatments. The next phase of pharmacological research will involve treatment algorithms – that is, studying the effectiveness of drugs used in combinations rather than singly, in a way that more realistically mirrors actual treatment regimens. Multi-site trials will be undertaken over the next few years in collaboration with MIRECCs around the country.

Primary care: Primary care providers, who are often the first to encounter patients with PTSD symptoms, will increasingly be the focus of education and consultation activities. The Center, together with researchers from both veteran and civilian organizations, has developed an educational curriculum to assist primary health-care providers in detection, evaluation, and treatment planning for patients with untreated PTSD. The Center has also presented several large-scale Primary Care "Summit Meetings" that were well attended by VA primary and mental health clinicians as well as policymakers from VA, DoD, HHS, and Congress.

Disaster mental health: Since its inception the Center has been called upon to assist in the aftermath of both natural disasters – such as the California earthquakes of 1989 and 1994, Hurricanes Andrew in 1992 and Floyd in 1999 – and terrorist attacks such as the Oklahoma City bombing of 1995 and the World Trade Center and Pentagon attacks of 2001. The Center has developed disaster intervention models and support materials, and is an important resource for the Federal Emergency Management Agency and others who work with disaster victims.

When the National Center for PTSD was established, its mission was "to advance the clinical care and social welfare of America's veterans" through

For further reading: Practice Guidelines for PTSD Treatment

In 1997, the Board of Directors of the International Society for Traumatic Stress Studies created a PTSD Treatment Guidelines Task Force. The ISTSS approached experts in PTSD treatment from different therapy specialties, and as a result the Task Force members represented a range of approaches, orientations, and training.

The results of the Task Force's work on the various treatments have been published in the book *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (Foa, Keane, & Friedman, Guilford Press, 2000).

Drs. Terence Keane and Matthew Friedman of the Center were two of the editors, and a number of other staff contributed as well, including Dr. Claude Chemtob, Mr. Fred Gusman, Dr. Kay Jankowski, Dr. David Riggs, Dr. Paula Schnurr, and Dr. Steven Southwick.

This book is an excellent source for those who are interested in learning more about the state of the art in PTSD treatment.

advancements in the understanding and treatment of PTSD. In the past twelve years the efforts in this area have had inestimable benefits for our military veterans, active duty personnel, and society in general. Center leaders are proud of the organization's continuing contributions to both the science and practice in PTSD treatment, and are gratified to be able to give something back to the veterans who have given so much to their country.

About this Annual Report

The balance of this Annual Report presents the highlights of the activities of the National Center for PTSD during FY 2001, including the major accomplishments of the seven divisions in the three key areas of endeavor:

- **Research:** Through its research publications, methodological breakthroughs, development of new assessment strategies, and promotion of innovative and collaborative research, the Center is a world leader in research on trauma and its aftermath.

- **Education:** The Center's educational initiatives aim to assimilate information and coordinate communication among top scientists in the field of PTSD, and to bring that information to clinicians and policymakers both inside and outside the VA.

- **Consultation:** Center expertise has been sought with increasing frequency by the top leadership, policy makers, and program directors in the VA and in other government agencies and branches; by a growing number of academic and non-governmental organizations that are dealing with PTSD as a major public health problem; and by the United Nations and national governments around the world.

A series of tables at the back of this document provide details on the organization of the Center and its seven individual divisions, research grants, publications, and educational activities. Detailed reports of activities at the divisions can be obtained by contacting the individual locations directly or by visiting the Center's website at **www.ncptsd.org**.

RESEARCH

The National Center is at the forefront of research into PTSD: its causes and symptoms, its assessment and treatment. The Center's research capabilities gain strength from several unique features of the Center's organization. The multidisciplinary backgrounds of the staff mean that different research emphases and points of view can be brought to bear on research initiatives. The multisite structure, with locations spread across the country, permits the carrying out of projects of major size and scope. And the Center's many relationships with agencies and organizations throughout the VA, the government, academia, and the health care community afford the opportunity to reflect real-world considerations in research projects — and to put science into practice.

The sections that follow summarize the major initiatives in FY 2001, followed by discussion of some key accomplishments in six areas: treatment, psychobiology, physical health, interpersonal functioning, assessment, and special populations. The tables at the back of this document contain a complete listing of Center researchers 111 professional publications, 90 in-press publications, and 231 educational and scientific presentations.

Major research initiatives

The Center's unique structure, broad-based expertise, and network of relationships make possible major research projects that would not be possible at conventional research facilities. Some of the more extensive efforts currently underway are listed below.

NVVLS follow-up: The Center is undertaking follow-up research under the National Vietnam Veterans Longitudinal Study (NVVLS), the 1980-1988 project that examined a cohort of Vietnam veterans to assess the prevalence of PTSD. The NVVLS is funded by Congress to study the long term consequences of PTSD on psychological problems, physical health, and social function. This study will be conducted by the Research Triangle Institute with oversight responsibility by the Center.

Millennium project: Work is commencing on a Congressionally-mandated, VA-funded research investigation entitled "Military Sexual Trauma Among the Reserve Component of the Armed Forces." The project has three primary objectives: to identify the rates of military sexual trauma experienced by former members of the reserves while on active duty for training, to examine the extent to which these individuals have sought counseling from the VA, and to determine the additional resources that would be required to meet the projected need for such counseling. A random sample of 4,500 male and female former members of the Reserve Component of the Armed Forces will be drawn and the data will be collected via telephone interviews. Data collection is scheduled to begin in early 2002.

Kosovo peacekeepers: The Behavioral Science Division has been studying the psychological consequences of peacekeeping and peace-enforcement missions for combat-trained US military personnel who served in Somalia, Bosnia, and Kosovo. Recent findings from the personnel in Bosnia show that particular frustrations and demands associated with peacekeeping duties (e.g., witnessing children suffering and seeing the aftermath of violence) are among the strongest predictors

of long-term stress symptoms. Researchers are also collaborating with the Army in a study that is aimed at determining if psychological debriefing for soldiers returning from Kosovo is effective in preventing mental health problems.

Cooperative studies: One of the largest projects in the Center's history was brought to a conclusion in FY 2001: VA Cooperative Study #420, spearheaded by the Executive Division. This five-year multi-site study, designed to test a cognitive behavioral group intervention for PTSD in male Vietnam veterans, is the largest project of its kind ever funded by the VA, and will have important implications for the design of VA treatment programs for Vietnam veterans.

During the year the Center received its fourth Cooperative Study award, this one for a project to address the needs of female veterans and active duty personnel who have PTSD. A recent study of female veterans estimated that 60% had experienced at least one traumatic event during military service, most often involving sexual assault or rape, but also including physical assault, accidents, disasters, and war-zone exposure. Cooperative Study #494 will be carried out in collaboration with the DoD, and will involve 384 women with PTSD from twelve sites who will receive either exposure therapy or therapy that focuses on current life problems.

Algorithm trials: Researchers from the Clinical Neurosciences Division are increasingly turning toward the study of treatment algorithms – that is, studying the effectiveness of drugs used in combinations rather than singly, in a way that more realistically mirrors actual treatment regimens in veteran populations. Researchers are currently developing a pharmacologic treatment algorithm that will allow for the study of multiple pharmacologic augmentations in PTSD patients who have had partial responses to antidepressants.

Treatment research

In addition to the major VA Cooperative Studies, there are several other research projects aimed at developing and evaluating new cognitive-behavioral treatments for PTSD. These studies include PTSD interventions for people with comorbid severe mental illnesses, comorbid substance abuse and HIV, formerly battered women, individuals who have been traumatized through torture, female sexual abuse survivors, and people who have experienced motor vehicle accidents.

Another key area of treatment research involves the evaluation of different pharmacological treatments for PTSD. During FY 2001 investigators examined two classes of medications, benzodiazapines and neuroleptics, and conducted trials of several specific drugs: *guanfacine*, to reduce hyperarousal and noradrenergic hyperactivity; *risperidone*, to treat symptoms related to frontal lobe dysfunction; and *naltrexone*, as an addition to antidepressants for veterans with co-morbid PTSD and alcohol dependence. Another drug-related project studied the effects of augmentation therapy of the anticonvulsant *topiramate* on impulsive aggression and startle response in male veterans with PTSD.

The Center also studies how treatment is delivered through the VA network. During FY 2001 investigators in the Evaluation Division completed a major study of the impact of cost-reduction efforts on clinical effectiveness of specialized PTSD programs. The Division issued the sixth "report card" of the National Mental Health Program Performance Monitoring System, which evaluates PTSD as well as mainstream mental health care provided at each VA medical center and in each of VA's 22 VISNs, and the ninth report in the *Long Journey Home* series on the status of

specialized treatment programs for PTSD. The Division is also conducting a three-year multisite program evaluation project to follow homeless women veterans with psychiatric disorders or substance abuse problems, and to evaluate Dr. Lisa Najavits' "Seeking Safety" treatment protocol.

Psychobiology

The Center's psychobiology research follows two main themes. First, the research program is dedicated to understanding how fundamental brain mechanisms are altered by the psychobiological impact of traumatic stress, utilizing techniques from molecular biology, cognitive neuroscience, animal models, and brain imaging. Second, researchers apply basic research findings to therapeutic strategies, including the development of new and effective pharmacological agents.

Over the past year the Center's Clinical Neurosciences Division has dramatically expanded its focus on the use of functional magnetic resonance imaging (fMRI) to explore the neural mechanisms that underlie the memory disruptions associated with PTSD. Research protocols have recently been developed to assess PTSD-related abnormalities in the hippocampal and perihippocampal brain regions with respect to information processing and memory formation. Another project is monitoring simultaneous fMRI and electophysiologic activity to investigate startle responses.

A number of descriptive studies of memory are also taking place. One recently-completed study compares qualitative differences in memories formed by PTSD subjects who differ on how frequently they exhibit dissociative responses. A separate study currently getting underway will investigate PTSD patients' memories for laboratory-based versus autobiographical events, with the goal of comparing the accuracy of subjective estimates and objective evidence.

Research on animal models of the impact of severe stress investigated the effects of the stress hormone cortisol on the blood-brain barrier and on gene expression in the hippocampus and medial prefrontal cortex. Another project has focused on the protein molecule CD163, a marker that is regulated by cortisol; investigators hope that CD163 will become a useful tool in studying the stress system in individuals with PTSD.

Studies of hypothalamic-pituitary-adrenal (HPA) axis reactivity in both men and premenopausal women with chronic PTSD has continued over the past year. This work has demonstrated increased adrenocortictropic hormone and cortisol responses to pituitary activation, and increased cortisol and dehydroepiandrosterone (DHEA) responses to adrenal activation in women with PTSD. Researchers are also examining cerebrospinal fluid levels of corticotropin releasing factor, neuropeptide Y (NPY), and neurosteroid levels in PTSD. A groundbreaking collaborative project with DoD is comparing mobilization of NPY, hormonal activity, and physiological response under conditions of extreme stress in Special Forces versus other military personnel.

The Education Division's Sleep Lab and the Behavioral Science Division continued their collaborative effort to collect a sample of over 100 MRI-based hippocampal volumes from combat veterans, and to analyze the data with respect to psychometric and electrophysiological indices of hippocampal function. Another sleep study, this one in collaboration with Richard Ross of the

University of Pennsylvania, involves studying the sleep patterns of identical twins in which one twin has PTSD while the other does not.

A new technology, currently in validation trials, measures sleep behavior using highly sensitive movement detectors. This technology is expected to provide improved information about the concomitants of episodic parasomnias such as nightmares and sleep panic attacks, as well as accurate estimates of longer-term trends in gross sleep behavior in relation to waking states.

A promising new direction in research involves the study of postmortem brain tissue of people who suffered from PTSD. Researchers plan to carry out neuroanatomical and molecular biological studies on the tissue samples, including MRI volumetric studies, neuronal counts, neurotransmitter, receptor and transporter localization, cell morphology studies, and microarray studies.

Physical health consequences of PTSD

The Center continues to investigate the physical health consequences of trauma and PTSD. A project by the Behavioral Science Division is testing the idea that PTSD may have an adverse impact on cardiovascular health because of the sustained or repeated elevations in arousal that are associated with the disorder. This study is using ambulatory monitors to record heart rate and blood pressure over 24-hour periods in the natural environment of study participants.

The Behavioral Science Division, Women's Health Sciences and Executive Divisions continued to study the health and well being of Vietnam veterans, with particular emphasis on long-term positive adjustment such as achievement and life satisfaction. One effort involves a review of military populations, showing that PTSD is an important link between trauma exposure and physical health, with combat-related PTSD associated with a range of physical health problems.

Other physical health-related research includes the NVVLS, which will examine the long term consequences of PTSD on physical health in Vietnam veterans; an analysis of archival Navy records to investigate the physical and mental health of repatriated Vietnam-era prisoners of war; a project to identify and quantify potential risk and resilience factors contributing to self-reported health status; and a study on how nicotine affects anxiety in individuals diagnosed with PTSD.

Interpersonal functioning

The impact of trauma and PTSD on interpersonal functioning is a key focus of behavioral science research. Several studies deal specifically with conditions under which people with PTSD have difficulty experiencing and expressing emotion. In one study, individuals with PTSD were found to be capable of expressing a full range of emotion, but they had particular difficulty expressing positive emotions after encountering reminders of their trauma. To explore this phenomenon further, investigators are now examining the possibility that individuals with PTSD have a higher threshold for experiencing positive emotion and a lower threshold for experiencing negative emotion.

A number of studies on interpersonal functioning are focused specifically on women and families. One study with women who have a history of sexual assault is examining their internal and expressive response to film clips designed to elicit feelings of happiness, intimacy, fear, and sadness.

Another project is using psychophysiology to assess emotional responding among women with PTSD. Among the projects dealing with domestic violence is one that suggests that psychological abuse may be a stronger predictor of PTSD symptoms than physical abuse, and another involving how violence between parents affects their children

A final area of behavioral science investigation is the etiology and phenomenology of PTSD. Based on data from the NVVLS database, investigators conducted a sequence of inquiries into marital dysfunction and domestic violence within Vietnam veteran families. A second study investigated postwar attainment, achievement, and personal growth among the population of Vietnam veterans.

Assessment

In the area of PTSD assessment, one key study involved comparison of a computerized trauma history and PTSD screen to the paper-and-pencil version, and comparison of a full screen instrument to an abbreviated version. Psychometric analyses continued on the Brief Trauma Interview, a clinician-administered screening measure developed by the Center. Other assessment studies include studies of hypervigilance, suicide predictors, and screening for PTSD in the primary care environment.

In another project, an investigator is working to identify the best methods for training clinicians to assign reliable and valid Global Assessment of Functioning scale (GAF) ratings to PTSD clinical and compensation cases. This is potentially a very important initiative, since the GAF has become a mainstay of clinical assessment for all psychiatric disorders in addition to PTSD.

An important ongoing assessment study on the course of chronic PTSD in combat veterans involves collecting data every two weeks over a two-year period on severity of PTSD symptoms, life stressors, and social support. This project runs from May 2000 to May 2002, and will afford researchers the opportunity to examine the immediate and long term impact of the events of September 11 on symptoms in chronic combat-related PTSD.

Special populations

In the early years of PTSD research, most investigation was focused on veterans of the Vietnam War and earlier conflicts. Since that time, the Center's focus has expanded to include extensive research into how PTSD manifests itself in distinct subgroups of the veteran population, as well as groups within the population at large.

Gulf War veterans: Center staff continued their collaboration with the Boston VA Environmental Hazards Center, one of three VA centers across the country examining the etiologies of the complex of illnesses that have come to be known as "Gulf War Syndrome." In the recent past, staff have participated in several protocols that have further elucidated symptoms of ill veterans by using tests of working memory during fMRI and neuropsychological test protocols. These projects helped determine rates of various psychiatric conditions in Gulf War veterans, and suggest that these psychiatric conditions do not fully explain the physical health problems of these individuals.

Several recent publications reported on the mechanisms by which depression and PTSD covary in Gulf War veterans and the relationship between PTSD symptom severity and retrospective reports of trauma exposure. Another large-scale multi-year Gulf War project, a collaboration between DoD and VA, is aimed at developing a psychosocial risk and resilience inventory as a prototype instrument for use with personnel in future military deployments.

Women: As women continue to increase their presence and expand their roles in military life, it is increasingly important to understand whether and how gender differences manifest themselves in PTSD. In addition to CSP #494 and the Millennium Project, two major research initiatives with women subjects, investigators also continued work on employees' gender awareness in VA health care. Investigators gathered information about employees' beliefs about the proper roles of men and women, gender sensitivity in the delivery of care, and knowledge of health care programs and services specifically available to women veterans. Based on this data, a Gender Awareness Inventory was created that will be used for monitoring throughout the Veteran's Health Administration.

Asian-American Vietnam veterans: The Pacific Islands Division has been in the forefront of studies of the relationship between race-related events during military service and PTSD. This division, in collaboration with the Behavioral Sciences Division, Duke Medical Center, and Readjustment Counseling Services (RCS), recently completed analysis of scale validation on the Race-Related Stressor Scale, a self-report measure that assesses exposure to race-related stressors in the military and war zone.

Aging veterans: Since its inception, the Executive Division, and more recently, the Behavioral Science Division, has collaborated with the VA Normative Aging Study to examine the needs of aging veterans. During FY 2001 investigators from the Education Division received approval to study the long-term effects of trauma in older adult female veterans. Approximately 200 older women will be assessed to investigate the relationship between trauma, health, and psychological functioning. Other studies examined the effects of elder abuse on women, and systematically researched late-onset stress symptoms in aging war veterans.

Veterans of tomorrow: Over the years the Center has engaged in a number of research projects involving active duty military personnel, in an effort to study PTSD symptoms and effects closer to the occurrence of the traumatic events. FY 2001 saw the completion of several projects on the impact of acute and extended stress with personnel at the JFK Special Warfare Training Center. In one project, researchers studied associative learning in soldiers before and after high stress in order to determine whether stress disrupts hippocampal-based learning. Another project tested whether the adrenal steroid DHEA predicts performance in a water-maze test, and a third study is evaluating human eyewitness memory for high stress events.

Another project with active duty personnel is taking place at Tripler Army Medical Center in Hawaii. This long-term project is addressing the role of prior trauma and current stress exposure on military unit performance. The impact of trauma is measured prospectively during stressful military deployments, giving researchers a better understanding of the etiology and development of PTSD as it is taking place. Data was successfully collected on over 300 medical staff from different branches of the service before and after a stressful training mission.

Adolescents and children: Child trauma experts at the Center established the Child and Adolescent Research Education program in FY 2001, a unique program that is designed for

children ages 1-12 who are removed from their homes for the first time for reasons of abuse or neglect. Instead of entering a regular foster care, they are placed in a therapeutic supervised group "safe home," together with their siblings, in their community of origin.

A project that is just getting underway will follow a cohort of 82 maltreated prepubescent children over two years to ascertain the prevalence and risk factors for chronic PTSD in this multiply traumatized population. Another project involves a cohort of inner-city adolescent girls who have been exposed to community violence and vicarious trauma but have not sought treatment. A study that assesses baseline and prepulse modification of the acoustic startle response in traumatized adolescent girls with PTSD is nearly complete, and a second study with this group is examining the relationship between PTSD and substance use.

Research funding

In FY 2001, Center researchers held grants and submitted proposals for 16 new grants (see Table 3 at the back of this document for details). These grants supplemented the Center budget as indicated below, bringing research funding for FY 2001 to $10.7 million and total research funding to over $46.7 million.

National Center for PTSD Research Funding

	FY 01 Research Funding	*Total Research Funding*	*Number of Grants*	*Number of Pending Grants*
Executive Division	$643,462	$5,577,768	4	1
Behavioral Science Division	$4,755,025	$21,732,460	18	5
Clinical Neurosciences Division	$3,742,109	$16,294,025	27	5
Education and Clinical Laboratory Division	$202,430	$599,900	5	2
Pacific Islands Division	$457,000	$1,203,000	8	1
Women's Health Sciences Division	$948,076	$1,362,767	3	2
Total	**$10,748,102**	**$46,769,920**	**65***	**16**

* Total does not match rows because some grants had Co-Principal Investigators from two different sites.

EDUCATION

The educational activities of the National Center for PTSD are the mechanism through which the findings from empirical research, program evaluation, and best-practice development are channeled to the practitioners who deliver trauma-related services. The communication channels established through educational activities also allow information from practitioners to be directed back to the Center, ensuring that future research priorities are grounded in practical considerations.

The Center's research and clinical publications, training programs and conferences, and web-based services are all aimed at improving the ability of practitioners – including those in both mental health and primary care fields – to provide the most effective care to today's veterans, active-duty personnel, and others who have been victims of traumatic stress.

Major education initiatives

During FY 2001 the Center undertook a number of special initiatives in the area of education and training, many of which were notable for the degree of collaboration among the Center's many divisions as well as collaborations with other agencies and organizations outside the Center.

Science-Into-Practice: In FY 2001 the Center launched "NCPTSD Science-Into-Practice," an electronic information service designed to better link research to practice and help busy VA clinicians and administrators identify the research that will be most relevant for them. Led by staff at several Center divisions and the Sierra-Pacific MIRECC, a standing team periodically reviews the traumatic stress literature, selects recent publications with important clinical care implications, and translates these into brief digestible summaries with clinical commentary about their application. The final summaries are distributed by email to VA PTSD treatment providers, Vet Centers, all VISN 21 mental health providers, and other interested parties.

Compensation and pension procedures: The Center worked with the Veterans Benefits Administration (VBA) and the EES to train VA employees about best-practice guidelines for the compensation and pension examinations through which veterans receive disability compensation for PTSD. In collaboration with VISN 20 MIRECC and the VBA, the Center developed a "best practices" manual containing an assessment protocol and disability examination worksheets that correlate with the protocol. It is anticipated that this document will raise the quality and standards of PTSD evaluations for veterans who receive compensation and pension examinations.

Distance learning: In another collaboration with the EES, the Education Division developed a satellite-delivered continuing education course entitled "Selected Topics in Post-Traumatic Stress Disorder," to be broadcast to 220 VA facilities across the country. The curriculum provides access to recognized experts through real-time broadcasts and live phone-in segments, providing practitioners with a first-of-its-kind, nationwide, multidisciplinary PTSD curriculum. The first televised session featured Executive Director Dr. Matthew Friedman presenting "PTSD, Allostatic Load, and Medical Illness." Six more broadcasts are planned for FY 2002.

CAPS CD-ROM: Center staff from several divisions continued their collaboration with the Sierra-Pacific MIRECC and EES to complete an educational CD-ROM to train VA mental health professionals in the use of CAPS, the Center's interview-based PTSD assessment tool. The CD-ROM is designed to be an independent study educational program and includes in-depth information on PTSD, history of CAPS, step-by-step instructions on how to administer and score the interview, and two videotaped CAPS interview examples to watch and score.

Primary care: Many people with PTSD seek help first from their primary care practitioners rather than from mental health professionals. As a result, the Center has placed particular emphasis on primary care practitioners in recent years, and the Center held its second annual Primary Care PTSD Conference during FY 2001. Also during the year, as part of the Veterans Health Initiative, the Center collaborated with EES and a team of clinicians and researchers from across VA to develop a manual and training procedures for primary care clinicians designed to assist them in screening, referring, and collaborating in the treatment of veterans with PTSD. The Center also worked with the Sierra-Pacific MIRECC to organize the PTSD section of a MIRECC National Conference, "Impact of Mental Health on Medical Illness in the Primary Care Setting and the Aging Veteran."

Research and clinical publications

During FY 2001 the *PTSD Research Quarterly*, a guide to the scientific literature on traumatic stress and PTSD, included articles on PTSD and memory, the role of military studies in understanding PTSD, contemporary approaches to missing data, and PTSD in older adults. The *National Center for PTSD Clinical Quarterly,* which publishes articles related to assessment and treatment primarily for practitioners, included articles by nationally-recognized experts from both within and outside the VA in the areas of exposure therapy for PTSD, a constructive narrative approach to the treatment of PTSD, positive and negative aspects of exposure to racism and trauma, and risks of intimate partner violence for women. A new column, featuring information on early intervention for trauma, was added to the two existing columns on women and on new directions.

The Center's PTSD Resource Center houses the largest single collection of traumatic stress literature in the world, containing reprints of journal articles, book chapters, books, and reports. The PILOTS database, the Center's online index to published literature, has grown to 20,512 entries at year end. The Center has reached agreement with the library of ICODO, the Dutch National Institute for the Victims of War, in which important PTSD literature in European languages will be selected and indexed for the PILOTS database by ICODO staff members. This will serve as a model for additional cooperative arrangements with other members of the International Psychotrauma Documentation Network.

Training programs and conferences

Center staff presented a total of 79 workshops, training sessions, and papers in a wide range of educational settings during FY 2001. Key topics included the neurobiology of PTSD, disaster mental health, acute stress and prevention of PTSD, and cognitive-behavioral treatment of PTSD and related problems. A complete list of programs and presentations is included in Table 4.

The Evaluation and Education Divisions continued to offer bi-monthly educational presentations for all VA specialized PTSD program staff. Especially important this year was the conference call held ten days after the September 11 terrorist attacks. Many sites reported that veterans were experiencing an increase in PTSD symptoms because of the similarity of the terrorist attacks to combat experiences.

The Center's week-long Clinical Training Program, held in Palo Alto, CA, continued to be the primary PTSD-related training forum in the country for VA health care staff. The curriculum includes a comprehensive range of trauma-related topics, including assessment of PTSD, anger management, PTSD/substance abuse comorbidity, psychobiology and psychopharmacology of PTSD, and trauma theory. During FY 2001, 118 mental health professionals participated in the week-long training. Also during the year, the two-year postdoctoral program in PTSD research, located at the Behavioral Science Division in Boston, received funding from the National Institute for Mental Health (NIMH) for another five years, and four research fellows completed their first year in the program.

The Education Division and the Sierra-Pacific MIRECC have adapted a cognitive-behavioral group treatment protocol for concurrent PTSD and substance abuse, originally developed by Dr. Lisa Najavits of Harvard Medical School, for use with male and female veterans. This initiative included a day-long training session for 130 staff of VISN21, a series of local training sessions, and demonstration groups in men's outpatient and women's inpatient PTSD treatment environments. A presentation outlining the effort to bring this protocol into the VA PTSD treatment system received the award for "Best Study: Science into Practice" at the annual meeting of the Association for the Advancement of Behavior Therapy.

Web-based services

The Center's website (**www.ncptsd.org**) is a major portal through which information is disseminated to both professional and general audiences. The number of fact sheets, materials for practitioners, and manuals available on the site continued to expand throughout the year. Then, following the terrorist attacks of September 11, the Center quickly added current information on treatment, assessment, and self-care following disaster, as well as information on special populations such as veterans, rescue workers, and children.

Plans are underway to revamp the site in FY 2002 to enhance navigation and to continue to add content. Some of the other features currently being developed include an expanded assessment section, video streaming of educational presentations, and web-delivered seminars.

In collaboration with the Sierra-Pacific MIRECC, the Education Division began development of web-delivered services intended to provide support, education, and recovery monitoring for veterans who have received PTSD care through the VA. The "Trauma Survivor Toolbox" will provide veterans and their families with information and education, coping skills training, motivation enhancement, social support, and expert consultation related to managing PTSD and its effects, all delivered via the Internet.

Disaster mental health activities

The VA plays an important role in the Federal Emergency Medical Disaster System, and the Center supports this role through its work on disaster mental health care. Staff specialists also continued to provide direct services as needed in the aftermath of major disasters, including, for example, services to airline employees and victims' families following the crash of Alaskan Airlines flight 261 and work in both New York and Washington after September 11 (see sidebar).

As part of a project funded by the Office of Victims of Crime in the Department of Justice, Center staff collaborated with CMHS to produce recommendations about best practices in the management of natural and criminally-perpetrated disasters. The project uses both empirically-based literature and experience from crisis response programs across the country. Center staff convened a focus group with a multidisciplinary group of private consultants and State and Federal representatives to review the reports, discuss ways to move the field of crisis intervention forward, and make general recommendations. This project will develop a state-of-the-art technical assistance center for field clinicians.

The Center and DoD are joining forces to plan and present a consensus conference on the subject of early intervention after mass casualties such as terrorist attacks or natural disasters. The conference, scheduled for early FY 2002, will bring together 66 international trauma experts who will draft a much-needed consensus statement on early intervention. In a similar effort, the Center co-sponsored and planned an early intervention conference with NIMH.

As research efforts have increasingly focused on early intervention to prevent the development of PTSD, the Center's collaborative projects have begun to concentrate on education in this area as well. One example is a collaboration with the DART Center for Journalism and Trauma to create an online curriculum for journalists who are writing about PTSD or who may be exposed to traumatic events themselves in the course of their work.

PTSD Education in the Aftermath of September 11

The September 11 terrorist attacks in New York and Washington gave rise to a significant increase in demand for information and assistance by the Center.

The Center's website was immediately expanded to contain informational, assessment, and treatment materials dealing with mass violence, including 21 documents for professionals, seven fact sheets for the public, and two downloadable videos. In the month following the attacks, the average number of online visits per day ranged as high as over 30,000, with most visitors remaining online longer, and the site was recognized with a "Best of the Web" award from *Forbes* magazine.

Center staff were also directly involved at the disaster sites. The Center delivered two large training sessions to approximately 250 New York City and County mental health agency managers and providers following the World Trade Center collapse, covering the nature of crisis counseling and mental health services. Staff also provided consultation services to federal and New York City agencies, as well as the states of New York and Connecticut.

A team from the Education Division responded to the crash at the Pentagon by providing counseling and training for staff at the Army's Community & Family Support Center in Arlington, VA. At the Pentagon Family Assistance Center in Washington, the response team provided support debriefings for counselors, educational presentations, and materials to help DoD assess experiences during the emergency response.

CONSULTATION

Through its activities in research and education, the Center has established itself as a respected source of information and expertise on PTSD. As a result, professionals from across all the Center's divisions are frequently called upon to serve in a consultative capacity with individuals and groups of clinicians, researchers, government policymakers, educators, and journalists, as well as with veterans and their family members.

Center staff consultations cover a wide range of types of activity. They can involve simple responses to phone calls and emails, on-site visits to meet with and advise other professionals, and elected or invited roles on boards and committees. Over the years consultations have taken Center staff to locations throughout the United States and, more recently, around the world. Many of the Center's most rewarding collaborative relationships began as consultations, including relationships with agencies throughout the VA, the DoD, and many professional societies both here and abroad.

Major consulting initiatives

Center professionals were invited to bring their expertise to bear on many situations during FY 2001, including several major initiatives in particularly critical areas.

Consultation to MIRECCs: Center staff played leadership roles in several of the MIRECCs around the country: Dr. Rosenheck is Co-Director of the Connecticut-Massachusetts MIRECC; Fred Gusman is Education Director of the Sierra-Pacific MIRECC; Dr. Friedman serves on the Advisory Boards of both the Sierra Pacific and Capital District MIRECCs; and Drs. Ruzek and Robyn Walser are members of the National MIRECC Education Group. Dr. Friedman also participates in the monthly MIRECC Executive Directors' conference calls.

Homelessness: Dr. Robert Rosenheck has become deeply involved in consultations to organizations concerned with homelessness, a serious problem for both veterans and general populations. During FY 2001 he served on the Expert Advisory Panel for the National Survey of Homeless Assistance Providers and Clients of the Federal Interagency Council on the Homeless, the Advisory Panel on Intelligent Mental Health and Substance Insurance Benefit Design of SAMHSA, and the Expert Panel for the National Symposium on Homelessness of HHS.

Aftermath of mass casualties: The Center has maintained a long-term consultative relationship with the Substance Abuse and Mental Health Services Administration's (SAMHSA's) Center for Mental Health Services. This relationship has evolved into a number of collaborative projects, including work on emergency responses to mass casualties. As a result Center staff, led by Drs. Friedman and Patricia Watson with support from Dr. Josef Ruzek and Mr. Bruce Young, have provided ongoing consultation to New York State and City in the period following the attacks of September 11.

Former Yugoslavia: At the invitation of the government of Croatia, medical association and veterans organizations, Drs. Matt Friedman, Terry Keane, John Krystal and Paula Schnurr provided consultation to professionals in the former Yugoslavia on conducting research with veterans of their recent civil war. This consultation provides the opportunity to carry out a

longitudinal study on the psychological, psychosocial and medical consequences of war zone trauma and should provide data that could be applied to treatment of American veterans with PTSD.

Consultation to the VA

The Center is frequently called upon to consult with VA's Mental Health Strategic Healthcare Group on clinical, research, and educational policy. Additional consultative activities include relationships with RCS, Medical Research Service, and the offices for Women Veterans, Emergency Medical Strategic Healthcare Group, and Minority Veterans. Center staff also work with the Under Secretary for Health's Special Committee on PTSD on planning and program development issues.

During FY 2001, Center staff served on a variety of VA committees, including the following:

- Dr. Friedman served on the New Knowledge Committee for Mental Health, the Mental Health Field Advisory Board, and the Under Secretary for Health's Special Committee on PTSD.
- Dr. Keane chaired the Scientfic Advisory Committee for the NVVLS and served as Co-Chair of the New Knowledge Committee for Mental Health. He is also a member of the Mental Health Field Advisory Board and serves on its Executive Committee.
- Dr. Rosenheck served on the Under Secretary's Special Committee on the Treatment of Seriously Mentally Ill Veterans. He, along with Dr. Susan Orsillo and Mr. Gusman, is also a member of the Under Secretary's Special Committee on PTSD.
- Dr. Greg Leskin was Program Chair of the VA Primary Care/Mental Health Integration Initiative.
- Dr. Paula Schnurr was a member of the In-Country Health Effects Workgroup and the VA Headquarters Committee to select centers for War-Related Illness.
- Drs. Ruzek and Watson were co-chairs of the PTSD in Primary Care Veterans Health Initiative. They were also members of the Executive Loan Program committee for the Office of Special Projects, which developed PTSD patient education materials for the VA website.
- Dr. Jeff Knight served on the VA Headquarters Advisory Committee on Mental Health Instrumentation.

Also during FY 2001 the Education Division continued to conduct the "Vet Center Consultation" program, an ongoing bimonthly telephone curriculum and case consultation to Vet Centers, helping them with their supervision and consultation requirements.

Other government agencies

Over the years the Center has become increasingly involved with other government agencies. Perhaps the most fruitful has been the relationship with the DoD, which has spawned such projects as the Brain Bank, the conference on Early Trauma Responses and Psychopathology, and planning for the Consensus Workshop on Early Intervention. A major consultation on acute

combat stress reaction during FY 2001 involved Drs. Friedman, Watson, and Ruzek and Mr. Young from the Center, Lt. Colonel E. Cameron Ritchie, MD, at the Pentagon, and Col. James Stokes, MD, at Fort Sam Houston.

Consultation activities with other government agencies also included the following:

- Drs. Friedman, Orsillo, and Danny Kaloupek served as members of NIMH research study sections during FY 2001, and Dr. Friedman also served on the NIMH Constituency Outreach and Partners Program.
- Dr. Keane served as an advisor on HIV and Trauma for a delegation from the NIMH to South Africa. He is on the Scientific Advisory Board of the Mitchell Center for Repatriated Prisoners of War and is a Distinguished Visiting Professor at the Wilford Hall Air Force Medical Center.
- Drs. Keane, Kaloupek, Daniel King, and Lynda King served as consultants to the Center for Naval Analysis on the evaluation of Vietnam Veterans who were former prisoners of war.
- Dr. Rosenheck is a Special Consultant to the Center for Substance Abuse Treatment Improvement Protocol #28, dealing with Naltrexone for the treatment of alcoholism.

Professional societies

Center professionals continue to play key roles in the ISTSS. During FY 2001 Dr. Kaloupek served as Treasurer and Chair of the Finance Committee, and Drs. Schnurr and Eve Carlson served as Board Members. Dr. Claude Chemtob was elected to the Board for a term beginning in December, 2001. Many other staff members served on ISTSS committees during the year as well, including Drs. Daniel King, Lynda King, Leskin, Bret Litz, Ruzek, Keane, Friedman, and Watson.

The Center's activities with other professional associations include the following:

- Dr. Keane serves on the American Psychological Association (APA) Council of Representatives and the Committee on Academic and Professional Issues.
- Dr. Brett Litz serves on the Association for the Advancement of Behavior Therapy's Committee on Academic and Professional Issues.
- Dr. Rosenheck is Chairman of the American Psychiatric Association Committee on Health Services Research.
- Drs. Friedman and Duman are members of the Scientific Advisory Board of the Anxiety Disorders Association of America.

Center staff are also frequently called upon to review journal articles. Drs. Schnurr, Krystal, Duman, and Ruzek hold editorial positions for major journals, and other staff serve on editorial boards. A complete listing is included in Table 5.

International agencies

As the field of traumatic stress continues to grow internationally, the Center is increasingly sought after for its expertise in both research and clinical issues by individuals and organizations around the world. The Center's work with DoD has also provided opportunities for consultation with military mental health experts from several countries, most notably Australia, Canada, Israel, The Netherlands, Norway, Sweden, and the United Kingdom. During FY 2001 Dr. Litz was a visiting professor at the Australian Centre for Posttraumatic Mental Health, and this close relationship continues to generate exciting opportunities for collaboration.

Drs. Keane and Friedman, along with Drs. Bonnie Green, John Fairbank, Susan Solomon and Joop de Jong, have continued to be involved with the ISTSS-sponsored UN initiatives focusing on psychosocial interventions for people exposed to mass casualties, social deprivation, and other traumatic experiences. This activity has helped shape planning for Center initiatives to assist in the post-September 11 recovery.

TABLE 1A
PUBLICATIONS BY NATIONAL CENTER STAFF
FISCAL YEAR 2001

1. Acierno, R., **Gray, M.**, Best, C., Resnick, H., Kilpatrick, D., Saunders, B., & Brady, K. (2001). Rape and physical violence: Comparison of assault characteristics in older and younger adults in the national women's study. *Journal of Traumatic Stress, 14*, 685-695.

2. **Aikins, D.E.**, & Craske, M.G. (2001). Cognitive theories of generalized anxiety disorder. *Psychiatric Clinics of North America, 24*, 57-74.

3. Anand, A., Charney, D., Oren, D., Berman, R.M., Hu, X.S., Cappiello, A., & **Krystal, J.H**. (2000). Attenuation of neuropsychiatric effects of ketamine with lamotrigine. *Archives of General Psychiatry, 57*, 270-276.

4. Antony, M., **Orsillo, S.M.**, & Roemer, L. (Eds.). (2001). *Practitioner's guide to empirically-based measures of anxiety*. New York: Kluwer Academic/Plenum.

5. Aultman, J.M., & **Moghaddam, B**. (2001). Distinct contributions of glutamate and dopamine receptors to temporal aspects of rodent working memory using a clinically relevant task. *Psychopharmacology, 153*, 353-364.

6. Berman, R.M., Cappiello, A., Anand, A., Oren, D.A., Heninger, G.R., Charney, D.S., & **Krystal, J.H.** (2000). Antidepressant effects of ketamine in depressed patients. *Biological Psychiatry, 47*, 351-354.

7. Birmaher, B., Dahl, R., Williamson, D., Perel, J., Brent, D., Axelson, D., **Kaufman, J.**, Dorn, L., Stull, S., Rao, U., & Ryan, N. (2000). Growth hormone secretion in children and adolescents at high risk for major depressive disorder. *Archives General Psychiatry, 57*, 867-872.

8. Blomqvist, O., **Gelernter, J.**, & Kranzler, H.R. (2000). A family-based study of DRD2 alleles in alcohol and drug dependence. *American Journal of Medical Genetics (Neuropsychology of Genetics), 96*, 659-664.

9. **Bolton, E., Litz, B.T.**, Britt, T.W., & Roemer, L. (2001). Report of prior exposure to potentially traumatic events and PTSD in troops poised for deployment. *Journal of Traumatic Stress, 14*, 249-256.

10. **Buckley, T.C.**, Blanchard, E.B., & Neill, W.T. (2000). Information processing and PTSD: A review of the empirical literature. *Clinical Psychology Review, 28*, 1041-1065.

11. **Buckley, T.C.**, & **Kaloupek, D.G.** (2001). A meta-analytic examination of basal cardiovascular activity in PTSD. *Psychosomatic Medicine, 63*, 585-594.

12. **Buckley, T.C.**, Parker, J.D., & Heggie J. (2001). A psychometric evaluation of the BDI-II in treatment-seeking substance abusers. *Journal of Substance Abuse Treatment, 20*, 197-204.

13. **Carlson, E.B.**, Dalenberg, C., Armstrong, J., Daniels, J., Loewenstein, R., & Roth, D. (2001). Multivariate prediction of posttraumatic symptoms in psychiatric inpatients. *Journal of Traumatic Stress, 14*, 549-567.

14. **Chemtob, C.M.** (2000). Delayed uses of debriefing interventions after disaster. In B. Raphael & J.P. Wilson (Eds.), *Psychological debriefing: Theory, practice and evidence* (pp. 227-240). New York: Cambridge University Press.

15. **Chemtob, C.M.**, & Louville, P. (2000). Psychological debriefing: Conceptual and procedural aspects of trauma prevention. In M. DeClerq, A. Andreoli, S. Lamarre, & P. Forster (Eds.), *Emergency psychiatry in a changing world* (pp. 227-240). Amsterdam, Netherlands: Elsevier.

16. **Chemtob, C.M.**, Tolin, D., van der Kolk, B., & Pitman, R. (2000). Eye movement desensitization and reprocessing (EMDR). In E. Foa, **T. Keane**, & **M. Friedman** (Eds.), *Effective treatments for PTSD* (pp. 333-335). New York: Guilford Press.

17. **Chemtob, C.M.**, Woo, L., Taylor, K.B., & Coel, M. (2001). Mixed-handedness and trauma symptoms among disaster-exposed adolescents. *Journal of Nervous and Mental Disease, 189, 58-60.*

18. Chen, A., & **Duman R.S.** (2001). Induction of GDNF expression in response to electroconvulsive seizure. *Synapse, 39*, 42-50.

19. Chen, A-H., Shirayama, Y., Shin, K.H., Neve, R.L., & **Duman, R.S.**, (2001). Expression of the cAMP response element binding protein (CREB) in hippocampus produces antidepressant effect. *Biological Psychiatry, 49*, 753-762.

20. Covault, J., **Gelernter, J.**, & Kranzler, H., (2001). Association study of cannabinoid receptor gene (CNR1) alleles and drug dependence. *Molecular Psychiatry, 6*, 501-502.

21. Dahl, R.E., Birmaher, B., Williamson, D.E., Dorn, L., Perel, J.M., **Kaufman, J.**, Brent, D.A., Axelson, D.A., & Ryan, N.D. (2000). Low growth hormone response to growth hormone-releasing hormone in child depression. *Biological Psychiatry, 4*, 981-988.

22. **Deykin, E.Y., Keane, T.M., Kaloupek, D.G.**, Fincke, G., Rothendler, J., Siegfried, M., & Creamer, K. (2001). Posttraumatic stress disorder and utilization of health services. *Psychosomatic Medicine, 63*, 835-841.

23. Doyle, B., Foa, E.B., **Keane, T.M.**, & Marshall, R. (2001). Posttraumatic stress disorder: Confronting the issues in primary care. *Medical Crossfire, 3*, 33-43.

24. **Duman, R.S.,** Malberg, J., Nakagawa, S., & D'Sa, C. (2000). Neuronal plasticity and survival in mood disorders. *Biological Psychiatry, 48,* 732-739.

25. **Erickson, D.J., Wolfe, J., King, D.W., King, L.A.,** & **Sharkansky, E.J.** (2001). Posttraumatic stress disorder and depression symptomatology in a sample of Gulf War veterans: A prospective analysis. *Journal of Consulting and Clinical Psychology, 69,* 41-49.

26. Fairbank, J., **Friedman, M.J.,** & Basoglu, M. (2001). Psychosocial models. In. E. Gerrity, **T.M. Keane,** & F. Tuma (Eds.), *The mental health consequences of torture* (pp. 65-72). New York: Kluwer Academic/Plenum.

27. Fairbank, J., **Friedman, M.J.,** & **Southwick, S.** (2001). Veterans of armed conflicts. In. E. Gerrity, **T.M. Keane,** & F. Tuma (Eds.), *The mental health consequences of torture* (pp. 121-132). New York: Guilford Press.

28. Fehon, D.S., **Grilo, C.M.,** & **Lipschitz, D.S.** (2001). Correlates of community violence exposure in hospitalized adolescents. *Comprehensive Psychiatry, 42,* 283-290.

29. Fehon, D.S., **Grilo, C.M.,** & **Lipschitz, D.S.** (2001). Gender differences in violence exposure and violence risk among adolescent inpatients. *Journal of Nervous & Mental Disease, 189,* 532-540.

30. Feng, J., Zheng, J., **Gelernter, J.,** Kranzler, H., Cook, E., Goldman, D., Jones, O.R., Craddock, N., Heston, L.L., DeLisi, L., Peltonen, L., Bennett, W.P., & Sommer, S.S. (2001). A common in-frame deletion in the α_{2c} adrenergic receptor in African-Americans. *Molecular Psychiatry, 6,* 168-172.

31. **Flack, W.F., Litz, B.T., Kaloupek, D.,** & **Keane, T.M.** (2000). Predictors of emotional numbing revisited: A replication and extension. *Journal of Traumatic Stress, 13,* 611-618.

32. Foa, E.B., **Keane, T.M.,** & **Friedman, M.J.** (2000). *Effective treatments for PTSD.* New York: Guilford Press.

33. Foa, E.B., **Keane, T.M.,** & **Friedman, M.J.** (2000). Guidelines for the effective treatment of PTSD. *Journal of Traumatic Stress, 13,* 539-555.

34. **Fontana, A.,** & **Rosenheck, R.** (2001). A model of patients' satisfaction with treatment for posttraumatic stress disorder. *Administration and Policy in Mental Health, 28,* 475-489.

35. Foy, D.W., **Schnurr, P.P.,** Weiss, D.S., Wattenberg, M.S., Glynn, S.M., Marmar, C.R., & **Gusman, F.D.** (2001). Group psychotherapy for posttraumatic stress disorder. In J.P. Wilson, **M.J. Friedman,** & J.D. Lindy (Eds.), *Treating psychological trauma and PTSD* (pp. 183-202). New York: Guilford Press.

36. **Friedman, M.J.** (2001). Allostatic versus empirical perspectives on pharmacotherapy for PTSD. In J.P. Wilson, **M.J. Friedman,** & J.D. Lindy (Eds.), *Treating psychological trauma and PTSD* (pp. 94-124). New York: Guilford Press.

37. **Gelernter, J.,** Bonvicini, K., Page, G., Woods, S.W., Goddard, A.W., Kruger, S., Pauls, D.L., & Goodson, S. (2001). Linkage genome scan for loci predisposing to panic disorder or agoraphobia. *American Journal of Medical Genetics (Neuropsychology of Genetics), 105,* 548-557.

38. George, T.P., & **Krystal, J.H.** (2000). Co-morbidity of psychiatric and substance abuse disorders. *Current Opinion in Psychiatry, 13, 327-331.*

39. Gerrity, E., **Keane, T.M.,** & Tuma, F. (2001). *The mental health consequences of torture.* New York: Plenum Press.

40. Goddard, A.W., Mason, G.F., Almai, A., Rothman, D.L., Behar, K.L., Petroff, O.A.C., **Charney, D.S.,** & **Krystal, J.H.** (2001). Reductions in occipital cortex GABA levels in panic disorder detected with 1H-magnetic resonance spectroscopy. *Archives of General Psychiatry, 58,* 556-561.

41. Hisama, F.M., Gruen, J.R., Choi, J.J., Husenovic, M., Grigorenko, E.L., Pauls, D., Mattson, R.H., **Gelernter, J.,** Wood, F.B., & Goei, V.L. (2001). Human GABA-B receptor 1 gene: Eight novel sequence variants. *Human Mutation, 17,* 349-350.

42. Jackson, M.E., Frost, A., & **Moghaddam, B.** (2001). Stimulation of prefrontal cortex at physiologically relevant frequencies inhibits dopamine release in the nucleus accumbens. *Journal of Neurochemistry, 78,* 920-923.

43. Jackson, M.E., & **Moghaddam, B.** (2001). Amygdala regulation of nucleus accumbens dopamine is governed by the prefrontal cortex. *Journal of Neuroscience, 21,* 676-681.

44. Jacobsen, L.K., **Southwick, S.M.,** & Kosten, T.R. (2001). Substance use disorder in patients with posttraumatic stress disorder: A review of the literature. *American Journal of Psychiatry, 158,* 1184-1190.

45. Jaranson, J.M., Kinzie, D., Friedman, M., Ortiz, S.D., **Friedman, M.J., Southwick, S.M.,** Kastrup, M., & Mollica, R. (2001). Assessment, diagnosis, and intervention. In E. Gerrity, **T.M. Keane,** & F. Tuma (Eds.), *The mental health consequences of torture* (pp. 249-275). New York: Kluwer Academic/ Plenum Publishers.

46. **Johnson, M.K.,** Hayes, S.M., D'Esposito, M., & Raye, C.L. (2000). Confabulation. In J. Grafman & F. Boller (Series Eds.) & L.S. Cermak (Vol. Ed.), *Handbook of neuropsychology: Vol 2.* (2nd ed., pp. 359-383). Amsterdam, Netherlands: Elsevier Science.

47. **Kaufman, J.,** & **Charney, D.** (2001). Effects of early adverse experience on the brain: Implications for understanding the relationship between child maltreatment and depression. *Development and Psychopathology, 13,* 451-471.

48. **Kaufman, J.**, Martin, A., King, R., & **Charney, D.** (2001). Are child-, adolescent-, and adult-onset depression one and the same disorder? *Biological Psychiatry, 49*, 980-1001.

49. **Kaufman, J.**, Plotsky, P., Nemeroff, C., & **Charney, D.**, (2000). Effects of early adverse experience on brain structure and function: Clinical implications. *Biological Psychiatry, 48*, 778-790.

50. **Keane, T.M.** (2001). Current directions in the psychological treatment of PTSD. In A. Braidwood (Ed.), *Psychological injury: Understanding and supporting.* London: The Stationery Office.

51. **Keane, T.M.** (2001). Entering the secret garden: The interface of cognitive neuroscience and trauma. *Journal of Aggression, Maltreatment, and Trauma, 13*, 25-28.

52. **Keane, T.M.** (2001). Entering the secret garden: The interface of cognitive neuroscience and trauma. In J.J. Freyd & A.P. DePrince (Eds.), *Trauma and cognitive science: A meeting of minds, science, and human experience* (pp. 19-22). New York :Haworth Press.

53. **Keane, T.M., Kaufman, M.**, & **Kimble, M.O.** (2000). Peritraumatic dissociative symptoms, acute stress disorder, and posttraumatic stress disorder: Causation, correlation, or epiphenomenon. In L. Sanchez-Planell & C. Diez-Quevedo (Eds.), *Dissociative States* (pp. 21-43). Barcelona: Springer-Verlag.

54. **Kimble, M.O.** (2000). The case of Howard. *Cognitive and Behavioral Practice, 7*, 118-122.

55. **Kimble, M.O.** (2000). Treating PTSD in the presence of multiple comorbid disorders. *Cognitive and Behavioral Practice, 7*, 133-136.

56. **Kimble, M.O., Kaloupek, D., Kaufman, M.**, & Deldin, P. (2000). Stimulus novelty differentially affects attentional allocation in PTSD. *Biological Psychiatry, 47*, 880-890.

57. **King, D.W., King, L.A., Erickson, D.J., Huang, M.T., Sharkansky, E.J.**, & **Wolfe, J.** (2000). Posttraumatic stress disorder and retrospectively reported stressor exposure: A longitudinal prediction model. *Journal of Abnormal Psychology, 109*, 624-633.

58. Kirz, J.T., **Drescher, K.D.**, Klein, J.L., **Gusman, F.D.**, & Schwartz, M.F. (2001). MMPI-2 assessment of differential post-traumatic stress disorder patterns in combat veterans and sexual assault victims. *Journal of Interpersonal Violence, 16*, 619-639.

59. Kosten, T.R., **Fontana, A.**, Sernyak, M.J., & **Rosenheck, R.** (2000). Benzodiazapine use in posttraumatic stress disorder among veterans with substance abuse. *Journal of Nervous and Mental Disease, 188*, 454-459.

60. **Krystal, J.H.** Bennett, A., Abi-Saab, D., Belger, A., Karper, L., D'Souza, C., **Lipschitz, D.**, Abi-Dargham, A., & **Charney, D.S.** (2000). Dissociation of ketamine effects on rule acquisition and rule implementation: Possible relevance to NMDA receptor contributions to executive cognitive functions. *Biological Psychiatry, 47*, 137-143.

61. **Kubany, E.S.**, Haynes, S.N., Owens, J.A., Leisen, M.B., Kaplan, A.S., Watson, S.B., & Burns, K. (2000). Development and validation of a brief broad-spectrum measure of trauma exposure: The Traumatic Life Events Questionnaire. *Psychological Assessment, 12*, 210-224.

62. **Kubany, E.S.**, Leisen, M.B., Kaplan, A.S., & Kelly, M.P. (2000). Validation of a brief measure of posttraumatic stress disorder: The Distressing Event Questionnaire (DEQ). *Psychological Assessment, 12*, 192-209.

63. Lindy, J.D., Wilson, J.P., & **Friedman, M.J.** (2001). Case history analysis of the treatments for PTSD: Lessons learned. In J.P. Wilson, **M.J. Friedman**, & J.D. Lindy (Eds.), *Treating psychological trauma and PTSD* (pp. 385-408). New York: Guilford Press.

64. **Litz, B.T., Orsillo, S.M., Kaloupek, D.**, & Weathers, F. (2000). Emotional processing in posttraumatic stress disorder. *Journal of Abnormal Psychology, 109*, 26-39.

65. Malberg, J.E., Eisch, A.J., Nestler, E.J., & **Duman, R.S.** (2000). Chronic antidepressant treatment increases neurogenesis in adult hippocampus. *Journal of Neuroscience, 20*, 9104-9110.

66. Martin, A., **Kaufman, J.**, & **Charney, D.** (2000). Pharmacotherapy of early-onset depression: Update and novel directions. In A. Martin & L. Scahill (Eds.), *Child and adolescent psychiatric clinics of North America* (pp. 135-157). Philadelphia, PA: W.B. Saunders.

67. Mason, J.W., **Wang, S.**, Yehuda, R., **Riney, S.**, **Charney, D.S.**, & **Southwick, S.M.** (2001). Psychogenic lowering of urinary cortisol levels linked to increased emotional numbing and a shame-depressive syndrome in combat-related posttraumatic stress disorder. *Psychosomatic Medicine, 63*, 387-401.

68. **Miller, M.W.**, & Patrick, C.J. (2000). Trait differences in affective and attentional responding to threat revealed by emotional Stroop interference and startle reflex modulation. *Behavior Therapy, 31*, 757-776.

69. **Miller, M.W., Peirce, J.M.**, & **Keane, T.M.** (2000). Posttraumatic stress disorder in adults. In W.E. Craighead & C.B. Nemeroff (Eds.), *The Corsini encyclopedia of psychology and behavioral science (Third Edition, Vol. 3)* (pp. 1222-1224). New York: John Wiley & Sons.

70. Mitchell, K.J., **Johnson, M.K.**, Raye, C.L., Mather, M., & D'Esposito, M. (2000). Aging and reflective processes of working memory: Binding and test load deficits. *Psychology and Aging, 15*, 527-541.

71. Mitchell, K.J., **Johnson, M.K.**, Raye, C.L., & D'Esposito, M. (2000). fMRI evidence of age-related

hippocampal dysfunction in feature binding in working memory. *Cognitive Brain Research, 10*, 197-206.

72. **Morgan, C.A., III,** Hazlett, G., **Wang, S., Richardson, E.G., Jr., Schnurr, P.P.**, & **Southwick, S.M.** (2001). Symptoms of dissociation in humans experiencing acute, uncontrollable stress: A prospective investigation. *American Journal of Psychiatry, 158*, 1239-1247.

73. **Morgan, C.A., III, Wang, S., Rasmusson, A.**, Hazlett, G., Anderson, G., & **Charney, D.S.** (2001). Relationship among plasma cortisol, catecholamines, neuropeptide y and human performance during exposure to uncontrollable stress. *Psychosomatic Medicine, 63*, 412-422.

74. **Orsillo, S.M.** (2001). Measures for acute stress disorder and posttraumatic stress disorder: A brief overview and guide to assessment. In M.M. Antony, **S.M. Orsillo,** & L. Roemer (Eds.), *Practitioner's guide to empirically-based measures of anxiety* (pp. 255-308). New York: Kluwer Academic/Plenum.

75. **Orsillo, S.M., Batten, S.V.**, & **Hammond, C.** (2001). Acute stress disorder and posttraumatic stress disorder: A brief overview and guide to assessment. In M.M. Antony, **S.M. Orsillo**, & L. Roemer (Eds.), *Practitioner's guide to empirically-based measures of anxiety* (pp. 245-254). New York: Kluwer Academic/Plenum.

76. Osterman, J.E., Hopper, J., Heran, W.J., **Keane, T.M.**, & van der Kolk, B. (2001) Awareness under anesthesia and the development of posttraumatic stress disorder. *General Hospital Psychiatry, 23*, 198-204.

77. Prigerson, H., Maciejewski, P., & **Rosenheck, R.** (2001). Combat trauma: Trauma with the highest risk of delayed onset and unresolved posttraumatic stress disorder symptoms, unemployment and abuse among men. *Journal of Nervous and Mental Disease, 198*, 99-108.

78. Ranganath, C., **Johnson, M.K.**, & D'Esposito, M. (2000). Left anterior prefrontal activation increases with demands to recall specific perceptual information. *Journal of Neuroscience, 20*, 1-5.

79. Raye, C.L., **Johnson, M.K.**, Mitchell, K.J., Nolde, S.F., & D'Esposito, M. (2000). fMRI investigations of left and right PFC contributions to episodic remembering. *Psychobiology, 28*, 197-206.

80. Roemer, L., **Litz, B.T., Orsillo, S.M.**, & **Wagner, A.W.** (2001). A preliminary investigation of the role of strategic withholding of emotions in PTSD. *Journal of Traumatic Stress, 14*, 149-156.

81. **Rosen, C.S.** (2000). Is the sequencing of change processes by stage consistent across health problems? A meta-analysis. *Health Psychology, 19*, 593-604.

82. **Rosen, C.S.**, Murphy, R.T., Chow, H.C., **Drescher, K.D.**, Ramirez, G., Ruddy, R., & **Gusman, F.** (2001). PTSD patients' readiness to change alcohol and anger problems. *Psychotherapy, 38*, 233-244.

83. **Rosenberg, H.J.**, Rosenberg, S.D., Wolford, G.L., Manganiello, P.D., Brunette, M.F., & Boynton, R.A. (2000). The relationship between trauma, PTSD, and medical utilization in three high risk medical populations. *International Journal of Psychiatry in Medicine, 30*, 247-259.

84. Rosenberg, S.D., Hulsey, T.L., & **Rosenberg, H.J.** (2000). The language of sexual abuse: An exploratory lexical analysis. *Journal of Trauma and Dissociation, 1*, 29-42.

85. **Rosenheck, R.**, & **Fontana, A.** (2001). Impact of efforts to reduce inpatient costs on clinical effectiveness: Treatment of posttraumatic stress disorder in the Department of Veterans Affairs. *Medical Care, 39*, 168-180.

86. **Ruef, A., Litz, B.T.**, & Schlenger, W. (2000). Hispanic ethnicity and risk for combat-related posttraumatic stress disorder. *Cultural Diversity and Ethnic Minority Psychology, 6*, 235-252.

87. **Ruzek, J.I., Rincy, S.J., Leskin, G.L., Drescher, K.D.**, Foy, D.W., & **Gusman, F.D.** (2001). Do PTSD symptoms worsen during trauma focus group treatment? *Military Medicine, 166*, 898-902.

88. Saxe, G.N., Stoddard, R., Courtney, D., Cunningham, K., Chawla, N., Sheridan, R., **King, D.W.**, & **King, L.A.** (2001). The relationship between acute morphine and the course of PTSD in children with burns. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 915-921.

89. **Schnurr, P.P.** (2000). [Review of the book Trauma: A Genealogy]. New England Journal of Medicine, 343, 1052.

90. **Schnurr, P.P., Friedman, M.J.**, Lavori, P.J., & Hsieh, F.Y. (2001). Design of VA Cooperative Study #420: Group treatment of PTSD. *Controlled Clinical Trials, 22*, 74-88.

91. Sernyak, M.J., Kosten, T.R., **Fontana, A.**, & **Rosenheck, R.** (2001). Neuroleptic use in the treatment of posttraumatic stress disorder. *Psychiatric Quarterly, 72*, 197-213.

92. **Sharkansky, E.J.** (2001). Alcohol and drug abuse and dependence. In E.F.T. Yee, S. Baillie, M. Ho, M. Schapira, & L. Van Egeren (Eds.), *Women's primary care guide* (pp.31-35). Washington, DC: Department of Veterans Affairs, Employee Education System.

93. **Southwick, S.M.**, & **Friedman, M.J.** (2001). Neurobiological models of posttraumatic stress disorder. In E. Gerrity, **T.M. Keane,** & F. Tuma (Eds.), The mental health consequences of torture (pp. 73-87). New York: Kluwer Academic/Plenum.

94. **Southwick, S.M., Morgan, C.A.**, & Rosenberg, R. (2000). Social sharing of Gulf War experiences: Association with trauma-related psychological symptoms. *Journal of Nervous and Mental Disease, 188*, 695-700.

95. Stein, D., Williamson, D.E., Birmaher, B., Brent, D.A., **Kaufman, J.**, Dahl, R.E., & Ryan, N.D. (2000). Parent-child bonding and family functioning in depressed children, and children at high-risk and low-risk for future depression. *Journal of the American Academy of Child and Adolescent Psychiatry, 39,* 1387-1395.

96. Stevenson, V., & **Chemtob, C.M.** (2000). The impact of anger on treatment termination in PTSD. *Military Medicine, 165,* 422-424.

97. Stine, S.M., Grillon, C.G., **Morgan, C.A., III**, Kosten, T.R., **Charney, D.S.**, & **Krystal, J.H.** (2001). Methadone patients exhibit increased startle and cortisol response after intravenous yohimbine. *Psychopharmacology, 154,* 274-281.

98. **Street, A.E.**, & Arias, I. (2001). Psychological abuse and posttraumatic stress disorder in battered women: Examining the roles of shame and guilt. *Violence and Victims, 16,* 65–78.

99. Takahata, R., & **Moghaddam, B.** (2000). Target specific glutamatergic regulation of dopamine neurons in the ventral tegmental area. *Journal of Neurochemistry, 75,* 1775-1778.

100. Thome, J., Impey, S., Storm, D., & **Duman, R.S.** (2000). Induction of CRE gene expression by antidepressant treatment. *Journal of Neuroscience, 20,* 4030-4036.

101. Vaidya, V.A., & **Duman, R.S.** (2000). Alterations in heavy and light neurofilament proteins in hippocampus following chronic ECS administration. *Synapse 35,* 137-143.

102. van Achterberg,M., Rohrbaugh, R.M., & **Southwick, S.M.** (2001). Emergence of PTSD in trauma survivors with dementia. *Journal of Clinical Psychiatry, 62,* 206-207.

103. Weathers, F.W., **Keane, T.M.**, & Davidson, J.R.T. (2001) Clinician administered PTSD scale (CAPS): A review of the first ten years of research. *Depression and Anxiety, 13,* 132-156.

104. **Whealin, J.M.** (2000). Sexual harassment: An overview of the impact for women. In A. Kesselman, L.D. McNair, & N. Schniedewing (Eds.), *Women, images, and realities: A multicultural anthology* (2nd ed.). Mountain View, CA: Mayfield.

105. Wilson, J.P., **Friedman, M.J.**, & Lindy, J.D. (Eds.). (2001). *Treating psychological trauma and PTSD.* New York: Guilford Press.

106. Wilson, J.P., **Friedman, M.J.**, & Lindy, J.D. (2001). A holistic, organismic approach to healing trauma and PTSD. In J.P. Wilson, **M.J. Friedman**, & J.D. Lindy (Eds.), *Treating psychological trauma and PTSD* (pp. 28-58). New York: Guilford Press.

107. Wilson, J.P., **Friedman, M.J.**, & Lindy, J.D. (2001). Practical considerations in the treatment of PTSD: Guidelines for practitioners. In J.P. Wilson, **M.J. Friedman**, & J.D. Lindy (Eds.), *Treating psychological trauma and PTSD* (pp. 409-431). New York: Guilford Press.

108. Wilson, J.P., **Friedman, M.J.**, & Lindy, J.D. (2001). Treatment goals for PTSD. In J.P. Wilson, **M.J. Friedman**, & J.D. Lindy (Eds.), *Treating psychological trauma and PTSD* (pp. 3-27). New York: Guilford Press.

109. Zabetian, C.P., Anderson, G.M., Buxbaum, S.G., Elston, R.C., Ichinose, H., Nagatsu, T., Kim, K.S., Kim, C.H., Malison, R.T., **Gelernter, J.**, & Cubells, J.F. (2001). A quantitative trait analysis of human plasma DBH activity: Evidence for a major functional polymorphism at the DBH locus. *American Journal of Human Genetics, 68,* 515-522.

110. Zalsman, G., Frisch, A., Bromberg, M., **Gelernter, J.**, Michaelovsky, E., Campino, A., Erlich, Z., Tyano, S., Apter, A., & Weizman, A. (2001). Family-based association study of serotonin transporter promoter in suicidal adolescents: No association with suicidality but possible role in violence traits. *American Journal of Medical Genetics (Neuropsychology of Genetics), 105,* 239-245.

111. Zaveri, H.P., Duckrow, R.B., **de Lanerolle, N.C.**, & Spencer, S.S. (2001). Distinguishing subtypes of temporal lobe epilepsy with background hippocampal activity. *Epilepsia, 42,* 725-730.

TABLE 1B
PUBLICATIONS BY NATIONAL CENTER STAFF, IN PRESS
FISCAL YEAR 2001

1. Acierno, R., Brady, K., **Gray, M.**, Kilpatrick, D., Resnick, H., & Best, C. Psychopathology following interpersonal violence: A comparison of risk factors in older and younger adults. *Journal of Clinical Geropsychology.*

2. Adams, B.W., Bradberry, C.W., & **Moghaddam, B**. NMDA antagonist effects on striatal dopamine release: Microdialysis studies in non-human primates. *Synapse.*

3. Adams, B.W., & **Moghaddam, B**. Effects of haloperidol, clozapine, and M100907 on phencyclidine-activated glutamate efflux in the prefrontal cortex. *Biological Psychiatry.*

4. Adler, A.B., Bartone, P.T., & **Litz, B.T.** The nature of peacekeeping stressors. In T. Britt & A. Adler (Eds.), *The psychology of the peacekeeper: Soldiers holding fire.* Westport, CN: Praeger.

5. **Batten, S.V.**, Follette, V.M., & Aban, I.B. Experiential avoidance and high risk sexual behavior in survivors of child sexual abuse. *Journal of Child Sexual Abuse.*

6. **Batten, S.V.**, Follette, V.M., Hall, M.L.R., & Palm, K.M. Physical and psychological effects of written disclosure among sexual abuse survivors. *Behavior Therapy.*

7. Beck, J., Freeman, J., **Shipherd, J.**, **Hamblen, J.**, & Lackner, J. Specificity of stroop interference in patients with pain and PTSD. *Journal of Abnormal Psychology.*

8. **Bolton, E.**, **Gray, M.**, & **Keane, T**. Recent advances in the assessment and treatment of PTSD. *Federal Practitioner.*

9. **Buckley, T.C.**, Blanchard, E.B., & Hickling, E.J. Automatic and strategic processing of threat stimuli: A comparison between PTSD, panic disorder, and non-anxiety controls. *Cognitive Therapy and Research.*

10. **Carlson, E.** Psychometric study of a brief screen for PTSD: Assessing the impact of multiple traumatic events. *Assessment.*

11. **Chemtob, C.M.**, Curtis, G., van Houten, W., & Guss, J. Personal and familial left-handedness in phobias. *Journal of Nervous and Mental Disease.*

12. **Chemtob, C.M.**, Nakashima, J., & Hamada, R. Psychosocial intervention for elementary school children with disaster-related psychological distress. *Archives of Pediatric and Adolescent Medicine.*

13. **Chemtob, C.M.**, Nakashima, J., Hamada, R., & Carlson, J. Brief treatment for elementary school children with disaster-related posttraumatic stress disorder: A field study. *Journal of Clinical Psychology.*

14. **Chemtob, C.M.,** & Taylor, T.L. The treatment of traumatized children. In R. Yehuda (Ed.), *Trauma survivors: Bridging the gap between intervention research and practice.* Washington, DC: American Psychiatric Press.

15. **Cook, J.M.**, Aren, P.A., **Schnurr, P.P.**, & **Sheikh, J.** Symptom differences of older depressed primary care patients with and without history of trauma. *International Journal of Psychiatry in Medicine.*

16. Costello, E.J., Pine, D.S., Hammen, C., March, J.S., Plotsky, P.M., Weissman, M.M., Biederman, J., Goldsmith, H.H., **Kaufman, J.**, Lewinsohn, P., Hellander, M., Hoagwood, K., Koretz, D.S., Nelson, C.A., & Leckman, J.F. Development and natural history of mood disorders. NIMH workgroup on the development and natural history of mood disorders – development section. *Biological Psychiatry.*

17. Dalenberg, C., & **Carlson, E.** Ethical issues in the treatment of recovered memory trauma victims and patients with false memories of trauma. In S. Bucky (Ed.), *The comprehensive textbook of ethics and law in the practice of psychology.* Haworth Press.

18. **de Lanerolle, N.C.**, Kim, J.H., Williamson, A., Zaveri, H.P., & Spencer, D.D. A retrospective analysis of hippocampal pathology in human temporal lobe epilepsy: Evidence for distinctive patient subcategories. *Epilepsia.*

19. Eid, T., Kovacs, I., Spencer, D.D., & **de Lanerolle, N.C.** Novel expression of AMPA receptor subunit GluR1 on dendrites and spines in the human epileptogenic hippocampus. *European Journal of Neuroscience.*

20. Fairbank, J.A., **Friedman, M.J.**, de Jong, J., Green, B.L., & Solomon, S.D. Intervention options for society, communities, families, and individuals. In B.L. Green, **M.J. Friedman**, J. de Jong, S. Solomon, **T. Keane**, J.A. Fairbank, B. Donelan, & E. Frey-Wouters (Eds.), *Trauma in war and peace: Prevention, practice, and policy.* Amsterdam: Kluwer Academic/Plenum.

21. **Fontana, A.**, & **Rosenheck, R.** The role of war-zone trauma and PTSD in the etiology of antisocial behavior. In D. Miller (Ed.), *Handbook of posttraumatic stress disorders.* New York, NY: Plenum.

22. Foy, D.W., **Ruzek, J.I.**, Glynn, S.M., **Riney, S.J.**, & **Gusman, F.D**. Trauma focus group therapy for combat-related PTSD: An update. *In Session: Psychotherapy in Practice.*

23. **Friedman, M.J.**, Warfe, P.G., Mwiti, G.K. UN peacekeepers and humanitarian field personnel. In B.L. Green, **M.J. Friedman**, J. de Jong, S. Solomon, **T. Keane**, J.A. Fairbank, B. Donelan, & E. Frey-Wouters (Eds.), *Trauma in war and peace: Prevention, practice, and policy.* Amsterdam: Kluwer Academic/Plenum.

24. Frueh, B.C., Hamner, M.B., Bernat, J., Turner, S.M., **Keane, T.M.**, & Arana, G.W. Racial differences in psychotic symptoms among combat veterans with PTSD. *Depression and Anxiety.*

25. **Gelernter, J.**, & Kranzler, H. Genetic variation and drug dependence risk factors: A pharmacogenetic perspective. In B. Lerer (Ed.), *Pharmacogenetics of psychotropic drugs.* England: Cambridge University Press.

26. Gerrity, E., **Keane, T.M.**, & Tuma, F. *Effective treatments for PTSD.* New York: Guilford Press.

27. **Gray, M.**, & Acierno, R. Examining the symptom presentation of older adult crime victims: A description of a clinical sample. *Journal of Anxiety Disorders.*

28. **Gray, M.**, & Acierno, R. Reviewing the literature and evaluating existing data. In J. Thomas & M. Hersen (Eds.), *Understanding research in clinical and counseling psychology: A textbook.* Hillsdale, NJ: Lawrence Erlbaum Associates.

29. **Gray, M.**, & Acierno, R. Treatment of posttraumatic stress disorder. In M. Hersen (Ed.), *Clinical behavior therapy: Adults and children.* New York, NY: John Wiley and Sons.

30. **Gray, M.**, & Lombardo, T. Trauma narrative complexity measures as indices of trauma-specific memory deficits: A critical analysis. *Applied Cognitive Psychology.*

31. Green, B.L., deJong, J., Fairbank, J.A., **Friedman, M.J.**, Frey-Wouters, E., Solomon, S., & **Keane, T.M.** *Psychosocial interventions for traumatic experiences worldwide.* United Nations.

32. Green, B.L., **Friedman, M.J.**, de Jong, J., Solomon, S., Keane, T., Fairbank, J.A., Donelan, B., & Frey-Wouters, E. *Trauma in war and peace: Prevention, practice, and policy.* Amsterdam: Kluwer Academic/Plenum.

33. Hayes, S.C., Pankey, J., **Batten, S.V.**, Gifford, E.V., & Quinones, R. Acceptance and commitment therapy in the treatment of experiential avoidance disorders. In T. Patterson (Ed.), *Comprehensive handbook of psychotherapy: Cognitive/behavioral/functional approaches (Vol. 2).* New York: Wiley Press.

34. Hofmann, S.G., Levitt, J.T., Hoffman, E.C., Greene, K., **Litz, B.T.**, & Barlow, D.H. Association between exposure to potentially traumatizing events and anxiety disorders: Evidence for the diathesis-stress model. *Depression and Anxiety.*

35. Hofmann, S.G, **Litz, B.T.**, & Weathers, F.W. Social anxiety and posttraumatic stress disorder. *Journal of Anxiety Disorders.*

36. **Jankowski, M.K.** [Review of the book Posttraumatic stress intervention: Challenges, issues, and perspectives]. *Journal of Nervous and Mental Disease.*

37. **Jankowski, M.K.**, Leitenberg, H., Coffey, P., & Henning, K. Parental caring as a possible buffer against sexual revictimization in young adult survivors of childhood abuse. *Journal of Traumatic Stress.*

38. **Kaufman, J.**, & Blumberg, H. Neurobiology of early onset mood disorders. In A. Martin, L. Scahill, J. Leckman, & D. Charney (Eds.), *Textbook of child and adolescent psychopharmacology.* New York: Oxford University Press.

39. Kaufman, M., **Kimble, M.O., Kaloupek, D.G.**, & Forti, A. Peritraumatic dissociation and physiological responding to trauma-relevant stimuli in Vietnam combat veterans with PTSD. *Journal of Nervous and Mental Disease.*

40. **Keane, T.M.** A call to action: Summarizing the issues in responding to social and humanitarian crises. In B.L. Green, J. deJong, J.A. Fairbank, **M.J. Friedman,** E. Frey-Wouters, S. Solomon, & **T.M. Keane** (Eds.), *Psychosocial interventions for traumatic experiences worldwide.* United Nations.

41. **Keane, T.M.**, & Barlow, D.H. Posttraumatic stress disorder. In D.H. Barlow (Ed.), *Anxiety and its disorders.* New York: Guilford Press.

42. **Keane, T.M.**, & **Kaloupek, D.G.** Posttraumatic stress disorder: Diagnosis, assessment, and monitoring outcomes. In R. Yehuda (Ed.), *Treating trauma survivors: Bridging the gap between intervention research and practice.* Washington: American Psychiatric Press.

43. **Keane, T.M., Kimble, M.O., Kaufman, M.**, & **Kaloupek, D.G.** Diagnosis and assessment of posttraumatic stress disorder in adults. *Journal of Interpersonal Violence.*

44. **King, L.A.**, & **King, D.W.** Male-perpetrated domestic violence: Testing a series of multifactorial family models. In B. Fisher (Ed.), *Violence against women and family violence.* Washington, DC: National Institute of Justice.

45. **King, L.A., Orcutt, H.**, & **King, D.W.** Gender differences in stress, trauma, and PTSD research: Application of two quantitative methods. In R. Kimerling, P.C. Ouimette, & J. Wolfe (Eds.), *Gender & PTSD.* New York: Guilford Press.

46. Kranzler, H.R., Hernandez-Avila, C.A., & **Gelernter, J.** Polymorphism of the 5-HT1B receptor gene (HTR1B): Strong within-locus linkage disequilibrium without association to antisocial substance dependence. *Neuropsychopharmacology.*

47. **Krystal, J.H.**, & D'Souza, D.C. Ketamine has equal affinity for NMDA receptors and the high affinity state of the dopamine D2 receptor. *Biological Psychiatry.*

48. **Kubany, E.S.,** & Watson, S.B. Guilt: Elaboration of a testable multidimensional model. *The Psychological Record.*

49. **Leskin, G.A., Morland, L.A.,** & **Keane, T.M.** Integrated treatment of PTSD in primary care settings. In W. O'Donnohue, N. Cummings, M. Byrd, & D. Henderson (Eds.), *Behavioral integrative care: Treatments that work in the primary care setting.* New York: Allyn and Bacon.

50. **Leskin, G.A., Moreland, L.,** & **Keane, T.M.** Integrating PTSD services: The behavioral health model. In K. Strohsahl (Ed.), *Integrative behavioral health services.*

51. **Leskin, G.A.,** & **Sheikh, J.I.** Lifetime trauma history and panic disorder: Findings from the National Comorbidity Survey. *Journal of Anxiety Disorders.*

52. **Lipschitz, D.S., Morgan, C.A.,** & **Southwick, S.M.** Neurobiological disturbances in youth with childhood trauma and in youth with conduct disorder. *Journal of Aggression, Maltreatment and Trauma.*

53. **Litz, B.T., Bolton, E.,** & **Gray, M.** Posttraumatic stress disorder following peacekeeping operations. In T. Britt & A. Adler (Eds.), *The psychology of the peacekeeper: Soldiers holding fire.* Westport, CN: Praeger.

54. **Litz, B.T.,** & **Gray, M.J.** Emotional numbing in posttraumatic stress disorder: Current and future research directions. *Australian and New Zealand Journal of Psychiatry.*

55. **Litz, B.T., Gray, M.J.,** Bryant, R., & Adler, A.B. Early intervention for trauma: Current status and future directions. *Clinical Psychology: Science and Practice.*

56. **Litz, B.T., Miller, M.W., Ruef, A.M.,** & McTeague, L.M. Assessment of adults exposed to trauma. In M.M. Antony & D.H. Barlow (Eds.), *Handbook of assessment, treatment planning, and outcome evaluation: Empirically supported strategies for psychological disorders.* New York: Guilford Press.

57. **Loo, C.M.,** Fairbank, J.A., Scurfield, R.M., Ruch, L.O., **King, D.W.,** Adams, L., & **Chemtob, C.** Measuring exposure to racism: Development and validation of a race-related stressor scale (RRSS) for Asian American Vietnam veterans. *Psychological Assessment.*

58. **Loo, C.M.,** & Kiang, P.N. Race-related stressors and psychological trauma: The contributions of Asian American veterans. In L. Zhan (Ed.), *Asian voices: Emerging needs of Asian Americans, 2nd Edition.* Massachusetts: Jones and Bartlett.

59. **McDonagh-Coyle, A., McHugo, G.J., Friedman, M.J., Schnurr, P.P.,** Zayfert, C., & Descamps, M. Psychophysiological reactivity in female sexual abuse survivors. *Journal of Traumatic Stress.*

60. **Morgan III, C.A., Rasmusson, A.M.,** Wang, S., Hoyt, G., Hauger, R., & Hazlett G. Neuroeptide Y and subjective distress in humans exposed to acute stress: Replication and extension of previous report. *Biological Psychiatry.*

61. **Morgan III, C.A.,** Wang, S., **Rasmusson, A.,** Hazlett, G., Anderson, G., & Charney D.S. Relationship among plasma cortisol, catecholamines, neuropeptide-y and human performance during exposure to uncontrollable stress. *Psychosomatic Medicine.*

62. Naugle, A., Resnick, H., **Gray, M.,** & Acierno, R. Treatment for acute stress and PTSD following rape. In J. Petrak & B. Hedge (Eds.), *The trauma of sexual assault: Treatment, prevention, and policy.* London: John Wiley and Sons.

63. Newman, E., Sinclair, R., & **Kaloupek, D.G.** Empirically supported ethical research practice: The costs and benefits of research from the participant's view. *Accountability in Research.*

64. Nock, M., **Kaufman, J.,** & **Rosenheck, R.** Examination of predictors of severe violence in combat-exposed Vietnam veterans. *Journal of Traumatic Stress.*

65. Novaco, R.N., & **Chemtob, C.M.** Anger and combat-related PTSD. *Journal of Traumatic Stress.*

66. **Orsillo, S.M.,** Raja, S., & **Hammond, C.** Gender issues in PTSD with comorbid mental health disorders. In R. Kimerling, P.C. Ouimette, & J. Wolfe (Eds.), *Gender and PTSD.* New York: Guilford Press.

67. Peirce, J.M., Newton, T.L., **Buckley, T.C.,** & **Keane, T.M.** Gender and psychophysiology in posttraumatic stress disorder. In P. Oiumette, R. Kimerling, & J. Wolfe (Eds.), *Gender and posttraumatic stress disorder.* New York: Guilford Press.

68. Prigerson, H.G., Maciejewski, P.K., & **Rosenheck, R.A.** War and society: Impact of combat exposure on the public health of U.S. males. *American Journal of Public Health.*

69. Prigerson, H.G., Silverman, G.K., Jacobs, S.C., Maciejeweski, P.K., Kasl, S., & **Rosenheck, R.A.** Traumatic grief, disability and the underutilization of health services. *Primary Psychiatry.*

70. **Rabois, D., Batten, S.V.,** & **Keane, T.** Implications of biological findings for psychological treatments of PTSD. *Psychiatric Clinics of North America.*

71. **Rasmusson, A.,** & **Friedman, M.J.** Gender and biological models of PTSD. In R. Kimerling, P.C. Ouimette, & J. Wolfe (Eds.), *Gender and PTSD.* New York: Guilford.

72. Read, J.P., Bollinger, A.R., & **Sharkansky, E.J.** Assessment of co-morbid alcoholism and posttraumatic stress disorder. In P.C. Ouimette & P.J. Brown (Eds.), *PTSD and substance use disorder comorbidity.* Washington, DC: American Psychological Association Press.

73. Roemer, L., **Litz, B.T., Orsillo, S.,** & **Wagner, A.** A preliminary examination of the role of strategic

withholding of emotions in PTSD. *Journal of Traumatic Stress.*

74. Rosenberg, S.D., Mueser, K.T., **Friedman, M.J.**, Gorman, P.G., Drake, R.E., Vidaver, R.M., Torrey, W.C., & **Jankowski, M.K.** Developing effective treatments for posttraumatic disorders among people with severe mental illness. *Psychiatric Services.*

75. **Rosenheck, R.A.**, & **Fontana, A.** African-American and Latino veterans in intensive VA treatment programs for posttraumatic stress disorder. *Medical Care.*

76. Ruscio, A.M., Ruscio, J., & **Keane, T.M.** The latent structure of posttraumatic stress disorder: A taxonometric investigation of reactions to extreme stress. *Journal of Abnormal Psychology.*

77. Russell, D., & **Duman, R.S.** Neurotrophic factors and intracellular signal transduction pathways. In D. Charney, C. Nemeroff, J. Coyle, & M. Davis (Eds.), *Psychopharmacology: The fourth generation.* New York: Raven Press.

78. **Ruzek, J.I.** Concurrent PTSD and substance use disorder among veterans of military service: Current evidence and treatment issues. In P. Ouimette & P. Brown (Eds.), *PTSD and substance abuse.* Washington, DC: American Psychological Association.

79. **Ruzek, J.I.**, & Cordova, M.J. The role of hospitals in delivering early intervention services following traumatic events. In R. Orner & U. Schnyder (Eds.), *Reconstructing early intervention after trauma.* Oxford, United Kingdom: Oxford University Press.

80. **Savarese, V.W., Suvak, M.K., King, L.A.**, & **King, D.W.** Relationships among alcohol use, hyperarousal, and marital conflict and violence in Vietnam veterans. *Journal of Traumatic Stress.*

81. **Schnurr, P.P., Friedman, M.J.**, & **Bernardy, N.C.** A brief summary of research findings on posttraumatic stress disorder. *In Session: Psychotherapy in Practice.*

82. **Schnurr, P.P.**, Spiro, A. III, Vielhauer, M.J., Findler, M.N., & **Hamblen, J.L.** Trauma in the lives of older men: Findings from the Normative Aging Study. *Journal of Clinical Geropsychology.*

83. Schultz, R., Rosenberg, D., Pugh, K., Pine, D., Peterson, B., **Kaufman, J.**, Kates, W., Jacobsen, L., Giedd, J., Castellanos, F.X., & Anderson, A. Pediatric neuroimaging. In M. Lewis (Ed.), *Child and adolescent psychiatry: A comprehensive textbook.* Baltimore, MD: Williams & Wilkens.

84. **Sheikh, J.I., Leskin, G.A.**, & Klein, D.F. Gender differences in panic disorder: Application of the Suffocation Alarm Theory. *American Journal of Psychiatry.*

85. Tolbert, L.M., D'Sa, C., & **Duman, R.S.** Neuronal signal transduction and plasticity to psychotropic drugs. In S.J. Martin, T. Scahill, D. Charney, & J. Leckman, (Eds.), *Textbook of child and adolescent psychopharmacology.* New York: Oxford University Press.

86. **Vogt, D.S., Stone, E.R., Salgado, D.M., King, L.A., King, D.W.**, & **Savarese, V.W.** Gender awareness among VA healthcare workers: Existing strengths and areas for improvement. *Women and Health.*

87. **Whealin, J.M.** Women's exposure to unwanted sexual attention in childhood. *Journal of Child Sexual Abuse.*

88. **Whealin, J.M.**, Davies, S., Schaffer, A., Jackson, J.L., & Love, L. Family factors and childhood adjustment associated with unwanted attention to girls' sexuality by intra-familial perpetrators. *Journal of Family Violence.*

TABLE 2
SCIENTIFIC PRESENTATIONS ON PTSD BY NATIONAL CENTER STAFF
FISCAL YEAR 2001

INTERNATIONAL SOCIETY FOR TRAUMATIC STRESS STUDIES
San Antonio, TX, November 2000

Bachrach, P.S., Suvak, M.K., King, D.W., & King, L.A. "Prewar factors contributing to positive life adjustment among Vietnam veterans."

Benoit, M., **Carlson, E.**, & **Ruzek, J.I.** "Effects of psychoeducation on knowledge and attitudes about PTSD."

Carlson, E.B., Lindley, S.E., Benoit, M., & Simmons, A. "Assessing impulsive aggression in patients with PTSD."

Carlson, E.B., & Waelde, L.C. "Preliminary psychometric properties of the Trauma Related Dissociation Scale."

Chemtob, C.M. "Trauma, culture, and public health."

Fenimore, E., **Drescher, K.**, Young, H.E., Simmons, A., & McGowan, W. "Combat trauma and spirituality across the lifespan."

Fitzpatrick, M.K., **Suvak, M.K., King, L.A., King, D.W.**, & Roemer, L. "Gender and egalitarianism as predictors of interpersonal aggression."

Friedman, M.J. "Mission-related stress among UN Peacekeepers and Civilian Field Personnel."

Friedman, M.J. "New findings on the treatment of chronic PTSD in veterans."

Friedman, M.J. "Psychobiological strategies to foster resilience."

Friedman, M.J. "Social deprivation."

Hammond, C., Stone, E.R., Suvak, M.K., Savarese, V.W., King, D.W., King, L.A., & Proctor, S. "PTSD-social support: A longitudinal investigation of Gulf War veterans."

Kaloupek, D.G. "Emotion and PTSD."

Kaloupek, D.G., Deykin, E., **Keane, T.M.**, Fincke, G., Rothendler, J., Siegfried, M., & Creamer, K. "Posttraumatic stress disorder and the utilization of health services."

Keane, T.M. "Guidelines for social and humanitarian crises: Joint project of the United Nations and the ISTSS."

Keane, T.M. "Violence and traumatic stress research at the NIMH."

Keane, T.M. & Piwowarczyk, L. "Betrayal in the war in the former Yugoslavia: The Bosnian's experience."

Kimble, M., Kaufman, M., Leonard, L., Lowy, J., Teresi, K., & **Kaloupek, D.** Combat and priming effects on sentence completion in veterans.

King, D.W., & **King, L.A.** "Cross-lagged analysis of PTSD and retrospective accounts of exposure."

Knight, J.A., Zimering, R.T., Munroe, J., & Vielhauer, M. "Impact of training on GAF reliability and accuracy."

Kubany, E.S., "Cross validation of the Trauma-Related Guilt Inventory."

Leskin, G.A., Woodward, S.H., & **Sheikh, J.I.** "Nightmares and sleep disturbance in PTSD and panic disorder: Findings from the National Comorbidity Survey."

Lindley, S.E. "Pharmacological treatment of impulsive aggression in PTSD: Current prescribing practices and assessment development."

McDonagh-Coyle, A.S. "Cognitive restructuring and exposure treatment for CSA survivors with PTSD."

McGowan, W., Simmons, A., Young, H.E., **Drescher, K.**, Fenimore, E., & Wisniewski, A. "Exaggeration of symptoms and compensation seeking in veterans with PTSD."

McTeague, L.M., **Ruef, A.M.**, & **Litz, B.T.** "Attachment, PTSD, & the mediating effects of lifelong social support."

Murphy, R., **Drescher, K.D.**, Sharp, L., Ramirez, G., & **Gusman, F.D.** "Individual differences in readiness to change PTSD: Service connection and ethnicity."

Niles, B.L., Lambert, J.F., **Smith, A.A.**, LoCastro, J.S., Orlander, J., & Mori, D.L. "Psychological and medical correlates of PTSD in primary care."

Ouimette, P.C., **Rosen, C.S.**, Humphreys, K., Moos, R.H., Finney, J.W., Cronkite, R., & Federman, B. "Self-help group participation among substance use disorder patients with PTSD."

Peirce, J., Niles, B., Riggs, D., & **Smith, A.** "Skills-based group treatments for combat-related PTSD."

Ruef, A.M., & **Litz, B.T.** "Hispanic ethnicity and risk for combat-related posttraumatic stress disorder."

Ruef, A.M., Litz, B.T., Miller, M.W., & McTeague, L.M. "The effects of priming traumatic memory on emotional behavior in PTSD."

Ruef, A.M., Litz, B.T., & Schlenger, W.E. "Hispanic ethnicity and risk for combat-related posttraumatic stress disorder."

Ruzek, J.I. "Cognitively-oriented therapies for physically or sexually abused women."

Salgado, D.M., Suvak, M.K., King, D.W., & King, L.A. "Stressor exposure and positive life adjustment: Hardiness as a moderator."

Schnurr, P.P. "CS #420: Preliminary findings on trauma focused group therapy."

Schnurr, P.P. "New findings on the treatment of chronic PTSD in veterans."

Schnurr, P.P. "PTSD and health: Examining symptoms, conditions, and service utilization."

Simmons, A., McGowan, W., Fenimore, E., Young, H.E., Wisniewski, A., & **Drescher, K.** "Identifying exaggeration to stressful life events."

Smith, A.A., **Niles, B.**, Fisher, L., **Buckley, T.C.**, Quinn, S., Riggs, D., **Kimble, M.**, & Krinsley, K. "Group treatment of Vietnam veterans: Changes in psychosocial wellbeing."

Southwick, S.M. "Neurobiology of trauma."

Stegman W.K, Stewart L.P., **Woodward S.H., Arsenault N.J.**, & **Drescher K.** "Who enters biological studies of PTSD? Evidence for selection bias."

Stewart L.P., Stegman, W.K., **Arsenault N.J.**, & **Woodward S.H.** "The auditory emotional Stroop in combat-related PTSD."

Stone, E.R., Fitzpatrick, M.K., **Vogt, D.S., King, L.A., King, D.W.**, & Knight, J. "Stressors of going to war: Listening to Gulf War veterans."

Vogt, D.S., Stone, E.R., Fitzpatrick, M., & **King, L.A.** "Using qualitative research to inform the quantitative measurement of life stressors."

Waelde, L.C., & **Carlson, E.B.** "Posttraumatic dissociation among college students."

Woodward, S.H., Wilhelm, F., & Clay, S. "Sleep and startle in combat-related PTSD inpatients."

ASSOCIATION FOR THE ADVANCEMENT OF BEHAVIOR THERAPY
New Orleans, LA, November 2000

Applegate, B.W., Jones, G.N., Howe, J.T., **Buckley, T.C.**, & Brantley, P.J. "Medical outcomes in low-income primary care patients with PTSD."

Batten, S.V. "Writing your troubles away: The use of written disclosure interventions for physical and psychological health issues."

Batten, S.V., Hall, M.R., Palm, K.M., & Follette, V.M. "The effects of a written disclosure paradigm with sexual abuse survivors."

Batten, S.V., Palm, K.M., Hall, M.R., Follette, V.M., Rosenthal, M.Z., Leonard, L., Lillis, J., & Hansen, J. "The effectiveness of a writing intervention for adult survivors of child sexual abuse."

Bolton, E., Glenn, D.M., **Orsillo, S.**, Roemer, L., & **Litz, B.T.** "The relationship between self-disclosure and psychological distress in peacekeepers deployed to Somalia."

Buckley, T.C., Galovski, T., Blanchard, E.B., & Hickling, E.J. "Is the emotional Stroop paradigm sensitive to malingering? A group study with professional actors and actual trauma survivors."

Buckley, T.C., & **Kaloupek, D.G.**. "PTSD and cardiovascular health: Results of a meta-analytic examination."

Canna, M.A., Blanchard, E.B., Hickling, E.J., Taylor, A.E., & **Buckley, T.C.** "PTSD, depression, and travel anxiety in motor vehicle accident survivors: Their relationship over time."

Canna, M.A., Friedenberg, B.M., Blanchard, E.B., Hickling, E.J., Taylor, A.E., & **Buckley, T.C.** "Does loss of consciousness during motor vehicle accidents affect subjective assessment of guile, blame, sense of foreshortened future and feelings of helplessness later on?"

Canna, M.A., Malta, L.S., Blanchard, E.B., Hickling, E.J., Taylor, A.E., & **Buckley, T.C.** "The relationship between self-assessed coping styles, reaction styles and objective measures of physiological responses in motor vehicle accident survivors."

Evans, B.A., **Orsillo, S.M.**, O'Neill, H.K., & Strandberg, D.K. "Resource loss and coping: A comparison of two measures of the stress process."

Lackner, J., Beck, J.G., **Shipherd, J.C.**, & **Hamblen, J.L.**, & Freeman, J. "Assessment of PTSD in chronic pain patients: A preliminary examination of the impact of methodology."

Litz, B.T. "The future of exposure therapy for PTSD?"

Luterek, J., **Orsillo, S.M.**, Mark, B.P., Harrsion, S.N., & Connor, C.E. "An experimental assessment of emotional responding in individuals with a history of childhood sexual abuse."

McDonagh-Coyle, A.S., & Descamps, M. "CBT for PTSD related to childhood sexual abuse."

McTeague, L.M., **Ruef, A.M.**, & **Litz, B.T.** "Attachment, PTSD and the mediating effects of lifelong social support."

McTeague, L.M., **Smith, A.A., Kaufman, M.L., Litz, B.T.**, & **Orsillo, S.M.** "Differential predictors of PTSD and perceived risk of intimacy: The role of trauma exposure and dissociation."

Miller, M.W., Patrick, C.J., Smith, A.A., & McTeague, L.M. "Multidimensional Personality Questionnaire (MPQ) profiles and psychopathology in veterans with posttraumatic stress disorder."

Orcutt, H.K., King, D.W., & **King, L.A.** "Violence among Vietnam veteran couples: Relationships with veteran's early life characteristics, trauma history, and PTSD."

Peirce, J., Riggs, D., **Niles, B.**, & Smith, A. "Anger management treatment in male veterans with PTSD."

Riggs, D.S., **Street, A.E.**, Kuhn, E., & Dowdall, D.J. "A content analysis of problem solving deficits among men who report perpetrating marital violence."

Ruef, A.M., Litz, B.T., Miller, M.W., & McTeague, L.M." The effects of priming traumatic memory on emotional behavior in PTSD."

Sharkansky, E.J. "Sexual trauma in women: Health outcomes and healthcare utilization."

Shipherd, J.C., Beck, J.G., Lackner, J., & **Hamblen, J.L.** "Treatment of MVA-related PTSD in chronic pain patients: Successes and failures."

Shipherd, J.C., Beck, J.G., Lackner, J., **Hamblen, J.L.**, & Freeman, J. "Sequelae of motor vehicle accidents: Rates of psychiatric comorbidity in a sample of pain patients."

Walser, R.D., Ruzek, J.I., & **Lee, T.T.**, "Treatment of concurrent PTSD and substance abuse in women: Applied implications and future directions for a manual-based intervention."

OTHER

Amaya-Jackson, L., Newman, E., & **Lipschitz, D.** "The child and adolescent PTSD checklist in 3 clinical research populations." Annual Meeting of the American Academy of Child and Adolescent Psychiatry, New York, NY, October 2000.

Axelrod, S.R., Grilo, C.M., Sanislow, C., Fehon, D.C., **Lipschitz, D.S.**, & Mc Glashan, T.H. "Exposure to trauma and personality disorder dimensions in adolescent psychiatric inpatients." Annual Meeting of the Connecticut Psychological Association, Westbrook, CT, November 2000.

Behr, H.M., Chang G., & Hiley, A.G. "Expanding the assessment of domestic violence: A new measure of physical and emotional abuse." Annual Meeting & Exposition of the American Public Health Association, Boston, MA, November 2000.

Bracha, H.S., Flaxman, N., et al, "PTSD, new research methods, neurobiology, and cultural factors." Grand Rounds Lecture, Nagasaki Medical School, Department of Psychiatry, Nagasaki, Japan, April 2001.

Bracha, H.S., Flaxman, N., et al, "PTSD, new research methods, neurobiology, and cultural factors." Grand Rounds Lecture, Jichi-Tochigi Medical School, Department of Psychiatry, Nagasaki, Japan, April 2001.

Bracha, H.S., Flaxman, N., Harmsen, N., Weiser, J.W., Sprenger, M., Ralston, T., & Bracha, Z., "Structural imaging: Can't it detect early premorbid experienced stress?" American Psychiatric Association, New Orleans, May 2001.

Bracha, H.S., Hanson, L., Weiser, J.W., Lloyd-Jones, J., Flaxman, N., & Ralston, T. "A method for estimating in adult patients the premorbid autonomic perturbations (vagal suppression) experienced during infancy and childhood." Annual Meeting of the Society of Biological Psychiatry, New Orleans, LA, May, 2001.

Bachrach, P.S., King, D.W., King, L.A., Spiro, A., **Salgado, D.M.**, Rooney, M.E., Evans, C.D., & **Davison, E.H.** "Characterizing LOSS in older veterans: Focus groups in aging research." American Psychological Association, San Francisco, CA, August 2001.

Chemtob, C.M., "Children and trauma." New York City Trauma Alliance, Mental Health Association of New York, NY, November 2000.

Chemtob, C.M., "It takes a village to heal A child: Trauma, children, and public health." 6Th Conference on Trauma in the Public Mental Health System (Office of Mental Health), New York, NY, April 2001.

Chemtob, C.M., "Trauma and public health." EMDR International Association (EMDRIA), Austin, Texas, June 2001.

Chemtob, C.M., "Trauma, culture, and public health." Annual Meeting of the French Association for Cognitive and Behavioral Treatment, Paris, France, December 2000.

Cook, J., & **Ruzek, J.I.** "The interaction of PTSD and dementia: Challenges in research and clinical practice." Third Annual Updates on Dementia Conference: Translating Research into Practice, Stanford University, Palo Alto, California, March 2001.

Duman R.S. "Molecular and cellular actions of stress and antidepressants." Neurobiology research seminar, UCLA, Los Angeles, CA, April 2001.

Duman, R.S. "A neurotrophic hypothesis of depression." Bohan Lecture, University of Kansas, Lawrence, KS, June 2001.

Duman, R.S. "A neurotrophic hypothesis of depression." Silverman Lecture, University of Michigan, Detroit, MI, June 2001.

Duman, R.S. "Molecular and cellular actions of stress and antidepressants." Pharmacology lecture, University of Kansas, Lawrence, KS, June 2001.

Duman, R.S. "Molecular and cellular actions of stress and antidepressant treatment." Abbott Laboratories, Chicago, IL, July 2001.

Duman, R.S. "Regulation of neurogenesis in adult hippocampus by stress and antidepressant treatment." Invited Lecture, Wyeth-Ayerst, Princeton, NJ, July 2001.

Duman, R.S. "A neurotrophic hypothesis of depression." German College of Neuropsychopharmacology and The Anna-Monika Foundation Award, Nuremberg, Germany, September 2001.

Duman, R.S. "Neurotrophic actions of antidepressant treatment." Servier Pharmaceutical, Paris, France, September 2001.

Friedman, M.J. "The diagnosis and treatment of PTSD." University of Pristina, Kosovo, November 2000.

Friedman, M.J. "VA satellite broadcast on compensation & pension exams for PTSD, February 2001.

Friedman, M.J. "Clinical consultation forum: PTSD." Annual Meeting of the Anxiety Disorders Association of America, Augusta, GA, March 2001.

Friedman, M.J. "Evaluating treatment guidelines for PTSD: What the clinician should know before trying the recommendations at home." Annual Meeting of the Anxiety Disorders Association of America, Augusta, GA, March 2001.

Friedman, M.J. "The VA's National Center for PTSD." Department of Justice Substance Abuse and Victimization Forum, Washington, DC, March 2001.

Friedman, M.J. "Pharmacotherapy for PTSD." American Psychiatric Association, New Orleans, May 2001.

Friedman, M.J. "Rationale for studying trauma focus group therapy." Annual Meeting of the European Society for Traumatic Stress Studies, Edinburgh, Scotland, May 2001.

Friedman, M.J. "Current Status of Treatment for PTSD." PTSD Symposium, VA Medical Center, White River Junction, VT, June 2001.

Friedman, M.J., "The physical and mental impact of stress." VA EES Conference on the Impact of Mental Health on Medical Illness in the Primary Care Setting and the Aging Veteran, New York City, NY, June 2001.

Friedman, M.J. "PTSD Allostatic Load and Medical Illness." Satellite Conference, Palo Alto, CA, August 2001.

Friedman, M.J. "Pharmacological treatment of PTSD." Symposium on the Psychoneurobiological frameworks of PTSD, Zagreb, Croatia, September 2001.

Gelernter, J. "Approaches to genetics and imaging." Brookhaven National Laboratory, Brookhaven, NY, May 2001.

Gelernter, J. "Approaches to genetics of psychiatric traits: Anxiety disorders and substance dependence." Department of Genetics lecture, Chulalongkorn University, Bangkok, Thailand, July 2001.

Gelernter, J. "Progress in a Ggenome scan for loci predisposing to anxiety disorders." Park City Conference in Molecular Psychiatry, Park City, UT, February 2001.

Hettinger, J., Chuo, P., Sullivan, B., **Rosen, C.**, & **Drescher, K.** (2001). "The mediating effects of spirituality/religiosity and the life satisfaction of veterans with PTSD." American Psychological Association, San Francisco, CA, August 2001.

Jankowski, M.K. "Modified PTSD treatment for people with severe mental illness." Sixth Annual Mastering the Key Connection: Clinical Training Conference on Trauma Services in the Public Mental Health System, New York, NY, April 2001.

Johnson, M.K. "Exploring neural activity associated with episodic memory." Symposium on Neural Substrates of Multiple Forms of Human Memory, Society for Neuroscience, New Orleans, LA, November 2000.

Johnson, M.K., Reeder, J.A., & Raye, C.L. "Second thoughts versus second looks: An age-related deficit in reflectively refreshing active information." Annual Meeting of the Cognitive Neuroscience Society, New York, NY, March 2001.

Keane, T.M. "Preventing posttraumatic stress disorder following forced medication." American Psychiatric Association, New Orleans, May 2001

King, L.A., & **King, D.W.** "Predicting health and adjustment among Vietnam-era repatriated prisoners of war." Repatriated Prisoner of War Health Study Conference, Alexandria, VA, April 2001.

Krystal, J. "Reduced cortical GABA-levels in depression." Symposium entitled Neurochemical modulation and Neuroimaging at the 7th World Congress of Biological Psychiatry (WCBP), Berlin, Germany, July 2001.

Krystal, J. "The neurobiology and neural circuitry of PTSD: Stress and Traumatization." Symposium on the Psychoneurobiological Frameworks of PTSD, Zagreb, Croatia, September 2001.

Lindley, S.E., Bengoechea, T., Wong, D., & Schatzberg, A.F. "Effect of glucocorticoid administration on haloperidol and clozapine pharmacokinetics." Society for Neuroscience, New Orleans, LA, November 2000.

Lipschitz, D.S. "Trauma, PTSD and substance use in Adolescents." Annual Meeting of the American Academy of Addiction Psychiatry, Phoenix, AZ, December 2000.

Loris, M., & **Lipschitz, D.S.** "Adolescents' trauma narratives and PTSD symptoms." Annual Meeting of the Connecticut Psychological Association, Westbrook, CT, November 2000.

McDonagh-Coyle, A.S. "CBT for PTSD related to childhood sexual abuse." Anxiety Disorders Association of America. Atlanta, Georgia, March 2001.

McDonagh-Coyle, A.S. "CBT for PTSD related to childhood sexual abuse." World Congress of Behavioral and Cognitive Therapies, Vancouver, Canada, July 2001.

Miller, M.W., Litz, B.T., Greif, J.L., & Wang, J.L. "Startle reflex modification during picture processing in posttraumatic stress disorder." University of Minnesota's Sesquicentennial Series' Conference on Mind and Emotion, Minneapolis, MN, May 2001.

Miller, M.W., Litz, B.T., Kimble, M.T., McTeague, L.M., **Ruef, A.M.**, & Tereski, K. "A startle-reflex investigation of the parameters of emotional processing in PTSD." Annual Meeting of the Society for Psychophysiological Research, San Diego, CA, October 2000.

Moghaddam, B. "Glutamatergic regulation of mesolimbic dopamine neurons." McLean Hospital, Harvard Medical School, Belmont, MA, October 2000.

Moghaddam, B. "Distinct contributions of glutamate and dopamine receptors to working memory and set-shifting in the rodent." American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 2000.

Moghaddam, B. "New insights into glutamatergic regulation of mesoaccumbens and mesocoritcal Dopamine neurons." American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 2000.

Moghaddam, B. "New mechanisms for an old question: How does prefrontal cortex influence subcortical dopamine activity." Winter Conference on Brain Research, Steamboat, CO, January 2001.

Moghaddam, B. "Function-specific glutamatergic regulation of dopamine neurons." Department of Psychology, Yale University, New Haven, CT, February 2001.

Moghaddam, B. "Reversal of NMDA receptor antagonist-mediated behaviors." World Congress of Biological Psychiatry, Berlin, Germany, July 2001.

Morgan, C.A. "Associative learning in humans exposed to uncontrollable stress." Center for Naval Analyses Annual Meeting, Arlington, VA, March 2001.

Morgan, C.A. "Predicting performance: What we can learn from psychobiological studies of humans participating in highly stressful military training." Society for Biological Psychiatry, New Orleans, LA, May 2001.

Piwowarczyk, L., **Keane, T.M.**, & Grodin, M. "Development of psychological interventions for Bosnian refugees." The Psychological Trauma Conference of Boston University, Boston, MA, March 2001.

Prins, A., & **Swales, P.J.** "The integration of PCT in programs for Veterans with PTSD." Annual Meeting of the Western Psychological Association, Maui, HI, May 2001.

Rasmusson, A.M., Zimolo, Z., Vasek, J., **Lipschitz D.**, Mustone M.E., Gudmundsen G., **Southwick S.M.**, Wolfe J., & Charney D.S. "Increased Adrenal DHEA release in premenopausal women with PTSD." Annual Meeting of the Society for Neuroscience, New Orleans, LA, November 2000.

Raye, C.L., **Johnson, M.K.**, Mitchell, K.J., & Reeder, J.A. "Using fMRI to help define Component processes of cognition: Refreshing a just-active representation." Annual Meeting of the Cognitive Neuroscience Society, New York, NY, March 2001.

Rosen, C.S. "Coordination of VA care for PTSD and substance abuse." American Psychological Association, San Francisco, CA, August 2001.

Rosenberg, S.D., & **Jankowski, M.K.** "Providing trauma services for people with severe mental illness." New Hampshire Homeless Service Providers Conference, North Conway, NH, August 2001.

Ruzek, J.I. "Toward a strategy to integrate PTSD science and practice." American Psychological Association, San Francisco, CA, August 2001.

Salgado, D.M., Bachrach, P.S., Rabois, D., **King, D.W.**, & **King, L.A.** "Positive life adjustment: Prewar influences and hardiness in a sample of Vietnam veterans." Annual Meeting of VA Health Services Research and Development: Improving Access and Outcomes, Washington, DC, February 2001.

Schnurr, P.P. "CSP #494: A randomized clinical trial of cognitive behavioral treatment for PTSD in women." Atlanta VA Medical Center, Decatur, GA, March 2001.

Schnurr, P.P. "Efficacy of two methods for treating chronic PTSD." Annual Meeting of the European Society for Traumatic Stress Studies, Edinburgh, Scotland, May 2001.

Schnurr, P.P. "Trauma focus group therapy for the treatment of chronic PTSD." Annual Meeting of the European Society for Traumatic Stress Studies, Edinburgh, Scotland, May 2001.

Schnurr, P.P. "CSP #420: Treatment of PTSD in Vietnam veterans." World Congress of Behavioral and Cognitive Therapies, Vancouver, Canada, July 2001.

Schnurr, P.P. "Trauma, PTSD, and physical health." Symposium on the Psychoneurobiological frameworks of PTSD, Zagreb, Croatia, September 2001.

Schorr, Y.H., Roemer, L. & **Orsillo, S.M.** "Emotional numbing of positive and negative emotions: Relationship to PTSD and symptoms of general distress." World Congress of Behavioral and Cognitive Therapies, Vancouver, Canada, July 2001.

Sheikh, J.I., Swales, P.J., Gandy, S., & Cassidy, E.L. "Sertraline in the treatment of panic disorder in geriatric patients." Annual Meeting of the New Clinical Drug Evaluation Unit (NIMH-NCDEU), Phoenix, AZ, May 2001.

Southwick, S.M. "Sympathetic nervous system dysregulation in posttraumatic stress disorder." American Psychiatric Association, New Orleans, May 2001.

Southwick, S.M., & **Krystal, J.H.** "Toward a neurobiological of dissolution." American Psychiatric Association, New Orleans, May 2001.

Street, A.E., Keehn, M.K., **King, L.A.**, & **King, D.W.** "A structural equation modeling analysis of the impact of male-perpetrated domestic violence on female partners and their children." International Family Violence Research Conference, Portsmouth, NH, July 2001.

Vogt, D.S., King, D.W., King, L.A., & **Stone, E.R.** "Stressors of going to war: Listening to Gulf War veterans." Conference on Federally Sponsored Gulf War Veterans' Illness Research, Alexandria, VA, January 2001.

Vogt, D.S., Salgado, D.M., Stone, E.R., Keehn, M.G., & **King, L.A.** "Toward gender-aware VA healthcare: Existing strengths and areas for improvement." Annual Meeting of VA Health Services Research and Development: Improving Access and Outcomes, Washington, DC, February 2001.

Walser, R., "Bridging the reality gap: Practical employment of a science-based intervention." American Psychological Association, San Francisco, CA, August 2001.

TABLE 3
NATIONAL CENTER FOR PTSD RESEARCH FUNDING
FISCAL YEAR 2001

PROJECTS APPROVED AND FUNDED

VA Cooperative Studies

Principal Investigators	Title of Project	Years	FY 01 Funding	Total Award
Schnurr Friedman	CSP#494 A Randomized Clinical Trial of Cognitive-Behavioral Therapy for Women	2001 - 2006	$342,212	$5,014,368

VA Merit Review

Principal Investigators	Title of Project	Years	FY 01 Funding	Total Award
Bracha	Clinical Research Bio-Markers for Estimating Early Stress	2000 - 2003	$149,000	$447,000
Kimble	Electrophysiological Markers of Vulnerability in PTSD	1999 - 2002	$103,700	$303,700
Kubany	Development and Validation of a Computerized Trauma History/PTSD Screen	1999 - 2001	$ 104,000	$250,000
Niles	Longitudinal Evaluation of Chronic Combat-Related PTSD	2000 - 2002	$47,400	$145,600
Schnurr	An Investigation of PTSD Chronicity in Vietnam Veterans	1999 - 2002	$58,950	$201,700
Southwick	Guanficine for the Treatment of PTSD	1999 - 2002	$92,750	$321,300

Other VA Sources

Principal Investigators	Title of Project	Funding Source	Years	FY 01 Funding	Total Award
Ciraulo LoCastro Renner Keane	Medication Development Research Unit	NIDA & DVA	1995 - 2001	$650,000	$7,000,000
Gelernter	Genetic Studies of Dual Diagnosis	MIRECC	1997 - On-going	$103,027	$370,227
Innis	Neuronal Mechanisms and Treatment Response in Depression	VA (REAP)	1999 - 2004	$199,500	$1,600,000

King, D King, L. Bachrach	Characterizing LOSS: Late-Onset Stress Symptomatology Among Aging Combat Veterans	MAVERIC	2001 - 2001	$14,500	$14,500
Krystal	West Haven VA Medical Center Alcoholism Research Center	Reseach Center	1999 - 2003	$233,805	$1,400,000
Litz	Mental Health Outcomes Associated with the Peacekeeping Duty for US Military Personnel	MAVERIC	1999 - 2002	$150,000	$453,423
Morland	Telehealth and PTSD Psychoeducation Classes: A Feasibility Study	VISN21 YIA	2001 - 2002	$25,000	$25,000
Street	Military Sexual Trauma Among the Reserve Components of the Armed Forces	VA	2001 - 2003	$885.926	$1,196,072
Whealin	The Role of Prior Trauma and Current Burnout in Leadership, Cohesion, and Morale	VISN 21 YIA	2001 - 2001	$25,000	$25,000

National Institute of Mental Health

Principal Investigators	Title of Project	Years	FY 01 Funding	Total Award
Duman	Antidepressants and Signal Transduction in Brain	1999 - 2004	$200,000	$1,400,000
Duman	Neurobiological Basis of Major Psychiatric Disorders (Stress only)	1997 - 2002	$539,633	$2,299,070
Gelernter	Neurobiology and Genetics of Panic, TS, and OCD	1996 - 2002	$95,864	$475,943
Keane	Postdoctoral Research Training in Posttraumatic Stress Disorder	1996 - 2006	$164,729	$1,543,485
Keane	Treating Torture Among Bosnian Refugees	1999 - 2003	$185,000	$730,000
Kimble	Studies of Sustained and Selective Attention in PTSD	1998 - 2003	$66,387	$349,840
Krystal	Glutamatergic Mechanism in Cognition and Psychosis	1998 - 2003	$72,683	$$325,000
Lipschitz	Modifiable Risk Factors for PTSD in Urban Adolescents???	2000 - 2005	$95,864	$475,943
Litz	Emotional-Processing in PTSD	2001 - 2004	$325,000	$409,000
McDonagh-Coyle	Brief Integrative Therapy for PTSD	2001 - 2003	$100,000	$200,000
Moghaddam	Glutamate and Prefrontal Cortex Function	1999 - 2004	$108,680	$594,000
Moghaddam	Biomedical Actions of Antipsychotic Drugs	1992 - 2002	$147,574	$681,786
Moghaddam	Translational Studies on Cognitive Flexibility	2001 - 2004	$250,000	$750,000
Rothbaum Hodges Litz	Virtual Vietnam Treatment of PTSD in Vietnam Veterans	1998 - 2001	$55,000	$111,837

Other Non-VA Sources

Principal Investigators	Title of Project	Funding Source	Years	FY 01 Funding	Total Award
Bracha	Validating a Laboratory Procedure for Estimating Early Deleterious Life Experiences	NARSAD	1999 - 2001	$46,000	$92,000
Chemtob	Child Trauma Research	Kirkeby Foundation	2001 - 2001	$10,000	$10,000
Chemtob	Trauma Treatment in Pediatric Primary Care	Klingston Third Generation Fund	2001 - 2001	$50,000	$50,000
Ciraulo Keane LoCastro	Behavioral and Psychopharmacological Treatment of Alcohol Abuse	NIAAA	1997 - 2003	$345,029	$2,800,000
Duman	Isolation of G Protein-Coupled Receptors from Locus Coeruleus	Pfizer	1997 - 2001	$170,000	$510,000
Duman	Regulation of hippocampal cell morphology by antidepressant treatment	NARSAD	1999 - 2001	$50,000	$100,000
Duman	Neurotrophic actions of estrogen	Donaghue Foundation	2000 - 2001	$50,000	$50,000
Gelernter	Guided Family-Controlled Linkage Disequilibrium Scan for Alcohol Dependence and PFC-Related Endophenotypes	NIH/NIAAA	2001 - 2006	$140,000	$700,000
Johnson	Effects of Aging on Memory for Source of Information	NIH	2000 - 2004	$298,510	$1,245,094
Johnson	Aging and Memory: fMRI Studies of Component Processes	NIH/Univ. of CA at Berkeley	2000 - 2003	$103,036	$309,249
Johnson	Cognitive and Neural Mechanisms of Conflict and Control	NIH/Princeton Univ.	2000 - 2004	$116,480	$606,627
Kaloupek Woodward	Effects of Combat Stress on the Structure and Function of the Hippocampus	DoD	1998 - 2001	$138,860	$597,800
Kaufman	Are child-, adolescent-, and adult-onset depression one and the same disorder?	NARSAD	2001 - 2003	$27,083	$54,204
Keane King, D.	Integrating Substance Abuse and PTSD Treatment with HIV Care to Improve Adherence and Outcome and to Reduce Health Care Utilization and Costs	SAMHSA	1998 - 2003	$542,049	$2,500,000
Keane King, D.	Predicting Health and Adjustment Among Vietnam-Era Repatriated Prisoners of War: A Quartet of Studies	Ctr for Naval Analyses	1998 - 2001	$196,000	$378,980
Keane Piwowarczyk Grodin	Cognitive Behavioral Treatment for War Traumatized Refugess: Project Welcome	DHHS Office of Refugee Resettlement	2000 - 2004	$500,000	$2,000,000

Keane Saxe	Treatment/Services Development Center for Medical Trauma and Refugee Trauma in Children	SAMSHA	2000 - 2004	$375,000	$1,500,000
King, D. King, L. Knight	Measurement and Validation of Psychosocial Risk Factors Associated with Physical and Mental Health and Health-Related Quality of Life Among Persian Gulf War Veterans	VA/DoD	1999 - 2002	$109,800	$318,890
Krystal	Amino Acid Neurotransmitter Dysregulation in Alcoholism	NIH/NIAAA	1999 - 2004	$100,620	$524,040
Krystal	Naltrexone Blockade of NMDA Antagonist Intoxication in Humans	NIAAA/NIH	2000 - 2003	$150,000	$450,000
Kubany Hill	Cognitive Trauma Therapy for Battered Women	TNRP	1998 - 2001	$48,000	$304,000
Lindley	Divalproex Sodium in the Treatment of Impulsive Aggression	Abbott Laboratories	2000 - 2001	$35,000	$85,000
Lindley	Effect of Chronic Corticosterone Administration on the Gene-Expression Profile in the Hippocamus and Mesotelencephalic Dopaminergic Cell Body Regions	Pritzker Depression Network	2001 - 2002	$24,000	$48,000
Lindley	The Effect of Mifepristone on the Blood Brain Barrier	Corcept, Inc.	2001 - 2002	$30,000	$65,000
Lindley Carlson	Topiramate in the Treatment of Symptoms of Chronic PTSD	Ortho-McNiel Pharmaceutical	2000 - 2002	$44,000	$103,000
Litz	The Effects of Psychological Debriefing on Soldiers Deployed on a Peacekeeping Mission	DoD	2001 - 2004	$918,151	$1,041,000
Moghaddam	Neurotransmitter Dynamics Associated with rTMS in Primates	NARSAD	2001 - 2003	$50,000	$100,000
Morgan	Psychobiological Assessment of High Intensity Military Training	DoD	1997 - On-going	$60,000	$365,000
Morgan	Psychobiological Assessment of High Stress: A Prospective Study	Ctr for Naval Analyses	2000 - 2002	$178,000	$178,000
Morganelli	Clinical Relevance of Novel Immunological Markers in PTSD	DoD	1998 - 2001	$142,300	$161,700
Nestler Duman	Neurobiology of Drug Addiction	NIDA	1998 - 2003	$109,000	$250,000
Rasmusson	The Effectiveness of Risperidone in the Treatment of PTSD	Janssen	1999 - 2002	$0	$158,542

APPLICATIONS PENDING APPROVAL

Principal Investigators	Title of Project	Funding Source	Years	Total Award
Buckley	PTSD, Health Behaviors and Cardiovascular Health	NIMH	2001 - 2005	$1,237,670
Buckley	Nicotine, Attention, and Conditioned Arousal in PTSD	NIDA	2002 - 2003	$81,000
Carlson	Venlafaxine ER and Sertraline in the Treatment of Posttraumatic Dissociative Symptoms	Wyeth-Ayerst	2001 - 2002	To be determin-ed
Chemtob	Child Trauma Assessment and Treatment	NIMH RISP-IP	2002 - 2007	$3,600,000
Kaufman	Corpus Callosum in Maltreated Children with PTSD	NIMH	2002 - 2007	$1,610,893
Kaufman	Permanency Planning for Abused Children and Service Outcomes	NIMH	2002 - 2007	$1,610,893
Kaufman	SAFE Homes Program Evaluation	CT-DCF	2001 - 2003	$59,400
Keane	HIV Research Infrastructure	NIMH	2002 - 2006	$2,000,000
Litz	Emotional Processing in PTSD	Merit Review	2002 - 2005	$267,800
Miller	Circadian Effects on the Human Startle Reflex	NIMH	2002 - 2003	$63,000
Mueser Rosenberg	Cognitive-Behavioral Treatment of PTSD in SMI Clients	NIMH	2002 - 2004	$1,185,968
Rasmusson	Effects of POW Stress on NPY Physiology: Potential Longterm Health Consequences	NAMRL, Ctr for Naval Analyses	2001 - 2004	$212,113
Rasmusson	HPA Axis Reactivity in Men and Women with Chronic PTSD	Merit Review	2001 - 2004	$309,700
Sharkansky	Deployment Stress and Health: A Prospective Study of Mediating and Moderating Effects	DoD	2002 - 2005	$498,821
Sheikh	Sleep in PTSD/Panic: A multi-Modal Naturalistic Study	NIMH	2002 - 2006	$1,603,348
Street	Characteristics of Persons at Risk for Trauma Exposure	NIMH	2002 - 2004	$100,000

TABLE 4
EDUCATIONAL PRESENTATIONS ON PTSD BY NATIONAL CENTER STAFF
FISCAL YEAR 2001

INTERNATIONAL SOCIETY FOR TRAUMATIC STRESS STUDIES
San Antonio, TX, November 2000

Kubany, E.S., Owens, J.A., Tremayne, K., & Watson, S.A. "Cognitive trauma therapy for battered women with PTSD."

Morland, L.A., Miyahira, S., **Pierce, K.**, & Gino, A. "Assessing PTSD using telemedicine in the Pacific Islands."

Murphy, R.T., & **Rosen, C.S.** "Implementing and evaluating a motivation enhancement group."

Schnurr, P.P. & Marshall, R. "A practical guide to clinical research."

Weerts, J., Hopman, B., Creamer, M., Passey, G., **Ruzek, J.I.**, & Johnson, D.R. "New veterans, new methods for prevention and assistance?"

VA

Carlson, E.B. "Trauma-related aggressive behavior in geriatric patients." Geropsychiatry Grand Rounds, Palo Alto VA Health Care System, Menlo Park, CA, May 2001.

Carlson, E.B. "Posttraumatic dissociation." Psychiatry Grand Rounds, Palo Alto VA Health Care System, Menlo Park, CA, September 2001.

Cook, J., & **Ruzek, J.I.** "What every primary care provider needs to know about PTSD and the older veteran." The Impact of Mental Health on Medical Illness in the Primary Care Setting and the Aging Veteran Conference, New York, NY, May 2001.

Cook, J., **Ruzek, J.I.**, & **Walser, R.** "PTSD and the older veteran." Yountville Veterans Home, Napa, CA, June 2001.

Jackson-Triche, M., & **Sharkansky, E.J.** "The impact of mental health issues on the delivery of primary care to women veterans." VA Annual Ambulatory Care Conference, San Diego, CA, August 2001.

Knight, J.A. "Global assessment of functioning scale." Satellite Broadcast Training for the National VHA System; Mental Health Strategic Health Care Group, VA Headquarters, and DVA Employee Education System, St. Louis, MO, February 2001.

Knight, J.A. "PTSD: improving the C& P process to better serve our veterans." Satellite Broadcast Training for the National Veterans Health Administration System, Washington, DC, July 2001.

Leskin, G., **Ruzek, J.**, & **Gusman, F.D.** "Overview of NCPTSD disaster relief efforts at the Pentagon Family Assistance Center." Annual Meeting of the Department of Veteran Affairs Social Work Chiefs, Potomoc, MD, September 2001.

Lindley, S.E. "Psychopharmacological treatment of PTSD." Palo Alto VA Health Care System Psychiatry Grand Rounds, Palo Alto, CA, September 2001.

Orsillo, S.M. "Borderline personality disorder." VA Boston's Women's Mental Health Mini-Residency, VA Boston Healthcare System, Boston, MA, October 2000.

Rosen, C.S., & Murphy, R.T. "Why are you ruining my beautiful treatment plan?" Annual Meeting of VA Rehabilitation Service Team Leaders, San Diego, CA, February 2001.

Ruzek, J.I., & **Watson, P.J.** "Thinking about services for workplace violence survivors." Veterans Administration Workplace Violence Prevention National Task Force, VA Central Office, Washington, DC, March 2001.

Ruzek, J.I. "PTSD and substance abuse in veterans." CBT for PTSD and substance abuse: A training in the seeking safety manual. VA Palo Alto Health Care System, Palo Alto, CA, August 2001.

Ruzek, J.I. "Self-care and staff care in the aftermath of September 11, 2001." Annual Conference of VA Chiefs of Social Work, Washington, DC, September 2001.

Schnurr, P.P. "Understanding psychotherapy research: VA Cooperative Study #420, group treatment of PTSD." VA Readjustment Counseling Service regional training meeting, Jacksonville, FL, February 2001.

Sharkansky, E.J. "DBT as treatment for chronic suicidality." VA Employee Education System, satellite broadcast, July 2001.

Sharkansky, E.J. "Management of PTSD and dissociation in primary care." VA Boston's Women's Mental Health Mini-Residency, VA Boston Healthcare System, Boston, MA, August 2001.

OTHER

Aikins, D.E. "Integrating fMRI and fear-potentiated startle methodology in studies of PTSD." Neuroscience Conference, Connecticut Mental Health Center, New Haven, CT, May 2001.

Bracha H.S. "Bio-markers of early life adversity in monozygotic twins and discordance for psychopathology," Annual Meeting of the Japanese Society on Heredity and Behavior (Psychiatric Genetics), Nagasaki, Japan, April 2001.

Bracha, H.S., Harmsen, N., Williamson L., Hanson L., & Flaxman N. "Novel medical applications of dental research methods" South Shore Dental Study Club, Honolulu, HI, June 2001.

Chemtob, C.M., "Trauma and public health." Boston University Medical School, Boston, MA, November 2000.

Chemtob, C.M., "Treating child and adolescent trauma." French Association for Cognitive and Behavioral Treatment Annual Meeting, Paris, France, November 2000.

Chemtob, C.M. "Treatment of trauma related anger." Boston University Medical School/Massachusetts Department of Mental Health, Boston, MA, November 2000.

Chemtob, C.M., "Treating children post-disaster." Division of Child and Adolescent Psychiatry Grand Rounds, Mount Sinai School of Medicine, New York, NY, March 2001.

Curran, E. "Treatment of families of veterans with PTSD." PTSD Summit Meeting, New Orleans, LA, July 2001.

Drescher, K.D. "PTSD symptoms and clinical manifestation." CIT Training Program, San Jose Police Department. San Jose, CA, October 2000 and May 2001.

Duman, R.S. "A neurotrophic hypothesis of depression." Department of Psychiatry Grand Rounds, UCLA, Los Angeles, CA, April 2001.

Gelernter, J. "Studies in the genetics of anxiety disorders and substance dependence." Duke University School of Medicine, Grand Rounds, Durham, NC, March 2001.

Jankowski, M.K. & **Hamblen, J.L.** "Modified PTSD treatment for people with severe mental illness: An individual treatment protocol." National Alliance for the Mentally Ill, Manchester, NH, April 2001.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." University of Uppsala National Conference on Trauma and PTSD, Uppsala, Sweden, October 2000.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." University of Wisconsin, Milwaukee, WI, November 2000.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." Dr. Solomon Carter Fuller Mental Health Center, Boston, MA, January 2001.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." Quincy Medical Center, Quincy, MA , February 2001.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." University of Stockholm, Stockholm, Sweden, March 2001.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." Wilford Hall Air Force Medical Center, San Antonio, TX, April 2001.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." College of Psychologists of New Brunswick, Fredericton, New Brunswick, May 2001.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." Behavioral Health Network, Concord, NH, September 2001.

Keane, T.M. "Recent advances in the assessment and treatment of PTSD." Croatian Medical Society, Zagreb, Croatia, September 2001.

King, D.W., & King, L.A. "Adaptation after war: 10 years of research from the National Vietnam Veterans Readjustment Study." Department of Psychology Colloquium Series, Central Michigan University, Mt. Pleasant, MI, March 2001.

King, D.W., & King, L.A. "Adaptation after war: 10 years of research from the National Vietnam Veterans Readjustment Study." Provost Emeritus Distinguished Guest Scholars Series, University of West Florida, Pensacola, FL, April 2001.

King, D.W., & King, L.A. "What about Vietnam veterans? Two sides to every story." Address to the Academic, Military, and General Communities, Pensacola, FL, April 2001.

Krystal, J. "Glutamatergic aspects of alcoholism: reward, dependence, and vulnerability" Visiting Scientist Research Seminar Series, Medical University of South Carolina, Charleston, SC, April 2001.

Kubany, E. S., "Cognitive trauma therapy for battered women with PTSD: Conceptual bases and treatment outlines." National Conference on Health Care and Domestic Violence, San Francisco, CA, October 2000.

Litz, B.T. "Emotional numbing in PTSD." Australian Society for Traumatic Stress Studies and The National Centre for War-related PTSD joint annual conference, Canberra, Australia, March 2001.

Litz, B.T. "Evidence based treatment for PTSD: Is it relevant for clinical practice?" Australian Society for Traumatic Stress Studies and The National Centre for War-related PTSD joint annual conference, Canberra, Australia, March 2001.

Litz, B.T. "Impediments to recovery from traumatic exposure." Australian Society for Traumatic Stress Studies and The National Centre for War-related PTSD joint annual conference, Canberra, Australia, March 2001.

Litz, B.T. "Psychological first-aide following trauma: Are they better off without us?" Australian Society for Traumatic Stress Studies and The National Centre for War-related PTSD joint annual conference, Canberra, Australia, March 2001.

Litz, B.T. "The psychological demands of peacekeeping: Themes of recent research." Australian Society for Traumatic Stress Studies and The National Centre for War-related PTSD joint annual conference, Canberra, Australia, March 2001.

Litz, B.T. "Emotional behavior in trauma and PTSD." Post-doctoral fellowship program in behavioral neurosciences at Harvard Medical School, Boston, MA, April 2001.

Litz, B.T. "The psychological demands of peacekeeping: Themes of recent research." Boston University School of Medicine, Boston, MA, May 2001.

Loo, C. "Utilizing the Race-Related Stressor Scale (RRSS) as an Assessment Tool for PTSD." Western Psychological Association Conference, Maui, HI, May 2001.

Loo, C., "Results of the Asian American Vietnam Veteran Race-Related Study (AVRS)," VA Central Office, Washington, DC, November 2000.

Loo, C. "Results of the Asian American Vietnam Veteran Race-Related Study (AVRS)." Advisory Committee on Minority Veterans, Wilmington, DE, November 2000.

Loo, C., "Racism and psychological trauma," Fall Professional Development program of the Counseling and Consultation Service of the Ohio State University, Columbus, OH, September 2001.

Morgan, C.A. "Eyewitness identification for events experienced during exposure to uncontrollable stress." Naval Aerospace Medical Research Laboratory Meeting, Pensacola, FL, April 2001.

Morland, L.A., "PTSD and dimensions of treatment." 2001 Western Psychological Society Meeting, Maui, HI, May 2001.

Morland, L.A., & Whealin, J.M., "Conceptualization of and clinical intervention for trauma," University of Guam/Guam Memorial Hospital Grand Rounds, Agata, Guam, May 2001.

Orsillo, S.M. "Integrating acceptance and mindfulness into the treatment of anxiety disorders." Department of Psychology Colloquium Series, Central Michigan University, Mt. Pleasant, MI, February 2001.

Ruzek, J.I. "Overview of acute stress reactions and PTSD: The discriminate use of debriefing and other early interventions." Disaster Mental Health Training, San Benito County Mental Health Services, Hollister, CA, October 2000.

Ruzek, J.I. & Watson, P.J. "Early interventions to prevent PTSD." U.S. Army Combat Stress Control Teams, Palo Alto, CA, April 2001.

Ruzek, J.I., & Walser, R. D. "I was just crossing the intersection: Impact of post-traumatic stress." Stanford University, Stanford, CA, July 2001.

Ruzek, J.I. "Clinical demonstration projects in PTSD." Annual Meeting of American Psychological Association, San Francisco, CA, August 2001.

Ruzek, J.I., & Gusman, F.D. "Self-care in the context of death notification duties." Casualty Assistance Officer Training, Washington, DC, September 2001.

Schnurr, P.P. & Rothbaum, B.O. "How to do treatment research." European Conference on Traumatic Stress, Edinburgh, Scotland, May 2001.

Southwick, S.M. "Trauma and the neurobiology of memory." Grand Rounds, University of Nebraska, Department of Psychiatry, Omaha, NE, April 2001.

Swales, P.J. "Applying information technology to bridge the science into-practice gap-NCPTSD-Science Into Practice." Annual Meeting of the American Psychological Association. San Francisco, CA, August 2001.

Watson, P.J. "Empirically based research on treatments for PTSD." Vermont State Trauma Commission. Waterbury, VT, October 2000.

Watson, P.J. "Ethnocultural issues with PTSD in Native American and Hispanic veterans." Readjustment Counseling Services Regional Meeting, Taos, New Mexico, April 2001.

Whealin, J. M., "PTSD and Survivors of child sexual abuse." Western Psychological Society Meeting, Maui, Hawaii, May 2001.

Whealin, J. M. "Multidimensional treatment for acute and chronic trauma reactions." Hawaii Psychological Association Meeting, Honolulu, HI, November 2001.

Young, B.H. & Ruzek, J.I. "Delivering disaster mental health services." Butte County Medical Health Services, Chico, CA, October 2000.

Young, B.H. & Ruzek, J.I. "Delivering disaster mental health services." Santa Cruz County Mental Health Services, Santa Cruz, CA, October 2000.

Young, B.H., Ruzek, J.I., & Gusman, F.D. "Delivering disaster mental health services." San Benito County mental Health Hollister, CA, November 2000.

Young, B.H., & **Ruzek, J.I.** "Review of disaster and community violence mental health training materials: Process, findings, recommendations, and questions." Center for Mental Health Services National Crisis Response Technical Assistance Project 1st Year, Mid-Program Focus Group Meeting, Washington, DC, April 2001.

TABLE 5
EDITORIAL BOARD MEMBERSHIPS OF NATIONAL CENTER STAFF
FISCAL YEAR 2001

Assessment	Keane, King, L.
Biological Psychiatry	Gelertner,,Krystal, Moghaddam
Critical Reviews in Neurobiology	Duman
International Journal of Emergency Mental Health	Keane
Journal of Abnormal Psychology	Litz, Keane
Journal of Aggression, Maltreatment and Trauma	Carlson, Friedman
Journal of Anxiety Disorders	Keane
Journal of Biological Psychiatry	Duman
Journal of Cultural Diversity and Ethnic Minority Psychology	Loo
Journal of Dissociation and Trauma	Carlson
Journal of Interpersonal Violence	Keane
Journal of Mental Health	Ruzek (North American Editor)
Journal of Neurochemistry	Duman (Handling Editor), Moghaddam (Handling Editor)
Journal of Pharmacology and Experimental Therapeutics	Duman (Associate Editor)
Journal of Psychopathology and Behavioral Assessment	Rosenheck, King, L.
Journal of Trauma Practice	Keane
Journal of Traumatic Stress	Carlson, Kaloupek, King, D., King, L., Litz, Schnurr (Deputy Editor), Southwick, Orsillo
Molecular Pharmacology	Duman
Neuropsychopharmacology	Duman (Associate Editor)
Neuroscience and Biobehavioral Reviews	Bracha
Psychiatric Genetics	Gelertner
Psychiatric Services	Rosenheck
Psychological Assessment	King, D., King, L.
Psychopharmacology	Krystal (Field Editor)
Trauma, Abuse & Violence	Keane
Traumatology	Ruzek

ABOUT THE NATIONAL CENTER

The National Center for Post-Traumatic Stress Disorder was created within the Department of Veterans Affairs in 1989, in response to a Congressional mandate to address the needs of veterans with military-related PTSD. Its mission was, and remains:

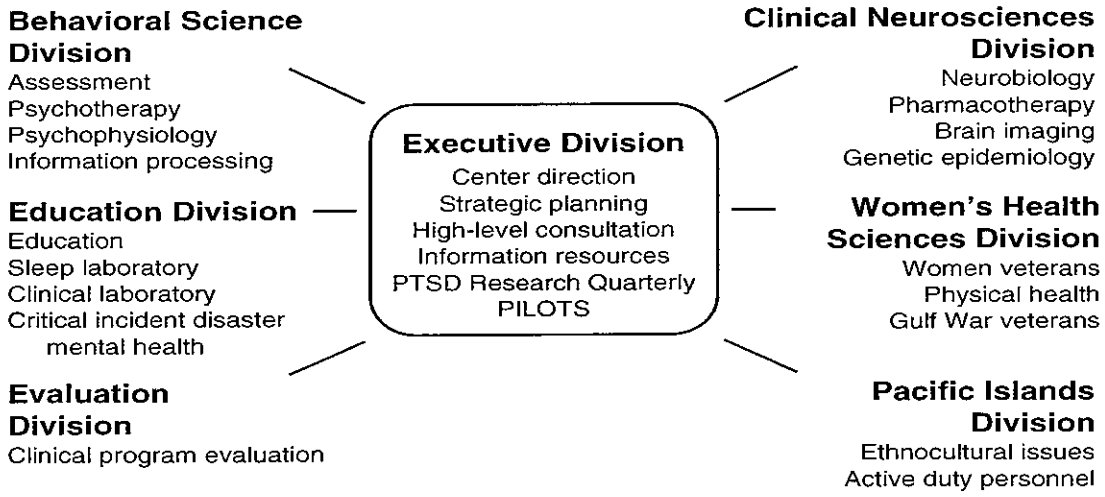
> **To advance the clinical care and social welfare of America's veterans through research, education, and training in the science, diagnosis, and treatment of PTSD and stress-related disorders.**

The VA charged the Center with responsibility for promoting research into the causes and diagnosis of PTSD, for training health care and related personnel in diagnosis and treatment, and for serving as an information resource for PTSD professionals across the United States and, eventually, around the world.

Although initially considered primarily a problem of veterans of the Vietnam War, PTSD is now recognized as a major public and behavioral health problem affecting military veterans, active-duty personnel involved in open conflicts or hazardous peacekeeping operations, and victims of disasters, accidents, and interpersonal violence in the civilian arena. Today, the disorder is estimated to affect more than ten million Americans at some point in their lives, and many times more people around the world.

At the time that the Center was being established, a VA-wide competition was undertaken to decide on a site where the Center would be located. It was quickly determined that no single VA site could adequately serve in this role. As a result, the Center was established as a consortium of five (later expanded to seven) VA centers of excellence in PTSD, each distinguished by a particular area of expertise while also sharing common interests and concerns.

National Center for PTSD: Organization



ABOUT THE DIRECTORS

Executive Division

Matthew J. Friedman, M.D., Ph.D., a professor of psychiatry and pharmacology at Dartmouth Medical School, is recognized as a world leader in the field of traumatic stress studies. He is the author, co-author, or editor of numerous influential publications, including the most widely cited book on the neurobiology of PTSD, and sits on a number of important scientific review panels, such as the VA/DoD/HHS Persian Gulf Expert Scientific Committee. He was principal investigator of the congressionally mandated Matsunaga Vietnam Veterans Project. At present, he and the deputy director, Dr. Paula Schnurr, are co-principal investigators of the largest PTSD treatment study ever funded by VA. He is a former president of ISTSS and a fellow of the American Psychiatric Association, and has received many awards for research and clinical service, including a Lifetime Achievement Award from the ISTSS.

Behavioral Science Division

Terence M. Keane, Ph.D., professor and vice-chair of the Department of Psychiatry at Boston University School of Medicine, is also recognized as a world leader in the field of traumatic stress. He developed many of the most widely used PTSD assessment measures and is considered an authority on the behavioral treatment of PTSD. Dr. Keane has participated in many important scientific review panels and was co-chair of the National Institute of Mental Health Consensus Conference that established national standards for the diagnosis and assessment of PTSD. He is a past president of ISTSS, a fellow of the American Psychological Association and the American Psychological Society, and has received many awards, including a Fulbright scholarship.

Clinical Neurosciences Division

John H. Krystal, M.D., professor and deputy chairman for research for the Department of Psychiatry at the Yale University School of Medicine, is one of the nation's leading investigators on the neurobiology and psychopharmacology of PTSD. Dr. Krystal has published over 200 original scientific articles and chapters and has served on the editorial boards of several journals. He has also served on many national advisory committees, including a DoD-VA collaborative research program initiative on stress, PTSD, and related Gulf War illnesses; National Institute of Health's Director's Advisory Group on Young Investigators; and the NIMH Board of Scientific Counselors. His work has been honored by numerous awards, including the ISTSS Presidents Award and the ISTSS Danielli Award, both for PTSD research contributions. Currently he also serves as Director of the Alcohol Research Center funded by the Department of Veterans Affairs.

Education and Clinical Laboratory Division

Fred D. Gusman, M.S.W., is an internationally recognized expert educator and program administrator who is often called upon to consult on program development, reorganization, and problem-solving. He developed the first and largest PTSD inpatient program in the VA system and the only specialized inpatient PTSD treatment for women veterans. His Clinical Training Program, the Center's mini-residency for PTSD clinicians, attracts national and international attention. Mr. Gusman is a consultant to numerous federal, state, and local programs, including the American Red Cross. He is currently a member of the Under Secretary for Health's Special Committee on PTSD, the Specialized PTSD Program Task Force, the Management Oversight Committee, and the Interdepartmental Task Group on Disaster, Crisis, and Counseling; the latter group includes DoD, Emergency Mental Health Strategic Healthcare Group, Veterans Health Administration, and the American Red Cross.

Mr. Gusman is also serving as Chief Operating Officer of the Pacific Islands Division until a permanent Director is named for that Division.

Women's Health Sciences Division

Lynda King, Ph.D. (Acting Division Director since January, 2000), is a quantitative psychologist with expertise in psychometric theory and techniques. She is the primary author of several published measurement instruments, including the Sex-Role Egalitarianism Scale, a well-regarded device to assess gender-role attitudes. She has published investigations of the psychometric properties of widely used measures of PTSD and combat exposure, and her work has served as a model for the development of new instruments in the field of traumatic stress. She joined the VA in 1995; she also holds the rank of Research Professor of Psychiatry at Boston University School of Medicine.

Pacific Islands Division

Fred Gusman of the Education and Clinical Laboratory Division is serving as Acting Director of the Pacific Islands Division until a replacement is named.

Evaluation Division

Robert Rosenheck, M.D., is a clinical professor of psychiatry and public health at Yale University School of Medicine, where he also is director of the Division of Mental Health Services and Outcomes Research. He is a nationally known mental health services researcher and a leader in cost-effectiveness studies of behavioral health interventions. In addition to monitoring and evaluating VA's specialized PTSD programs, Dr. Rosenheck also monitors VA programs for homeless veterans and veterans who suffer from severe mental illness. He has served as a prime architect of national VA collaborative programs with both the Department of Housing and Urban Development and the Social Security Administration. He also directs the client-level evaluation of the Substance Abuse and Mental Health Services Administration's ACCESS program for homeless mentally ill Americans.

ACRONYMS USED IN TEXT

ACCESS	Access to Community Care and Effective Supportive Services
APA	American Psychological Association
CAPS	Clinician-Administered PTSD Scale
CMHS	Center for Mental Health Services
CSP	Cooperative Studies Program
DHEA	Dehydroepiandrosterone
DoD	Department of Defense
DVA	Department of Veterans Affairs
EES	Employee Education System
fMRI	Functional Magnetic Resonance Imaging
GAF	Global Assessment of Functioning scale
HHS	(Department of) Health and Human Services
HIV	Human Immunodeficiency Virus
HPA	Hypothalamic-pituitary-adrenal
ICODO	Dutch National Institue for Victimsof War
ISTSS	International Society for Traumatic Stress Studies
MAVERIC	Massachusetts Veterans' Epidemiology Research and Information Center
MIRECC	Mental Illness Research, Education, and Clinical Centers
MRI	Magnetic Resonance Imaging
NAMRL	Naval Aerospace Medical Research Lab
NARSAD	National Allliance for Research in Schizophrenia and Depression
NIAAA	National Institute on Alcohol Abuse and Alcoholism
NIDA	National Institute of Drug Abuse

NIH	National Institutes of Health
NIMH	National Institute of Mental Health
NPY	Neuropeptide Y
NVVLS	National Vietnam Veteran Longitudinal Study
PILOTS	Published International Literature on Traumatic Stress
PTSD	Post-Traumatic Stress Disorder
RCS	Readjustment Counseling Service
SAMHSA	Substance Abuse and Mental Health Services Administration
UN	United Nations
VA	(Department of) Veterans Affairs
VBA	Veterans Benefits Administration
VISN	Veterans Integrated Service Network