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STATEMENT OF INTEREST OF AMICUS CURIAE

The INTERNATIONAL COMMITTEE of SOCIAL, PSYCHIATRIC, PSYCHOLOGICAL, COGNITIVE SCIENCE, NEUROSCIENCE, and NEUROLOGICAL SCIENTISTS is a group of nationally and internationally prominent psychiatrists, psychologists, neuroscientists, behavioral scientists, members of the National Academy of Sciences, members of the list of 'Highly Cited' researchers (top 0.5% of world scientists in relevant fields), members of the National Academy of Arts and Sciences, Federal grant recipients, private foundation grant recipients, members of professional journal editorial boards, journal reviewers, recipients of national and international research awards, collectively publishers of thousands of peer-reviewed scientific journal articles, tenured professors at major universities, recipients of Lifetime Achievement awards, Past-Presidents of professional associations, journal editors, and/or licensed clinical health care practitioners. See Addendum A (for a list of the names, addresses, e-mail addresses, university positions and other affiliations of the Amici). Put simply, this group of internationally acclaimed scientists is a "Who's Who" of the relevant sciences.

These Amici have extensive experience with conducting and publishing peer-reviewed scientific research, obtaining national and international funding for research, serving on the editorial boards of the leading journals, providing clinical services, administering programs, serving as expert witnesses, training scientists and clinicians, and advising on public policy issues germane to the fields of cognition, memory, development, trauma, and posttraumatic stress disorder (PTSD) for the full range of relevant populations, including civilians and veterans, adults and children.

These Amici are, in essence, the relevant scientific community for the theoretical disputes underlying this case. See Grove, W. M. and Barden, R.C. (2000) Protecting the Integrity of the Legal System : The Admissibility of Testimony from Mental Health Experts Under Daubert/Kumho Analyses, Psychology, Public Policy and Law, Vol 5, No. 1, 234-242 [Hereinafter, Grove, Protecting the Integrity of the Legal System]. As argued infra, the issues in the case of Commonwealth v. Shanley et al. are so relevant to the past, present, and future work of Amici as scientists and practitioners that they have joined together to form The INTERNATIONAL COMMITTEE of

SOCIAL, PSYCHIATRIC, PSYCHOLOGICAL, COGNITIVE SCIENCE, NEUROSCIENCE, and NEUROLOGICAL SCIENTISTS to inform the court with regard to scientific and policy issues they feel are essential to the integrity of the legal and scientific systems and the interests of justice.

As with any expert witness opinion, the ultimate goal of this brief is to assist the court by providing detailed, technical, scientific, historical and other relevant information. Amici Curiae respectfully submits this brief to document the position of the relevant scientific community regarding the misleading, controversial, and unreliable notions of "repressed-recovered memories", "dissociative amnesia", and related concepts.

Misleading notions such as "repressed-recovered memories", "dissociative amnesia" and similar concepts threaten the integrity of the legal system and expose legal, religious, educational, mental health, scientific, and other societal systems to grave errors of process and a loss of public trust.

STATEMENT OF THE CASE

Amicus adopts the statement of the issues set forth in the Defendant's brief.

STATEMENT OF FACTS

Amicus adopts the statement of facts set forth in the Defendant's brief.

SUMMARY OF ARGUMENT

Amici Curiae, The INTERNATIONAL COMMITTEE of SOCIAL, PSYCHIATRIC, PSYCHOLOGICAL, COGNITIVE SCIENCE, NEUROSCIENCE, and NEUROLOGICAL SCIENTISTS, respectfully submits this brief documenting the position of the relevant scientific community regarding the misleading, controversial, and unreliable notions of "repressed-recovered memories", "dissociative amnesia", and related concepts.

"Repressed-recovered memories", "dissociative amnesia" and related concepts are best described as pernicious psychiatric folklore devoid of convincing scientific evidence. Such theories are quite incapable of reliably assisting the legal process. In our collective opinion, these unsupported, controversial notions have caused incalculable harm to the fields of psychology and psychiatry, damaged tens of thousands of families, severely harmed the credibility of mental health professionals, and misled the legislative, civil, criminal, and family legal systems into many miscarriages of justice.

ARGUMENT

Introduction and History

The debate over "repressed-recovered memories of trauma" is one of the most contentious and important debates in the history of psychology, psychiatry, and the mental health system. To more fully understand this debate, it is essential that the court briefly review the relevant historical and scientific background. Throughout the 1990's tens of thousands of families were torn apart as psychotherapy patients began reporting "recovering repressed memories" of abuse by once trusted and beloved parents, spouses, teachers, and others. Some of these reports included abuse in "past lives", abuse by "international satanic cults", and even abduction and mistreatment by "space aliens." Despite an almost total lack of credible scientific support for the notion of "repressed memories of trauma", by the mid 1990s thousands of therapists were practicing "recovered memory therapy" on tens of thousands of vulnerable patients. See Worsnop, R., The Recovered Memory Debate, The U.S. Congressional Quarterly, Vol 6, No. 25, July 5, 1996. pg. 579-599; Piper, A., Lillevik, L. and Kritzer, R., What's Wrong With Believing in Repression?: A Review for Legal Professionals, Psychology, Public Policy, and Law Vol. 14, No. 3, 223-242 (2008) [Hereinafter

"Piper, What's Wrong With Believing in Repression?"; Loftus and Davis, Recovered Memories, Annual Review of Clinical Psychology, 2:469-498 (2006) [Hereinafter "Loftus, Recovered Memories"]; McNally RJ., Remembering Trauma, Cambridge, Mass: Belknap Press/Harvard University Press [Hereinafter, "McNally, Remembering Trauma"]; Ofshe, R. and Watters, E., Making Monsters: False Memories, Psychotherapy, and Sexual Hysteria, 2nd Edition, University of California Press (1996) [Hereinafter "Ofshe, Making Monsters"]; Loftus, E. and Ketcham, K. The Myth of Repressed Memory: False Memories and Allegations of Sexual Abuse, St. Martin's Griffin Press (1996).

Despite the enormous cultural-legal-media-political momentum generated by this controversial theory, by the year 2001, the 1990's tsunami of recovered memory therapists and patients had largely collapsed under the weight of dozens of scientific and media exposés, many successful and nationally reported psychotherapy malpractice lawsuits, see e.g. Belluck, P., Memory Therapy Leads to a Lawsuit and Big Settlement [\$10.6 Million], The New York Times, Page 1, Column 1, Nov. 6, 1997; license revocations/prosecutions of several national leaders of the "repressed-recovered memory" field, see State of Illinois v. Bennett G. Braun MD, License No.

036042542, Department of Licensing Regulation Case No.1998-10343-01 (1998); see also, the Affidavit of R. Christopher Barden, Ph.D., J.D., LP filed in this case with the motion for a new trial, and repeated exclusions of controversial "repressed-recovered memory" experts from courtrooms using Frye-Daubert-Kumho legal hearings to expose the many flaws and fallacies of "repressed-recovered memory" theories and research.¹ See Barden, R.C., Informed Consent in

¹ Competently conducted Frye/Daubert/Kumho hearings have routinely rejected "repressed-recovered memory" testimony. See, e.g., Piper, What's Wrong With Believing in Repression?; See also, Grove, Protecting the Integrity of the Legal System; State of New Hampshire v. Hungerford and State of New Hampshire v. Morahan 698 A.2d 1244 (N.H. 1997)("The phenomenon of recovery of repressed memories has not yet reached the point where we may perceive these particular recovered memories as reliable."); State of New Hampshire v. Walters 697 A.2d 916 (N.H. 1997)("[W]e conclude, as we did in Hungerford , that " [t]he indicia of reliability present in the particular memories in [this] case do not rise to such a level that they overcome the divisive state of the scientific debate on the issue."); State of Rhode Island v. Quattrocchi, C.A. No. P92-3759 (R.I. 1999) [on remand from the Rhode Island Supreme Court 681 A.2d 879 (R.I. 1999)] ("The State has not met its burden of establishing that repressed recollection is reliable and admissible as scientific evidence."); State of New Hampshire vs. Bourgelais, Docket No. 02-S-2834, Judge T. Nadeau, April 4, 2005 ("the State's motion [to use repressed memory evidence at trial] is denied... the court determines, based on the law and the evidence, that the reliability of memory retrieval has not been sufficiently established..."); Rivers v. Father Flanagan's Boys Town, Doc 1024, Case No. 743, Nebraska State Court Judge S. Dougherty, November 25, 2005. ("... the Court finds and concludes that Plaintiff has not met his burden of establishing that repressed and

Psychotherapy: A Multidisciplinary Perspective, The Journal of the American Academy of Psychiatry and the Law, Vol 29, No. 2, pgs. 160-166 (2001)) [Hereinafter "Barden, A Multidisciplinary Perspective"]; see also Grove, Protecting the Integrity of the Legal System.

The relevant scientific community rose to the challenge posed by these dangerous and unreliable notions by publishing dozens of studies documenting the limitations, logical errors, methodological flaws, and lack of competent, reliable scientific information to support "repressed-recovered memory" research, theories, and therapies. Research into memory contamination produced detailed and scientifically reliable explanations for why some adults make false "recovered memory" allegations of childhood abuse. See Loftus, Recovered Memories, see also, Piper, What's Wrong With Believing in Repression?. Under the weight of this multi-pronged attack including civil suits, scientific research, licensing revocations, criminal prosecutions, Frye/Daubert exclusions, media exposes, and other processes, over the years from 1994-2001,

recovered memory is reliable and admissible as scientific evidence or that it is properly applied in this case. The Plaintiff's evidence lacks the scientific reliability and proper application necessary... the Court finds and concludes that the Defendants' Motion [banning all testimony regarding repressed and recovered memories] shall be sustained.").

the repressed memory "industry" collapsed and the number of patients claiming to recover "repressed memories" of abuse declined precipitously to a fraction of previous claims. Similarly, the rate of scientific publications regarding "repressed memory" tumbled equally dramatically, from a peak in 1997 to only a fraction of that rate by 2001 and thereafter. Furthermore, journal articles appearing after 2000 on the subject of "repressed memory of trauma" were often frankly skeptical of the concept, and few of the articles continued to present cases of actual individuals with putative "repressed" or "recovered" memories of trauma much less "multiple personalities." See Pope HG Jr, Barry S, Bodkin JA, Hudson JI, Tracking scientific interest in the dissociative disorders: a study of scientific publication output from 1984-2003, Psychother Psychosom 75:19-24 (2006); Affidavits of Harrison G. Pope, M.D., MPH, Elizabeth Loftus, Ph.D., and R. Christopher Barden, Ph.D., J.D., LP filed in this case with the motion for a new trial.

A stream of evidence emanating from malpractice lawsuits, licensing prosecutions, and research reviews generated questions as to whether "repressed-recovered memory" research was tainted by serious irregularities including but not limited to: bizarre foundational theories, gross methodological errors, misreporting of

results, failures to permit data review, confessions of data fabrication, and the premature destruction of data. See Id.

Throughout these ongoing "memory wars", it has always been the consensus opinion of the "relevant *scientific* community" that there is no credible, methodologically sound scientific evidence whatsoever for the theory that survivors of trauma truly "repress" and then later "recover memories" of actual events that were experienced as traumatic at the time. Although a vocal subset of clinicians (psychotherapists), believe in the "repressed-recovered memory" hypothesis, research conducted by the most credible scientists over many years involving thousands of trauma-abuse victims demonstrates the persistence of trauma memories. See Pope H, Oliva P, Hudson J, *Repressed memories. The scientific status of research on repressed memories, in Modern Scientific Evidence: The Law and Science of Expert Testimony -- Social and Behavioral Science*, 2005-2006 Edition. Edited by Faigman D, Kaye D, Saks M, Sanders J. Eagen, MN, West Group, pp 408-447 (2005) (reviewing studies of thousands of trauma-abuse victims) [Hereinafter, Pope, The Scientific Status of Research on Repressed Memories"]; McNally, Remembering Trauma (reviewing the science of "repressed-recovered memories").

In sum, "repressed-recovered memories", "dissociative amnesia" and related concepts are best described as pernicious psychiatric folklore devoid of convincing scientific evidence. Such theories are quite incapable of reliably assisting the legal process. In our collective opinion, these unsupported, controversial notions have caused incalculable harm to the fields of psychology and psychiatry, damaged tens of thousands of families, severely harmed the credibility of mental health professionals, and misled the legislative, civil, criminal, and family legal systems into many miscarriages of justice.

I. "REPRESSED-RECOVERED MEMORY", "DISSOCIATIVE AMNESIA" and SIMILAR UNRELIABLE EVIDENCE ENDANGERS THE INTEGRITY OF THE LEGAL AND SCIENTIFIC SYSTEMS:

The debate over "repressed-recovered memories of trauma" is one of the most contentious, important and newsworthy debates in the history of psychology, psychiatry and the mental health system. Because this highly acrimonious debate has contentiously embroiled the legal, legislative, medical, licensing, and journalism systems of the U.S., it is often referred to as the "memory wars." Legal acceptance of controversial and unreliable notions such as "repressed-recovered memories", "traumatic amnesia",

"dissociative amnesia", "psychogenic amnesia", and related concepts would present a significant threat to the integrity and reliability of the legal, scientific, and mental health systems.

The current state of the "memory wars" is best summarized in a recent, comprehensive, competent, scientific review of this field published in the American Psychological Association's journal, Psychology, Public Policy, and Law in 2008. The authors' review of the field is highly informative:

Some courts in recent years have tarnished their credibility by willingly and blindly adopting the theory of repressed memory. Such acceptance can destroy the reputations of falsely accused individuals, and, by failing to pay due attention to reliable scientific evidence, gives credence to junk science and demeans the scientific method. This paper was written to inform judges and attorneys about the relevant evidence, which shows that: (a) the concepts of repressed and recovered memory are not generally accepted in the psychological and psychiatric community; (b) the studies cited to support these concepts reveal significant flaws; (c) much empirical evidence has been accumulated against the theory of repression; (d) the studies using the best methodology offer the least support for the repression hypothesis; and (e) there is no evidence that recovered memories accurately reveal the specifics of long-ago events. Repressed-recovered memory theory is not supported by science.

See Piper, What's Wrong With Believing in Repression?.

Decades of research show that traumatic events -- those experienced as overwhelmingly terrifying and

life threatening -- are remembered all too well. More specifically, informed clinicians and scientists realize that emotional arousal enhances memory for trauma; it does not result in blocked memory for trauma. Indeed, people who develop posttraumatic stress disorder (PTSD) are haunted by intrusive memories of horrors that they cannot forget--facts embodied in the diagnostic criteria for PTSD. See McNally, Remembering Trauma.

Yet a subset of clinicians has made the controversial claim that the mind somehow protects itself by banishing memories of trauma from consciousness, making it impossible for victims to recall their most terrifying experiences until it is safe to do so years later. Some clinicians believe that sexual abuse victims, especially those who repeatedly suffer abuse, are likely to experience amnesia for their abuse. These beliefs are incongruent with the well-known scientific laws governing emotion and memory.

Despite the clinical beliefs of some therapists, there is simply no credible, methodologically sound, replicable scientific evidence whatsoever for the claim that victims repress and recover memories of traumatic events. The relevant scientific community has long rejected such notions. To be sure, some

victims may not think about disturbing events for many years, if the events were not experienced as traumatic at the time of their occurrence. But not thinking about something for a long time is not the same thing as being unable to remember it, and it is an inability to remember that lies at the heart of repressed-recovered memory theory.

Decades of research and scientific debate have repeatedly clarified, that the relevant scientific community views the notion of traumatic events being somehow "repressed" and later accurately "recovered" as "memories" as one of the most pernicious bits of folklore ever to infect psychology and psychiatry. See Barden, R. C. and Amici, (2006) Amicus Curiae Brief of the National Committee of Scientists for Academic Liberty, for Defendants and Appellants, Elizabeth Loftus, et. al., Submitted to the Supreme Court of the State of California, Feb., 2006; McNally, R. J., Is traumatic amnesia nothing but psychiatric folklore? Cogn Behav Ther, p. 97 (2004); McNally, Remembering Trauma.

II. THE FOLKLORE NOTIONS OF "REPRESSED-RECOVERED MEMORIES", "DISSOCIATIVE AMNESIA", AND SIMILAR CONCEPTS ARE HIGHLY CONTROVERSIAL, UNRELIABLE, AND NOT ACCEPTED BY THE RELEVANT SCIENTIFIC COMMUNITY:

A range of terms including but not limited to "repressed memory", "recovered memory", "traumatic

amnesia", "dissociative amnesia", "psychogenic amnesia" and related concepts describe the same phenomena and are largely interchangeable. These theoretical processes are highly unreliable (if they exist), are subject to *unknown error rates*, and are clearly *not able to assist* - but are likely to mislead - the legal system.

As international trauma expert Prof. Richard McNally of Harvard University has noted, those who endorse the concept of traumatic amnesia often misinterpret the very studies they adduce in support of it. More specifically, they misinterpret other, unrelated memory phenomena as evidence for traumatic amnesia, such as ordinary forgetfulness, psychogenic amnesia, organic amnesia, incomplete encoding of traumatic experiences, non-disclosure of remembered trauma, and simply not thinking about something for a long time. See, McNally, Remembering Trauma.

Whichever of the many terms listed above are employed, they all refer to the claimed involuntary and 100% total inability to remember traumatic events, with the "repressed memory" of such events somehow stored in a pristine, reliable manner, then somehow "recovered" years later in a process that supposedly maintains the accuracy of recall. Such terms, and all of them, thus assume 1) traumatic memories can be

automatically, involuntarily wiped from consciousness, then 2) stored in some reliable, pristine fashion safely, totally, and involuntarily out of awareness, then 3) somehow involuntarily "recovered" and brought back to consciousness, and 4) that the recovery process provides access to a reliably accurate "memory" of the original event(s). Courts should not accept such testimony from "experts" or from "victims" until all four components of this extraordinary claim are demonstrated by competently conducted and interpreted peer reviewed scientific research and fully accepted by the relevant scientific community. Currently, there is no credible scientific evidence, no general acceptance in the relevant scientific community, and no known error rates for any of these four extraordinary claims.

We urge legal reviewers not to confound statements about ordinary memory as if they involved "repressed memory." Not wanting to think about a painful event is not at all the same as involuntarily "repressing" 100% of the knowledge of that event. Courts should be mindful of the distinction between someone who seeks to avoid underlying pain of which they harbor a clear awareness and for which they recognize the cause, with a person who somehow involuntarily "represses" all knowledge of the cause

and lives in a state of total oblivion that it ever occurred.

III. THE LEGAL SYSTEM SHOULD BEWARE OF FLAWED AND MISLEADING INTERPRETATIONS OF "REPPRESSED-RECOVERED MEMORY" RESEARCH:

Research interpretations offered by supporters of "repressed and recovered memories" often fail to comply with minimal standards of scientific analysis and methodology. For example, research subjects who may have simply chosen not to discuss personal histories of abuse with strangers have been misreported as having "repressed" all memory of abuse. See Williams, L.M., Recall of childhood trauma: A prospective study of women's memories of child sexual abuse, Journal of Consulting & Clinical Psychology, 62, 1167-1176 (1994). Similarly, children who were shocked into unconsciousness by a violent lightning strike have been misreported as examples of "repressed memory", "dissociative amnesia", "psychogenic amnesia" and similar concepts. See, Dolinger, S.J., Lightning-strike disaster among children, Br J Med Psychol. 58:375-383 (Dec. 1985). Such errors of logic and methodology demonstrate why "repressed-recovered memories", "dissociative amnesia", "psychogenic amnesia", and related concepts remain controversial at

best and have never been accepted by the relevant scientific community.

A. RETROSPECTIVE STUDIES: Avoiding errors of Logic and Methodology.

Most of the research studies cited by supporters of the "repressed memory" concept are "retrospective studies". Such studies involve asking subjects to recall and discuss memories of past events. Interpretations of such studies often demonstrate a plethora of errors of logic and methodology. For example, some retrospective studies do not even attempt to document or validate that actual abuse occurred, and have used persons whose memories were recovered in suspect circumstances (e.g., suggestive therapy) without comparison to those whose memories were recovered more naturally. Incredibly, one of the most influential studies of this type recruited subjects through a national network of "recovered memory" psychotherapists. See Briere, J. & Conte, J., Self-reported amnesia for abuse in adults molested as children, Journal of Traumatic Stress 6, 21-31 (1993). Unsupported statements of troubled therapy patients were the only essential "data" gathered. Given a variety of methodological issues and possible explanations for such results, these kinds of therapy patient claims of past "repressed-recovered memories" are unreliable and scientifically un-interpretable.

Tragically, "repressed-recovered memory" proponents often cite dozens of just such fatally flawed studies to "prove" their claims.²

In other flawed and often misinterpreted retrospective studies, patients claiming recovered memories of abuse have previously undergone questionable procedures such as hypnosis or guided imagery. For example, fully two thirds of those reporting periods of amnesia in Roe & Schwartz's (1996) study reported first recovery of the memory during hypnosis. See Roe, C.M & Schwartz, M. F., Characteristics of Previously Forgotten Memories of Sexual Abuse: A Descriptive Study, J Psychiatry & L. 189-206 (Summer 1996). In another study, participants who never remembered abuse but who had joined incest survivor "therapy" groups to "help them remember" were classified as having repressed and recovered memories of abuse. See Herman, J.L. & Schatzow, E., Recovery and verification of memories of childhood sexual trauma, Psychoanalytic Psychology 4, 1-1 (1987). Proponents of repressed-recovered memory often offer deceptive depictions of the research field, failing to inform readers of these egregious and widespread methodological flaws and limitations. See Brief of the

² The Amicus Brief of the "Leadership Council" in this case provides many examples of these and other errors of logic and methodology.

"Leadership Council." See e.g. Piper, What's Wrong With Believing in Repression?; See also, Pope, The Scientific Status of Research on Repressed Memories

In sum, the dozens of retrospective studies in this field (including those cited and mischaracterized by the "Leadership Council" brief in this case) add very little to the science of memory. When hundreds of subjects are asked flawed questions such as "do you recall a time when you did not recall" or "do you remember not remembering" such reports are obviously nothing more than guesses about whether the person could remember or subjective assessments of reasons for failure to remember rather than responses to actual attempts to remember. In sum, they are difficult or impossible to interpret in any meaningful, reliable, scientific manner. Such data are misleading, unreliable, and cannot assist a rational legal system.

Even more devastating to the usefulness of retrospective studies is research showing that patients often fail to remember that they previously remembered abuse. For some claimed instances of recovered memories, it has been shown that the subject actually did remember during the alleged amnesic period, but later forgot previously remembering and talking about the abuse to others. See Brenneis C.B.,

Evaluating the evidence: Can we find authenticated recovered memory?, *Psychoanal. Psychol.* 17: 61-77 (2000). In one particularly illuminating retrospective study, women who claimed that they had undergone periods of forgetting their abuse said later in the same interview that they had actually never forgotten. See Fivush, R., & Edwards, V.J., Remembering and forgetting childhood sexual abuse, *Journal of Child Sexual Abuse*, 13, 1-19 (2004). Similarly, recent data have shown that people often forget that they had actually been quite able to remember an event in the past - and thus now erroneously believe that they "repressed" the memory. See Geraerts, E., Arnold, M. M., Lindsay, D. S., Merckelbach, H., Jelicic, M., & Hauer, B., Forgetting of prior remembering in persons reporting recovered memories of childhood sexual abuse, *Psychological Science*, 17(11), 1002-1008 (2006). Exposing the unreliability of such methodologies is important and quite devastating to "repressed-recovered memory" claims.

Finally, studies of memory reports for real-life traumata of all sorts suffer from additional problems such as illogically misinterpreting general difficulty with everyday memory as evidence for total, involuntary "repression" of a specific traumatic event. Similarly, supporters of "repressed-recovered

memory", "dissociative amnesia" and similar concepts fail to rule out injury and organic causes of amnesia in a rush to over-interpret flawed retrospective studies (e.g., the study on lightening strike victims). See e.g., Piper, [What's Wrong With Believing in Repression](#). Although some reviewers have claimed a large number of retrospective studies support "repressed-recovered memory" theory, even neophyte scientists understand that a hundred times zero remains zero.

In sum, although there have been dozens of published retrospective studies in which individuals have reported a prior period of "forgetting" an event, the sheer number of such studies does not enhance their validity nor solve their fatal methodological flaws. No error rates or credible evidence of reliability can result from such limited, flawed research. In sum, fatal errors, flaws, limitations, and misinterpretations of retrospective studies render them useless in attempts to support so-called "repressed and recovered memories", "dissociative amnesia" and related concepts. See Loftus, [Recovered Memories](#); McNally, [Remembering Trauma](#); Piper, A., Jr., Pope, H. G., Jr., & Borowiecki, J. J., III, [Custer's last stand: Brown, Schefflin, and Whitfield's latest attempt to salvage "dissociative amnesia."](#) Journal of

Psychiatry and Law, 28, 149-213 (2000); see also, Pope, The Scientific Status of Research on Repressed Memories.

B. PROSPECTIVE STUDIES: Avoiding Errors of Logic and Methodology.

In a *prospective* memory study, individuals with a record of abuse or other trauma in the past are later interviewed to see what they remember. The best-known and most widely cited (by supporters of "repressed-recovered memory) study (i.e., the "Williams" study) involved women who reported sexual abuse that occurred when they were aged 10 months to 12 years old. See Williams, L.M., Recall of childhood trauma: A prospective study of women's memories of child sexual abuse, Journal of Consulting & Clinical Psychology, 62, 1167-1176 (1994). In interviews with a stranger-interviewer some 17 years later, 38% did not freely mention the abuse incident. These very predictable and un-interpretable results are sometimes mistakenly cited to support the notion that a significant percentage of women "repressed the memories" [involuntarily and completely lost any awareness] of sexual abuse. See id. Numerous critics have devastated this simplistic interpretation noting that myriad reasons other than "repression" are more likely the

cause of participants not reporting abuse. See Ofshe, Making Monsters; Piper, A., Jr., Pope, H. G., Jr., & Borowiecki, J. J., III, Custer's last stand: Brown, Schefflin, and Whitfield's latest attempt to salvage "dissociative amnesia." Journal of Psychiatry and Law, 28, 149-213 35 (2000); see also, McNally RJ., Remembering Trauma.

For example, some of the victims were mistreated when they were so very young (under age 2) that childhood amnesia would lead us to expect no memory for the abuse. Even if they did remember it, obviously some victims may have simply not wanted to discuss being abused with a stranger-interviewer due to embarrassment or simply the lack of rapport. See D.D. Femina, et al., Child Abuse and Neglect 14: 227-231, (1990).

More importantly, in most all of the retrospective studies in this field, by design, most participants are never asked directly about abuse, and subsequent research shows that had these subjects been asked, many or all would have simply reported it. See Loftus, Recovered Memories (for a detailed review of such research). The best studies show that victims do remember, do report, and do discuss abuse when simply asked about it directly. See supra Femina, D.D., et al. Such carefully conducted research eviscerates

claims that a large percentage of victims "repress" memories of sexual abuse. In sum, there are no competently conducted, credible prospective studies that support the notion of "repressed-recovered memory" or related concepts.

C. ANECDOTAL CLINICAL CASE STUDIES: Avoiding Errors of Logic and Methodology.

Anecdotal case studies (sometimes called "anecdata") are also offered in attempts to support the notion of "repressed-recovered memories (e.g. the "Leadership Council" brief in this case). In such "research" a psychotherapist creates an account of a case history along with an "interpretation" that the therapist subjectively believes the patient subjectively believes the patient is telling the truth, is competent to offer such reports, and has truly "repressed", and later reliably "recovered" an actual "memory" of abuse. Such studies obviously require a rather breathtaking litany of unreliable assumptions. Even more troubling, several of the best-known such case studies involve patient histories analyzed and allegedly "verified", "recorded", "interpreted", and described by one and only one therapist-researcher. Such non-repeatable "anecdata" are not subjected to credible, objective, external,

verification. Several of these therapist-researchers have repeatedly refused to permit objective, external reviews of the alleged "data". Even more troubling is the growing documentation that several of these and related studies involve actual scandals including the destruction of controversial data and admissions of misreporting evidence and data fabrication. See Affidavit of R. Christopher Barden, Ph.D., J.D. filed in this case with the Motion for a New Trial.

One very public example of the dangers of reliance upon such clinician-generated "anecdotal" can be found in the 1997 case history of "Jane Doe". See Corwin, D., Olafson E., Videotaped Discovery of a Reportedly Unrecallable Memory of Child Sexual Abuse: Comparison with a Childhood Interview Videotaped 11 Years Before, *Child Maltreatment* 2 (2): 91-112 (1997). A clinician-researcher published an account of Jane Doe's life and her allegedly "repressed-recovered memory". The case was widely cited as a "verified" example of an actual "repressed and recovered memory". Two nationally prominent researchers, Loftus & Guyer (2002a,b) were skeptical of the story and used public records and newspaper clippings to locate Jane Doe's actual family. The investigators learned that the case

was, in fact, not even remotely a proven case of repressed memory. In fact, much newly discovered evidence casts serious doubt on whether any abuse had ever occurred at all. This expose is now an essential, cautionary tale for a controversial field. Case histories can be compelling, but they are severely limited by the motivations, competence, honesty, and interpretations of the storyteller-therapist. It is disturbing that a number of well-known "repressed-recovered memory" proponents have apparently "confessed" in sworn depositions to being the only persons to see or review their claimed "clinical data" and also to destroying such data before any scientist saw, touched, reviewed, or properly cross-evaluated the alleged "data". This is not how competent, reliable science is conducted. See Affidavit of R. Christopher Barden, Ph.D., J.D. filed in this case with the Motion for a New Trial.

D. THE TROUBLED FOUNDATIONS OF "REPRESSED-RECOVERED MEMORY" THEORIES: Additional Indicia of Unreliability.

A detailed peer reviewed article in one of the American Psychological Association Journals, Psychology, Public Policy, and Law, entitled "Protecting the Integrity of the Legal System,"

exposed and documented the unreliability of foundational theories underlying notions such as "repressed-recovered memory" (RRM), "dissociative amnesia", "traumatic amnesia", and "multiple personality disorder" (MPD) (i.e. alternate personalities resulting from "repressed memories" of abuse). As the authors noted:

In assessing the credibility of the MPD [RRM] causal hypothesis, an acquaintance with the full range of theories about MPD [RRM] is important. Courts must be truthfully informed that variants of the theory of MPD [RRM] —crafted by central figures of MPD [RRM] theory and practice—are unsupported by any credible evidence. One national leader, Corydon Hammond [co-author of the most widely cited text supporting RRM], has posited that MPD [RRM] is often the product of 'programming' by intergenerational, international Satanic cults.

See, Grove, [Protecting the Integrity of the Legal System](#), at 234-242.

Similarly, a former President and Co-Founder [Dr. Bennett Braun] of the International Society for the Study of Dissociation reportedly offered his own detailed theories of how RRM and MPD are often the result of abuse by "satanic cults". It is important to note that Dr. Braun was one of the key figures in the history of the "repressed-recovered memory" movement. Prior to surrendering his medical license to the Attorney General of the State of Illinois, Dr. Braun

served as Editor of the most influential pro-repression journal "Dissociation". See Id at 234; State of Illinois v. Bennett G. Braun MD, License No. 036042542, Department of Licensing Regulation Case No.1998-10343-01 (1998); Ofshe, Making Monsters, at pg. 245.

This brief account of the curious history of "repressed-recovered memory" theory demonstrates why it is essential that courts, when assessing the reliability of research in controversial fields, understand the history and social milieu in which theories such as "repressed-recovered memory" were constructed. Similarly, before relying upon research published in specialty "trauma" journals, courts should fully assess the quality of a journal's peer review process and explore the knowledge, training, experience and judgment of peer reviewers.

In the present case, the Amicus brief of the "Leadership Council" appears to rely heavily upon research with well-known limitations, unreliable "clinical case studies", and reviews by controversial theorists and psychotherapists. Such analyses contain significant errors of logic and methodology and cannot reliably assist courts of law. See Piper, What's Wrong

With Believing in Repression; see also, McNally, Remembering Trauma.

E. Dozens of Peer Reviewed Studies and Reviews have Exposed Errors and Flaws in Research Used to Support "Repressed-Recovered Memory", "Dissociative Amnesia", and Related Concepts.

The methodological errors, misreports, and misinterpretations of memory research by supporters of "repressed and recovered memories" have been painstakingly exposed by prominent peer reviewed published reviews, studies, and articles. We understand that complete copies of several dozens of these peer-reviewed, published, journal articles have been filed with the court in this case. See Affidavit of Harrison Pope, M.D., MPH as filed in this case with the motion for a new trial; see also, Piper, What's Wrong With Believing in Repression?.

These and the many other peer-reviewed published articles cited herein, also provide extensive documentation of the ongoing, contentious nature of the "memory wars" and of the striking lack of general acceptance for controversial notions such as "repressed-recovered memories", "dissociative amnesia", "traumatic amnesia", and others.

IV. COMPETENT REVIEWS OF RESEARCH ON THOUSANDS OF ACTUAL TRAUMA VICTIMS PROVIDE NO CREDIBLE SUPPORT FOR "REPRESSED-RECOVERED MEMORIES", "DISSOCIATIVE AMNESIA" AND RELATED CONCEPTS.

Studies of thousands of trauma victims including victims of sexual abuse have produced no credible support for the notions of "repressed and recovered memories", "traumatic amnesia", "dissociative amnesia" and related concepts. In contrast, such research demonstrates that human beings remember traumatic events all too well. See Pope, The scientific status of research on repressed memories ; Affidavit of Harrison G. Pope, M.D., MPH filed in this case with the motion for a new trial; See also, McNally, Remembering Trauma.

V. DISEASE CLASSIFICATION SYSTEMS INCLUDING THE DIAGNOSTIC AND STATISTICAL MANUAL OF THE AMERICAN PSYCHIATRIC ASSOCIATION (DSM) AND THE INTERNATIONAL CLASSIFICATION OF DISEASES (ICD) ARE NOT PEER REVIEWED RESEARCH STUDIES AND DO NOT SUPPLY EVIDENCE OF RELIABILITY NOR ERROR RATES FOR "REPRESSED-RECOVERED MEMORY", "DISSOCIATIVE AMNESIA", AND RELATED CONCEPTS:

The DSM and ICD systems have confused a few courts in the past. Simply put, reliability data and error rates for such notions as "repressed and recovered memories", "traumatic amnesia", "dissociative amnesia" and related concepts are not supplied nor supported by the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM) or the International Classification

of Diseases (ICD). Specifically, DSM-IV explicitly states that there is a lack of consensus regarding dissociative amnesia noting "there has been considerable controversy concerning amnesia related to reported physical or sexual abuse." Diagnostic and Statistical Manual-IV (Text Revised), p. 480 (2000) (Emphasis added).

Legal professionals should note that classification systems including the DSM and ICD are not peer reviewed scientific research publications but rely instead upon a committee voting system. Competent scientists understand that DSM and ICD are essentially medical dictionaries of disorders designed to standardize the use of diagnostic labels. Such classification systems do not document nor demonstrate the validity, reliability, nor error rates for "dissociative amnesia" or related concepts such as "repressed-recovered memories." See Grove, Protecting the Integrity of the Legal System, at 230.

In addition, the DSM and ICD do not contain methodological standards for "dissociative amnesia" or related concepts, nor statistical or other data documenting any reliability claims for "dissociative amnesia" and related concepts, nor do they offer any

demonstrated error rates for such concepts. As medical dictionaries, DSM and ICD are simply designed to standardize the way medical professionals use diagnostic labels. DSM and ICD are not designed to demonstrate nor document the validity, reliability, nor error rates for controversial concepts such as "repressed-recovered memories", "dissociative amnesia" and related concepts. We note that several of the most prominent experts in the world regarding the origins, uses, and functions of the DSM and ICD (e.g., Robert Spitzer, M.D. and others) have co-signed this brief.

Finally, as Professor Harrison G. Pope of Harvard Medical School notes in his affidavit filed in this case (with the motion for a new trial), DSM-IV is internally inconsistent, listing "dissociative symptoms such as amnesia" in a list of "pseudo-neurological" symptoms, along with such conversion (hysterical) symptoms as impaired coordination or balance, paralysis, or seizures (page 490). See Affidavit of Harrison G. Pope, M.D., MPH filed in this case with the motion for a new trial. Thus, DSM-IV, in its own text, defines dissociative amnesia as a symptom that does not have a genuine neurological basis - a symptom analogous to pseudo-seizures,

pseudo-paralysis, or pseudo-anesthesia. Importantly, the International Classification of Diseases has taken a similar position viewing "dissociative amnesia" as a pseudo-neurological (hysterical) condition. In sum, the DSM and ICD offer no error rates, nor support for the reliability of, "repressed-recovered memory" or related concepts.

VI. PUBLIC STATEMENTS FROM PROFESSIONAL ASSOCIATIONS DOCUMENT THE ONGOING CONTROVERSY REGARDING "REPRESSED-RECOVERED MEMORIES", "DISSOCIATIVE AMNESIA", AND RELATED CONCEPTS:

Heated controversy and general acceptance are mutually exclusive states of debate. Numerous public statements of professional associations including the American Medical Association, the American Psychological Association, the Canadian Psychological Association, the Australian Psychological Association, and others demonstrate the ongoing, contentious, and controversial debate over the existence and reliability of so-called "repressed-recovered memories" and related concepts. As the following statements document, no credible national or international psychological, psychiatric, neurological, cognitive science, or other professional association has ever endorsed "repressed-recovered memories", "dissociative amnesia", "traumatic amnesia", "psychogenic amnesia", or related concepts

as reliable processes with known error rates.

The American Medical Association, the American Psychiatric Association, the (British) Royal College of Psychiatrists, the Canadian Psychiatric Association, and the Australian Psychological Society have all voiced skepticism about "repressed-recovered memory" and related notions.

The American Medical Association considers recovered memories of childhood sexual abuse to be of uncertain authenticity, which should be subject to external verification. The use of recovered memories is fraught with problems of potential misapplication" (American Medical Association, Council on Scientific Affairs, 1995, p. 117) . . . [Emphasis added.]

If memories of events have not been revisited and cognitively rehearsed in the interval between occurrence of the events and attention being paid to them some years later, it is not clear that such memories can endure, be accessible, or be reliable" [Emphasis added.] (Canadian Psychiatric Association, 1996, p. 305)

Existing scientific evidence does not allow global statements to be made about a definite relationship between trauma and memory. The available scientific and clinical evidence does not allow accurate, inaccurate, and fabricated memories to be distinguished [from one another] in the absence of independent corroboration." (Emphasis added). (Australian Psychological Society, Limited, 1994, p. 2).

See Piper, What's Wrong With Believing in Repression?, pgs 230-231.

The public rejections or silence from all credible professional associations on the essential issues of reliability and error rates for "repressed-recovered memories" present an insurmountable obstacle for those attempting to meet the burden of proving general acceptance, reliability, error rates, and/or ability to assist triers of fact.

VII. REPORTS OF SO-CALLED "REPRESSED-RECOVERED MEMORIES" or "DISSOCIATIVE AMNESIA" ARE LIKELY THE RESULT OF WELL-KNOWN AND WIDELY RESEARCHED MEMORY CONTAMINATIVE PROCESSES:

Over the past two decades, many persons have reported the odd and previously unheard of claim that they experienced "repressed and recovered memories" of traumatic abuse. These odd reports raise the question of whether some or all such "memories" may be false. It is widely accepted in the relevant fields of science that such "recovered-repressed memories" are highly unreliable, of unknown origin, and should be subject to rigorous corroboration (e.g. contemporaneous confessions, contemporaneous journals, photographs, video and audio recordings, DNA evidence, etc). Hundreds of scientific studies have demonstrated that human memory is subject to contaminative processes including post-event information, confabulation, source confusion, imagination inflation, the implantation of false memories, media influences, and other sources of "recovered memory"

content. See Loftus, Recovered Memories; Ofshe R.J., Singer M.T., Recovered-Memory Therapy and Robust Repression: Influence and Pseudomemories, Int J Clin Exp Hypn 42:391-410 (1994); see also, Schacter D.L., Curran T., The Cognitive Neuroscience of False Memories, Psychiatric Annals 25:726-730 (1995).

Research in the past several decades has shown that it is relatively easy to change details of memories for previously experienced events and that it is also possible to implant entirely false autobiographical memories, even of highly implausible or even impossible events. See Loftus, Recovered Memories. Using forms of suggestion in a paradigm known as the "familial informant false narrative procedure" or simply the "lost-in-the-mall" technique people have been led to believe that, as children, they were lost in a shopping mall for an extended time, had an accident at a family wedding, were the victim of a vicious animal attack, nearly drowned and had to be rescued by a lifeguard, etc. Such false memories can be planted by telling individuals that their relatives have provided the information and then suggestively interviewing the individuals to try to elicit memory reports. See id.

Recent work has shown that even subtle suggestions can lead people to develop emotionally

powerful false beliefs and memories. One such technique, common in some psychotherapy offices, is "guided imagination." "You don't remember your abuse, but you have all the symptoms, why don't you just close your eyes and try to imagine who might have done it," some therapists have been known to say. Yet researchers have shown that imagining an event that didn't happen (like breaking a window with your hand) can lead people to think that it did actually happen. They called this phenomenon "imagination inflation." See Garry, M., Manning, C., Loftus, E.F., & Sherman, S.J., Imagination Inflation: Imagining a childhood event inflates confidence that it occurred, Psychonomic Bulletin and Review, 3, 208-214 (1996).

A common complaint about false memory research is that the suggestions used may be reviving a true memory rather than planting a false one. Perhaps the individual really did break a window, forgot it, and the imagination exercise revived it. Perhaps the individual really did get lost or attacked by an animal, forgot it, and the strong suggestion revived the memory? To address this concern, researchers turned their attention to trying to plant memories of events that would be implausible or even impossible. In one set of studies people were led to believe that they had witnessed a person being demonically

possessed as a child. Even though subjects entered the experiment thinking this was not very plausible, many of them exited the experiment, after strong suggestion, with increased confidence that this had occurred to them before the age of three. See Loftus, Recovered Memories. In another set of studies, people were led to believe that they had met and shaken hands with Bugs Bunny on a childhood trip to a Disney resort. Even though this event is impossible (since Bugs Bunny is a Warner Brothers character and could never be seen at a Disney resort), many people were led to believe that this had actually occurred to them as children. See id. A number of subjects in such studies have embellished their "memories" with unique and emotional sensory details. Such sensory details are important to memory scientists because people use sensory detail to assist them in distinguishing between true memories and those that are product of imagination, dreams or some other process. And when people listen to the stories of others, which they do as therapists, or police officers, or jurors, or even simply as friends, they use sensory detail as a cue to tell us that we are hearing a report that is based on authentic memory. These studies also document that false memories can be very detailed and emotional. See id. In fact false memories can be not only detailed,

but they can be held with confidence, and expressed with powerful, congruent emotion - - other cues that usually make us (wrongly) think that memory reports are true. See Laney, C. & Loftus, E.F., Emotional content of true and false memories, *Memory*, 16, 500-516 (2008).

VIII. MUCH OF THE "SUPPORT" FOR "REPRESSED-RECOVERED MEMORIES" IS BASED UPON THE REPORTS OF PSYCHOTHERAPISTS. DECADES OF RESEARCH CASTS DOUBT ON THE RELIABILITY OF SUCH "CLINICAL JUDGMENT" METHODOLOGIES.

Mental health experts often justify diagnostic and predictive judgments on the basis of `years of "clinical experience". In contrast, a consistent body of research published over many years documents significant limitations and concerns with the "clinical judgment" methodologies of psychotherapists. More specifically, research shows that, in general, the validity of clinical judgment and amount of clinical experience are not related. See, Dawes, R.M., Faust, D., & Meehl, P.E., Clinical versus actuarial judgment, *Science*, 243, 1668- 1674 (1989) (emphasis added); Garb, H.N., Clinical judgment, clinical training, and professional experience, *Psychological Bulletin*, 105, 387-396 (1989); Dawes, R.M., House of

cards: Psychology and psychotherapy built on myth, New York: Free Press (1997).

The central problem with relying upon the judgment of psychotherapists seems to be that clinicians often have considerable difficulty distinguishing valid and invalid variables because psychotherapy methods often fail to provide the accurate feedback required to reliably learn from experience. Psychotherapists frequently sit in a room and simply talk to people. They typically lack accurate feedback because they rarely conduct detailed, factual investigations to ascertain the accuracy of patient statements. See Dawes, R.M., Faust, D., & Meehl, P.E., Clinical versus actuarial judgment, *Science*, 243, 1668- 1674 (1989). Thus, research shows us that psychotherapy case reports, case studies, anecdotal examples, and other "clinical judgment" ("anecdotal") procedures are quite limited and often unreliable methodologies. See, Garb, H. N., Studying the Clinician: Judgment Research and Psychological Assessment, American Psychological Association Press (1998)

Most relevant to the present discussion is the repeatedly demonstrated inability of psychotherapists

to distinguish true from false patient reports. Numerous studies have shown that therapists (and other clinicians) are unreliable lie detectors and thus often unable to determine the simple truthfulness of patient reports. See Ekman, P. and O'Sullivan, M., Who Can Catch a Liar? American Psychologist, 46: 913-920, (1991); Rosen, G. M. and Phillips, W.R., A Cautionary Lesson from Simulated Patients, Journal of the American Academy of Psychiatry and Law, 32, 132-133, (2004); McNally, RJ, Troubles in Traumatology, Canadian Journal of Psychiatry 50:815-816 (2005) (showing clinicians routinely misdiagnose PTSD in veterans who never saw combat); see also, Frueh BC, Elhai JD, Grubaugh AL, Monnier J, Kashdan TB, Sauvageot JA, and others, Documented combat exposure of US veterans seeking treatment for combat-related post-traumatic stress disorder, Br J Psychiatry 186:467-472 (2005).

Given the serious methodological limitations of "clinical judgment" and psychotherapy methodologies, the "relevant scientific community" in psychology, psychiatry, cognitive science, neuroscience, and neurology should never be confused with psychotherapists but correctly viewed as members of

the relevant scientific research community. The actual "relevant scientific community" includes those who publish competent research in credible science journals (in contrast to therapy "trauma" journals or specialty "dissociation" journals), serve on the editorial boards (or consulting boards) of credible scientific journals, have received significant research grant funding from nationally known private foundations or governmental science agencies, and/or have received awards for scientific distinction from the relevant scientific (not clinical) organizations.

If courts fail to properly identify the "relevant scientific community", the legal system is left at the mercy of unreliable groups often burdened with social, philosophical, economic, or other conflicts of interest. Without the guidance of the actual "relevant scientific community", protections designed into Frye-Daubert-Kumho processes are weakened or destroyed leaving the legal system open to contamination by misleading methods, practices, and theories including "repressed-recovered memory" and related unreliable, controversial concepts.

IX. THE HISTORY OF THE "MEMORY WARS" DEMONSTRATES THE IMPORTANT ROLE OF THE SCIENTIFIC, LEGAL, AND LICENSING SYSTEMS IN LIMITING THE DAMAGING

**EFFECTS OF PERNICIOUS PSYCHIATRIC FOLKLORE
INCLUDING "REPRESSED-RECOVERED MEMORY" THEORIES
AND THERAPY PRACTICES.**

The well-documented and widely publicized history of the rise and fall of "repressed-recovered memory" theories and practices demonstrates the essential roles of the science, civil justice, licensing, criminal justice, legislative, and academic systems in regulating rogue elements of the mental health system. These multidisciplinary systems should continue to work together to protect institutions and citizens from the effects of pernicious, unreliable notions such as "repressed-recovered memories", "dissociative amnesia", "traumatic amnesia" and related concepts. Informed multidisciplinary analyses will lead to important improvements in legal and scientific processes. See Barden, A Multidisciplinary Perspective, at pgs. 160-166 (2001).

CONCLUSION

"Repressed-recovered memories", "dissociative amnesia", "traumatic amnesia", "psychogenic amnesia", and similar unproven, unreliable notions have caused incalculable harm to the fields of psychology and psychiatry, damaged tens of thousands of families, severely weakened the credibility of mental health professionals, and misled the legislative, civil, criminal, and family legal systems into many miscarriages of justice. These controversial and misleading notions cannot reliably assist the legal system and have never been accepted by the relevant scientific community.

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CERTIFICATION

I, Eric Tennen, certify that this brief complies with the rules of court that pertain to the filing of briefs, including, but not limited to: Mass. R. A. P. 16(a)(6), Mass. R. A. P. 16(e), Mass. R. A. P. 16(f), Mass. R. A. P. 16(h), Mass. R. A. P. 18, and Mass. R. A. P. 20.

Eric Tennen

ADDENDUM A

DESCRIPTION OF AMICI CURIAE

Aaron T. Beck, M.D., a member of the Institute of Medicine of the National Academy of Sciences and Fellow of the Royal College of Psychiatrists, serves as University Professor of Psychiatry Emeritus at the University of Pennsylvania School of Medicine. Dr. Beck is the founder of cognitive therapy and has been listed as one of the ten Americans with the greatest influence in the history of American psychiatry. He has received numerous awards, including research awards from the American Psychiatric Association, the American Psychological Association, and the Institute of Medicine. These include the Joseph Zubin Award for Distinguished Contributions in Psychopathology from the the Society for Research in Psychopathology, the Lifetime Achievement Award from the Association for the Advancement of Behavior Therapy, the Senior Member Award of the Institute of Medicine of the National Academy of Sciences, the Distinguished Scientist Award from the Society for Psychotherapy Research, the James McKeen Cattell Fellow Award in Applied Psychology from the Association for Psychological Science, a MERIT Award from the National Institute of Health, the Distinguished Scientific Award for the Applications of Psychology from the American Psychological Association, the Hoch Award from the American Psychopathological Association, the Foundation's Fund Prize for Research in Psychiatry from the American Psychiatric Association, and other awards. Dr. Beck is the author or co-author of over 500 publications, including 17 books. He has performed Editorial duties on a number of leading research journals. Dr. Beck's cognitive therapy, the most heavily researched form of psychotherapy, represents a major advance in the understanding and treatment of a variety of psychiatric disorders including affective disorders, anxiety disorders, substance abuse, personality disorders, and schizophrenia. Dr. Beck received his medical degree from the Yale University School of Medicine. According to the Institute for Scientific Information, Professor Beck is a "Highly Cited" researcher and thus among the most highly cited (top 0.5%) psychologists and psychiatrists in the world.

Mahzarin Rustum Banaji, Ph.D. is President-elect of the Association for Psychological Science. She serves as the Richard Clarke Cabot Professor of Social Ethics in the Harvard University Department of Psychology and Carol K. Pforzheimer Professor at the Radcliffe Institute for Advanced Study. In 2005, Banaji was elected fellow of the Society for Experimental Psychologists, in 2008 to the American Academy of Arts and Sciences and in 2009 was named Herbert A. Simon Fellow of the American Academy of Political and Social Science. Banaji is a Fellow of the American Association for the Advancement of Science, the American Psychological Association (Divisions 1, 3, 8 and 9), and the American Psychological Society. She has served as Associate Editor of the journal *Psychological Review* and of the *Journal of Experimental Social Psychology* and is currently Co-Editor of *Essays in Social Psychology* (Psychology Press) and the advisory board on Social Cognition and Social Neuroscience for Oxford University Press. Her research, represented in over 100 papers, has been funded by the National Science Foundation, the National Institute of Mental Health, the Third Millennium Foundation, the Mind Science Institute, the Wallace Foundation, and the Russell Sage Foundation. Among her awards, in 2000, her work with R. Bhaskar received the Gordon Allport Prize for Intergroup Relations.

Robert Perloff, Ph.D. is a past president of the American Psychological Association, the American Psychological Foundation, the Eastern Psychological Association, the Evaluation Research Society, and several other regional and national associations. He is the Distinguished Service Professor Emeritus of Business Administration and of Psychology at the Joseph M. Katz Graduate School of Business, University of Pittsburgh. He is the author of over 400 publications, reviews, commentaries, and presentations at universities and professional conferences. In 2000, the American Psychological Foundation awarded him its Gold Medal for Lifetime Achievement in Psychology in the Public Interest.

Henry L. Roediger, III, Ph.D. has been elected to the American Academy of Arts and Sciences. He is the James

S. McDonnell Distinguished University Professor and Department Chair at Washington University in St. Louis. Dr. Roediger's research has centered on human learning and memory, and he has published 180 articles and chapters on various aspects of cognitive processes involved in remembering. His recent research has focused on illusions of memory (how we sometimes remember events differently from the way they actually occurred) and effects of testing memory (how retrieving events from memory can change their representation, often making them more likely to be retrieved in the future. Dr. Roediger served as Editor of the *Journal of Experimental Psychology: Learning, Memory and Cognition* (1985-1989) and was founding editor of *Psychonomic Bulletin & Review* (1994-1999). He has served as President of the American Psychological Society (2003-2004), Chair of the Governing Board of the Psychonomic Society (1989-1990) and Chair of the Society of Experimental Psychologists (2003-2004).

Richard M. Shiffrin, Ph.D., is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Philosophical Society. He is an author of several leading theories and models of memory phenomena. He serves as the Distinguished Professor and Luther Dana Waterman Professor of Psychological and Brain Sciences at Indiana University. Dr. Shiffrin has published over 120 science reports and reviews and has received continuous federal grants supporting his research on human memory. Dr. Shiffrin has also trained many students who have gone on to major research careers in this field. Professor Shiffrin was awarded a Guggenheim fellowship in 1975, elected to the Society of Experimental Psychologists in 1981, chaired the governing boards of the Psychonomic Society in 1982 and the Society for Mathematical Psychology in 1983, and edited the *Journal of Experimental Psychology: Learning, Memory, and Cognition* from 1980-1984. He has received several of the major awards his field confers, including the Howard Crosby Warren Medal of the Society of Experimental Psychologists, the David E. Rumelhart Prize for Contributions to the Formal Analysis of Human Cognition, and the Distinguished Scientific Contribution Award of the American Psychological Association.

Elizabeth Loftus, PH.D. is the recipient of six honorary doctorates and election to the Royal Society of Edinburgh, the American Philosophical Society, the American Academy of Arts and Sciences, and the National Academy of Sciences. She is a past president of the Association for Psychological Science, the Western Psychological Association, and the American Psychology-Law Society. She serves as Distinguished Professor at the University of California - Irvine. She holds faculty positions in three departments (Psychology & Social Behavior; Criminology, Law & Society; and Cognitive Sciences), and in the School of Law, and is also a Fellow of the Center for the Neurobiology of Learning and Memory. She received her Ph.D. in Psychology from Stanford University. Since then, she has published 22 books (including the award winning *Eyewitness Testimony*) and over 450 scientific articles. Loftus's research of the last 30 years has focused on the malleability of human memory. In 2005 Professor Loftus received the Grawemeyer Award, sometimes referred to as "the Nobel Prize in psychology." She was given a Distinguished Scientific Applications in Psychology Award from the American Psychological Association. When Dr. Loftus received the prestigious William James award from the American Psychological Society ("APS") - the Society's highest award for scientific contributions - her work was described as having "advanced substantially both the quality of basic memory research and the fairness of the criminal justice system." Dr. Loftus' was listed as one of the 99 *Most Eminent Psychologists of the 20th Century.*

Jay Belsky, Ph.D., is Director of the Institute for the Study of Children, Families and Social Issues and Professor of Psychology at Birkbeck University of London. Professor Belsky is an internationally recognized expert in the field of child development and family studies. He is a founding and collaborating investigator on the NICHD Study of Child Care and Youth Development (US) and that National Evaluation of Sure Start (UK). He is the author of more than 300 scientific articles and chapters. Among other things, he is currently involved in a multi-million dollar, multi-site investigation in the

U.S. of the effects of early child care on children's development through the age of 15 (The NICHD Study of Early Child Care and Youth Development) and a long-standing longitudinal study of 1,000 (currently) young adults in New Zealand who have been studied intensively since age 3. Professor Belsky led the multi-disciplinary team that won the multi-million pound award to carry out the National Evaluation of Sure Start in England, on which he serves as Research Director. According to the Institute for Scientific Information, Professor Belsky is a "Highly Cited" researcher and thus among the most highly cited (top 0.5%) psychologists and psychiatrists in the world.

Benjamin B. Lahey, Ph.D. has served as the President of the Society for Clinical Child and Adolescent Psychology and the President of the International Society for Research in Child and Adolescent Psychopathology. Dr. Lahey currently serves as the Irving B. Harris Professor of Epidemiology and Psychiatry in the Department of Health Studies (MC 2007) at the University of Chicago. He is the recipient of awards from numerous societies including the National Academy of Neuropsychology and the Society for Clinical Child and Adolescent Psychology. Dr. Lahey serves or previously served on the Editorial Boards of many leading journals including Psychological Bulletin, the Journal of Consulting and Clinical Psychology, the Journal of Abnormal Child Psychology, the Journal of Psychopathology and Behavioral Assessment, Child and Behavior Family Therapy and others. He was a representative of the field of psychology on the DSM-IV Child Disorders Work Group and a member of the US liaison group for the mental health section of the International Classification of Diseases. He was also the editor, with Alan E. Kazdin, of the first fourteen volumes in the annual series, Advances in Clinical Child Psychology, published by Plenum Press. According to the Institute for Scientific Information, Professor Lahey is a "Highly Cited Researcher" in psychiatry/psychology(<<http://www.isihighlycited.com/>>), a designation awarded to only 0.5% of published scientist-researchers in these disciplines.

Dante Cicchetti, Ph.D. serves as the McKnight Presidential Chair and Professor, Institute of Child Development and Department of Psychiatry at the University of Minnesota. He has received a number of awards, including three of the highest honors of the Developmental Division of the American Psychological Association (APA), the G. Stanley Hall Award (2005) and the Urie Bronfenbrenner Award (2006), and the Mentorship Award (2008). He is the recipient of the the Nicholas Hobbs Award, Division 37 of the American Psychological Association, for Significant Contributions to Child Advocacy and Social Policy, (1999) as well as the Senior Career Award for Distinguished Contributions to Psychology in the Public Interest from the American Psychological Association (2004). He is also the recipient of the Outstanding Research Study Award from the American Professional Society on the Abuse of Children as well as the Scientific Merit Award from the National Institute of Mental Health. Dr. Cicchetti has published hundreds of articles, books, and journals that have had far-reaching impact on developmental theory as well as science, policy, and practice related to child maltreatment, depression, mental retardation, and numerous other domains of development. Dr. Cicchetti's research has achieved "Top Grantee" status with the National Institutes of Health (above the 95th percentile of distribution of extramural NIH grants over the last 25 years). According to the Institute for Scientific Information, Professor Cicchetti is a "Highly Cited" researcher and thus among the most highly cited (top 0.5%) psychologists and psychiatrists in the world.

Dr. Robert L. Spitzer serves as Professor of Psychiatry at Columbia University and is on the research faculty of the Columbia University Center for Psychoanalytic Training and Research. He chaired the task force for the Diagnostic and Statistical Manual of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* . He has been referred to as a major architect of the modern classification of mental disorders involving the classifying of mental disorders in discrete categories, with specified diagnostic criteria. According to the Institute for Scientific Information, Professor Spitzer is one of the most highly cited (top

0.5%) psychiatrists in the world.

Charles B. Nemeroff, MD, Ph.D is the past President of the American College of Neuropsychopharmacology and the American College of Psychiatrists. In 2002 he was elected to the Institute of Medicine. Dr. Nemeroff served as Duke University Professor of Psychiatry and Pharmacology and Chief of the Division of Biological Psychiatry before relocating in 1991 to Emory University School of Medicine in Atlanta, Georgia. At Emory serves as the Reunette W. Harris Professor of the Department of Psychiatry and Behavioral Sciences. Dr. Nemeroff has received numerous honors during his career, including the A.E. Bennett Award from the Society of Biological Psychiatry (1979), the Judith Silver Memorial Young Scientist Award from the National Alliance for the Mentally Ill (1989), both the Kempf Award in Psychobiology (1989) and the Samuel Hibbs Award (1990) from the American Psychiatric Association, and the Gold Medal Award and the Research Prize (1996) from the Society of Biological Psychiatry. In 1993 he was awarded the Edward J. Sachar Award from Columbia University and the Edward A. Strecker Award from the Institute of Pennsylvania Hospital. In 1997, he was the recipient of the Gerald Klerman Award from the National Depressive and Manic-Depressive Disorders Association and Selo Prize from the National Alliance for Research in Schizophrenia and Depression. In 1998 he was the recipient of the Research Award in Mood disorders from the American College of Psychiatrists and in 1999 he received the Bowis Award from the same organization. He was awarded the Menniger Prize in 2000 from the American College of Physicians, the Research Award from the American Foundation for Suicide Prevention in 2001, and the Burlingame Prize from the Institute of Living in 2002. Dr. Nemeroff is the Editor-in-Chief of Neuropsychopharmacology. With Alan F. Schatzberg, MD, he is the co-Editor of the Textbook of Psychopharmacology, now in its Third Edition, published by the American Psychiatric Association Press. He has served on the Mental Health Advisory Council of the National Institutes of Mental Health and the Biomedical Research Council for NASA. He is currently the recipient of several research grants from the National Institutes of Health. He has published more than 750 research reports and reviews.

According to the Institute for Scientific Information, Dr. Nemeroff is a "Highly Cited" researcher and thus among the most highly cited (top 0.5%) psychologists and psychiatrists in the world.

James L. McGaugh Ph.D. was elected a member of the National Academy of Sciences and was also elected a member of the Brazilian and Mexican academies of science. He served as president of the Association for Psychological Science and the Western Psychological Association and was elected a fellow of the American Academy of Arts and Sciences and a fellow of the World Academy of Arts and Science. Dr. McGaugh also awarded the John P. McGovern Award from the American Association for the Advancement of Science. He currently serves as Fellow, at the Center for the Neurobiology of Learning and Memory as well as Research Professor of Neurobiology and Behavior at the University of California, Irvine. Dr. McGaugh is the recipient of many other notable awards including the Karl Lashley Prize in Neuroscience from the American Philosophical Society, the Norman Anderson Lifetime Achievement Award from the Society of Experimental Psychologists. According to the Institute for Scientific Information, Dr. McGaugh is among the most highly cited (top 0.5%) neuroscientists in the world.

Steven D. Hollon, Ph.D. is past president of the Association for Behavior Therapy and the recipient of a Distinguished Scientist Award from the Society for a Science of Clinical Psychology as well as the George A. Miller Award for Outstanding Article from the American Psychology Association. He is one of the most influential and respected experts in the treatment of depression worldwide. Dr. Hollon serves as Professor of Psychology, in the Vanderbilt University College of Arts and Science; as Professor of Psychology at Peabody College; and as Professor of Psychiatry at the Vanderbilt University School of Medicine. Professor Hollon has served on a number of American Psychological Association Task Forces and Working Groups including the APA Task Force for the Development of Guidelines for Determining Treatment Efficacy and the APA Outcomes Management Work Group.

Prof. Hollon has also served as Editor of the journal, *Cognitive Therapy Research*, and as an Associate Editor of the *Journal of Abnormal Psychology*. A former director of clinical training, he maintains an active clinical practice in the context of his research program. Dr Hollon's research has been funded by multiple grants from the National Institute of Mental Health. According to the Institute for Scientific Information, Prof. Hollon is among the most highly cited (top 0.5%) psychologists and psychiatrists in the world.

Myrna Weissman, Ph.D. is a past President of the American Psychopathological Association and a member of the National Academy of Sciences, Institute of Medicine. She currently serves as Professor of Epidemiology in Psychiatry, College of Physicians & Surgeons, Columbia University. She also serves as Chief of the New York State Psychiatric Institute, Division of Epidemiology. She is the recipient of a Joseph Zubin Research Award from the American Psychopathological Association, the Selo Prize for Outstanding Research Achievement in Depression from the National Alliance for Research on Schizophrenia and Depression, the Klerman Distinguished Lecture Award from the American College of Neuropsychopharmacology, the Lapouse Award from the American Public Health Association, and the Klerman Research Award from the World Psychiatric Association. She has also been named an Honorary Fellow of the American Psychiatric Association and a Fellow of the American College of Neuropsychopharmacology. Professor serves as Deputy Editor of the journal *Depression and Anxiety*, and as a Editorial Board member of several journals including the *Encyclopedia of Psychotherapy*, the *Bulletin of the World Health Organization*, *Comprehensive Psychiatry*, *Biological Psychiatry*, *Psychiatry Research*, *Psychological Medicine*, the *Harvard Review of Psychiatry*, the *American Journal of Psychiatry*, *Archives of General Psychiatry*, *Journal of Affective Disorders*, and others. Professor Weissman has also served as an Advisory Board Member for the World Health Organization, Scientific Working Group on Methodological Issues in the Development and Application of Classifications and Diagnostic Concepts and as an Advisory Board Member for the President's Commission on Mental Health, White House Task Force on Epidemiology of Mental Health. Dr. Weissman received

her doctorate from the Yale University School of Medicine. According to the Institute for Scientific Information, Professor Weissman is among the most highly cited (top 0.5%) epidemiologists and psychiatrists in the world.

Laurence Steinberg, Ph.D., is the Distinguished University Professor and Laura H. Carnell Professor of Psychology at Temple University. Dr. Steinberg is Past-President of the Division of Developmental Psychology of the American Psychological Association, a former President of the Society for Research on Adolescence, and former Director of the MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice. An internationally recognized expert on psychological development during adolescence, Dr. Steinberg's research has focused on a range of topics in the study of contemporary adolescence, including adolescent brain development, risk-taking and decision-making, parent-adolescent relationships, adolescent employment, high school reform, and juvenile justice. His work has been supported by the National Institutes of Health, the U.S. Departments of Justice and Education, and numerous private foundations. He served as a member of the National Academies Panel on the Health Implications of Child Labor, Committee on the Science of Adolescent Health and Development, and Board on Children, Youth, and Families; he currently chairs the Academies' Committee on the Science of Adolescence. Dr. Steinberg is the author of more than 300 articles and essays on growth and development during the teenage years, and the author or editor of 15 books. Steinberg has been the recipient of numerous awards, including the American Psychological Association's Award for Distinguished Contributions to Research in Public Policy. His research on adolescent development was cited multiple times in the U.S. Supreme Court's decision to abolish the juvenile death penalty. According to the Institute for Scientific Information, Dr. Steinberg is among the 225 most cited psychologists and psychiatrists in the world.

Frederick Crews, Ph.D., an emeritus professor of English at the University of California, Berkeley, is an American essayist and literary critic with broad interdisciplinary interests. The author of many books

and the recipient of various awards, he is a member of the American Academy of Arts and Sciences. He also serves on advisory boards of the False Memory Syndrome Foundation, the Committee for Skeptical Inquiry, and the Commission for Scientific Medicine and Mental Health. He is best known among social scientists for his critiques of Freud and psychoanalysis, especially in The Memory Wars: Freud's Legacy in Dispute (New York Review Books, 1995). His most recent book is Follies of the Wise: Dissenting Essays (Counterpoint, 2006).

Donald F. Klein, M.D., D.Sc. is a Fellow of the American Association for the Advancement of Science, a former President of the American Society of Clinical Psychopharmacology, and a former President of the American College of Neuropsychopharmacology. Dr. Klein also serves as the President for the National Foundation for Depressive Illness. He also serves as Professor of Psychiatry at the Columbia University College of Physicians & Surgeons. Dr. Klein is the recipient of numerous awards and honors including the Castillo del Pino Prize for Achievement in Psychiatry, the Lifetime Achievement Award from the Society of Biological Psychiatry, the Salmon Medal for Distinguished Service in Psychiatry, the Console Award in Psychiatry, the Lehman Research Award, the Paul Hoch Distinguished Service Award from the American College of Neuropsychopharmacology, the Gold Medal Award from the Society of Biological Psychiatry, the Foundation Fund Prize for Research in Psychiatry from the American Psychiatric Association, the Hamilton Award from the American Psychopathological Association, and others. Dr. Klein serves or previously served as an Editorial Board Member for several journals including *Evolutionary Psychology*, *Depression and Anxiety*, *International Journal of Methods in Psychiatric Research*, the *Journal of Clinical Psychiatry*, *Journal of Psychiatric Research*, *Journal of Clinical Psychopharmacology*, and others. Dr. Klein also served as a Member of the Diagnostic and Statistical Manual Task Force of the American Psychiatric Association. Dr. Klein's research has been supported over a period of many years by the National Institutes of Health. According to the Institute for Scientific Information, Professor Klein is among the 225 most cited psychologists and psychiatrists in the world.

Harrison G. Pope, Jr, M.P.H., M.D. is Professor of Psychiatry at Harvard Medical School and Director of the Biological Psychiatry Laboratory at McLean Hospital, Harvard's principal psychiatric teaching hospital. Dr. Pope is the author of more than 275 peer-reviewed scientific papers in a wide range of fields within psychiatry, and has published extensively on the controversy surrounding "repressed memory" and childhood sexual abuse. Prof. Pope performs or has performed Editorial Board duties at a number of scientific journals including *Scientific Review of Mental Health Practice*, the *Journal of Bipolar Disorder*, the *Journal of Clinical Psychiatry*, *International Journal of Eating Disorders*, and others. Prof. Pope served on the American Psychiatric Association Task Force on Nomenclature and Statistics for the Diagnostic and Statistical Manual-III. Dr. Pope received his A.B. (Summa Cum Laude) from Harvard College and his graduate training (M.P.H., M.D.) from Harvard Medical School and the Harvard School of Public Health. Professor Pope is among the small group of psychologists and psychiatrists in the world identified by the Institute for Scientific Information as "Highly Cited" (i.e., in the top one half of one percent of all published psychologists and psychiatrists worldwide in terms of citation impact). The Institute for Scientific Information reports that Dr. Pope is also a "Highly Cited" researcher in the field of neuroscience.

Richard J. McNally, Ph.D., is Professor of Psychology and Director of Clinical Training at Harvard University. Dr. McNally is the author of over 320 publications, many in the field of traumatic stress and memory, including the book Remembering Trauma (2003). His research includes laboratory studies on cognitive functioning in adults who report having been sexually abused as children. He served on the American Psychiatric Association's committees for revising the DSM-IV diagnostic criteria for posttraumatic stress disorder (PTSD) and for simple phobia. Dr. McNally is a Fellow, American Association of Applied and Preventive Psychology, a Fellow of the Association for Psychological Science, a Fellow of Council for Scientific Medicine and Mental Health. Professor McNally is a recipient of the Distinguished

Scientist Award from the Society for the Science of Clinical Psychology. He has served as a Consultant to the National Institute of Mental Health. Professor McNally is also a Member of the International Review Committee for the Experimental Psychopathology Institute, University of Maastricht in the Netherlands. He has received research grants funding from the National Institutes of Health. Dr McNally is among the small group of psychologists and psychiatrists in the world identified by the Institute for Scientific Information as "Highly Cited" (i.e., in the top one half of one percent of all published psychologists and psychiatrists worldwide in terms of citation impact).

James I. Hudson, M.D., Sc.D. -- is Professor of Psychiatry at Harvard Medical School, and Director of the Biological Psychiatry Laboratory and the Psychiatric Epidemiology Research Program at McLean Hospital, Harvard's principal psychiatric teaching hospital. Dr. Hudson is the author of more than 200 peer-reviewed scientific publications in a wide range of psychiatric fields. Professor Hudson has published extensively on the controversy surrounding "repressed memory" and childhood sexual abuse. Dr. Hudson performs Editorial Board and related duties at a number of journals including the Journal of Clinical Psychiatry, Psychotherapy and Psychosomatic, International Journal of Eating Disorders, and others. Dr. Hudson received his B.A. (Cum Laude, with distinction in philosophy) from Yale College, his M.D. from Tufts University School of Medicine, and holds degrees in epidemiology (Sc.D.) and biostatistics (S.M.) from the Harvard School of Public Health. Professor Hudson is among the small group of psychologists and psychiatrists in the world identified by the Institute for Scientific Information as "Highly Cited" (i.e., in the top one half of one percent of all published psychologists and psychiatrists worldwide in terms of citation impact).

Richard Ofshe, Ph.D. is a Professor (emeritus, recalled to service) in the Department of Sociology of the University of California at Berkeley. He is the recipient of a John Simon Guggenheim Foundation Fellowship, the Dorcus Award of the International Society for Clinical and Experimental Hypnosis and

shared in the award of the Pulitzer Prize for Public Service given to the Point Reyes Light Newspaper. He has been the recipient of Federal research grants and has served on the editorial boards of scientific journals. His research in recent years has focused on two topics, the misuse of influence by incompetent psychotherapists leading to pseudomemories of sexual abuse (so called recovered memories) and the misuse of influence by police detectives during interrogation leading to false confessions by the innocent. His work on both topics is internationally recognized.

William M. Grove, Ph.D. -- is Assoc. Professor and former Co-Director of the Ph.D. Clinical Training Program at the University of Minnesota, Department of Psychology. Professor Grove of the University is an internationally recognized expert in psychopathology, diagnosis, behavior genetics and scientific methodology. Professor Grove has served as a reviewer for virtually every leading journal in psychology and psychiatry, and is the author of over 100 professional publications. Dr. Grove has been awarded several millions of dollars of research grants from the National Institutes of Health. He has also testified as an expert witness on the methods of science in many legal cases involving so-called "repressed memories". Prof. Grove is among the small group of psychologists and psychiatrists in the world identified by the Institute for Scientific Information as "Highly Cited" (i.e., in the top one half of one percent of all published psychologists and psychiatrists worldwide in terms of citation impact).

Paul R. McHugh M.D. Presently University Distinguished Service Professor of Psychiatry, Johns Hopkins University, Dr. McHugh was Psychiatrist-in-chief at Johns Hopkins Hospital from 1975-2001. He has published 4 books and over 150 scientific papers on psychiatry and related subjects. He is a member of the Institute of Medicine (NAS) and of the President's Council on Bioethics and recipient of the Menninger Award from the American College of Physicians and the Zubin Award from the American Psychopathological Association.

Stephen J. Ceci, Ph.D. is a Chaired Professor of Developmental Psychology and Co-Director of the

Cornell Institute for Research on Children in the Department of Human Development at Cornell University. Dr. Ceci is the author of over 300 articles, chapters, reviews and books many in the field of children's memory, including the award-winning book Jeopardy in the Courtroom: A Scientific Analysis of Children's Testimony (1995), published by the American Psychological Association. In 1994-1995, Dr. Ceci served on the American Psychological Association's Task Force on Recovered Memories of Childhood Abuse. Dr. Ceci is the recipient of the 2004-05 American Psychological Society's James McKeen Cattell Award. The award states, "His research ... findings have led to significant advances in how we think about intelligence and children's testimonial competence." Dr. Ceci is a fellow of the American Association for the Advancement of Science (AAAS), APS and APA (7 divisions). Currently he serves on the White House Commission on Developmental Research, the National Science Foundation's Advisory Board and the National Academy of Science's Board on Behavioral, Cognitive and Sensory Sciences.

Daniel L. Schacter, PhD. is William R. Kenan, Jr. Professor of Psychology at Harvard University. He has been elected to the Society of Experimental Psychologists and the American Academy of Arts and Sciences. Schacter's research has examined the cognitive and brain mechanisms involved in remembering and forgetting, with an emphasis on understanding nonconscious forms of memory, amnesic syndromes, the basis of memory distortion, and how memory is used to imagine future events. He has published over 350 articles and chapters in scientific journals and scholarly volumes, and was named one of the 260 most frequently cited psychologists and psychiatrists in the world by the Institute of Scientific Information. Schacter has written three books on the topic of memory, including Searching for Memory (1996) and The Seven Sins of Memory (2001), both of which were named Notable Books of the Year by the New York Times Book Review and also received the William James Book Award from the American Psychological Association. Schacter has also edited or co-edited eight books on various aspects of memory and cognition, is an associate editor of the Annual Review of Psychology, and serves on the editorial advisory board of eleven scientific

journals. He has won numerous awards for his research, including the Distinguished Scientific Award for an Early Career Contribution to Psychology in Human Learning and Cognition from the American Psychological Association, a Guggenheim Fellowship, the Troland Award and the Award for Scientific Reviewing from the National Academy of Sciences, and the Howard Crosby Warren Medal from the Society of Experimental Psychologists.

Steven Pinker, Ph.D., the Johnstone Professor of Psychology at Harvard University, is one of the world's best-known scientists studying language and the mind. His NIH-and NSF-supported research has won awards from the National Academy of Sciences, the Royal Institution of Great Britain, and the American Psychological Association, and he has won many prizes from scientific societies for books such as *How the Mind Works* and *The Blank Slate* (both of which were finalists for the Pulitzer Prize). He was named by *Time* magazine as one of the 100 most important people in the world today, and by *Foreign Policy* as one of the world's top 100 public intellectuals.

August Piper, M.D. is a clinical and forensic psychiatrist in Seattle, WA. Dr. Piper has testified as an expert in a number of prominent "repressed memories" trials. He is the author of several important works in the field including "Hoax and Reality :The Bizarre World of Multiple Personality Disorder", "Custer's last stand: Brown, Schefflin, and Whitfield's latest attempt to salvage "dissociative amnesia." and "Multiple Personality Disorder". Dr. Piper is Medical Director of the Psychiatry Service at Swedish/Providence Medical Center in Seattle, Washington.

B. Christopher Frueh, PhD, a clinical psychologist, conducts clinical trials, epidemiological, and mental health service delivery research in a variety of medical and mental health settings. He is currently a tenured Professor of Psychology and Director of the Social Sciences Division at the University of Hawaii at Hilo and Director of Clinical Research at The Menninger Clinic in Houston, TX. Over the past 17-years he has been Principal Investigator on 13 federally-funded research grants, has authored over

150 professional scientific publications, held an endowed research position at Baylor College of Medicine, and attained the rank of tenured professor at three different universities (Medical University of South Carolina, University of Hawaii at Hilo, Baylor College of Medicine).

Steve Lynn, Ph.D. is a Professor in the Department of Psychology at the State University of New York at Binghamton. He has 237 publications, including the book Truth in Memory. Many of these publications cover the topics of hypnosis and memory recovery techniques, traumatic stress, dissociation and purportedly repressed memories, and psychopathology. Professional distinctions include: a) past president of the American Psychological Association Division of Scientific Hypnosis; b) Diplomate in both Clinical and Forensic Psychology (ABPP); c) editorial board or editor service for 13 scientific journals; d) research funded by the National Institute of Mental Health; e) Fellow in 6 professional organizations, including the American Psychological Association and the American Psychological Society; and f) numerous professional awards including the Chancellor's Award of the State University of New York for Scholarship, Creativity, and Professional Activity.

Peter van Koppen, J.D. is a tenured Professor of Law and Psychology at the Departments of Law of both Maastricht University and the Free University Amsterdam, the Netherlands. Both an experimental psychologist and a lawyer, he has over 250 scientific publications in the field of psychology and law and serves as Co-Editor of Psychology, Crime, and Law. He currently is the President of the European Association of Psychology and Law. He has served as expert witness in more than 300 cases in the Netherlands, Belgium, and England. He served on a committee for the Dutch minister of Justice to investigate cases of ritual sexual abuse. He wrote a report for the Dutch minister of Justice on how the police and prosecution should handle cases with repressed and recovered memories and he served on the Dutch National Expert Group on Unusual Sexual Crimes of the College of Attorneys-General to which the prosecution is obliged to turn for advice before any arrest is made in cases in which claims of recovered memories are made.

John F. Kihlstrom, Ph.D. is Professor in the Department of Psychology, University of California, Berkeley, where he is also a member of the interdisciplinary Institute for Cognitive and Brain Sciences and the Institute for Personality and Social Research. He has published more than 100 articles, chapters, and books, many on the subject of memory and its pathology, including a number of articles on trauma and memory as well as a textbook and handbook chapters on the dissociative disorders and on functional amnesia. He has chaired two review groups for the National Institute of Mental Health. Among other editorial appointments, he has served as Associate Editor of the American Journal of Psychology, the International Journal of Clinical and Experimental Hypnosis, the Journal of Abnormal Psychology and as Editor of Psychological Science.

Gerald M. Rosen, Ph.D. is a practicing psychologist in Seattle, Washington, and holds an appointment as Clinical Professor in the Department of Psychology, University of Washington. He is editor of the text Posttraumatic Stress Disorder: Issues and Controversies, and author of over 60 articles, many in the field of posttraumatic studies.

Sally Satel, M.D. is a psychiatrist and Resident Scholar at the American Enterprise Institute. She has published two books, PC MD and One Nation Under Therapy, and writes frequently for the Wall Street Journal and the Science section of the New York Times. Her writings have included extensive discussion of issues germane to trauma, memory and reporting of trauma, and treatment of PTSD. She has testified before a U.S. congressional committee on matters related to PTSD funding for the Veterans Affairs system.

Maryanne Garry, Ph.D. is a Senior Lecturer (the U.S. equivalent of Associate Professor) in Psychology at Victoria University of Wellington, in New Zealand. Her area of expertise is memories for personal experiences, particularly false memories from childhood. She has numerous scholarly publications, has been Principal Investigator on grants from both the U.S. and New Zealand, and is the Chair of

her human research ethics committee.

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Howard N. Garb, Ph.D. directs the largest psychological screening program for the United States Air Force. Screening is conducted during basic training, and the purpose is to identify trainees with severe psychopathology. Dr. Garb serves on several committees for the Department of Defense and national psychological organizations including the American Psychological Association. With more than 75 scientific publications, he has published extensively in the area of psychological assessment. (Dr. Garb is required to include the following statement: The views expressed in this amicus brief are not the official policy of the Department of Defense or the United States Air Force.)

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Dr. Naomi Breslau, Ph.D, is Professor of Epidemiology at Michigan State University. She is an internationally renowned researcher in epidemiology of psychiatric disorders. Her research publications on trauma, PTSD and other posttrauma disorders in the general community have set the methodological standards of research in this area. She has published 188 peer reviewed articles in leading journals, based on her NIH supported research. Dr. Breslau is a "Highly Cited Researcher" in psychiatry/psychology (<http://www.isihighlycited.com/>), a designation awarded to only 0.5% of published scientist-researchers in these disciplines.

David F. Dinges, Ph.D., is Professor of Psychology in Psychiatry, Chief of the Division of Sleep and Chronobiology in the Department of Psychiatry, and Associate Director of the Center for Sleep and Respiratory Neurobiology in the University of Pennsylvania School of Medicine. He is also a member of Penn's Institute for Neurological Sciences, the Psychology Graduate Group, the Biological Basis of Behavior faculty, and an Adjunct Professor in the School of Biomedical Engineering, Science and Health Systems, at Drexel University. Dr. Dinges earned his M.S. and Ph.D. degrees in Experimental Physiological Psychology from Saint Louis University. He also trained at the Central Institute for the Deaf, Washington University School of Medicine in St. Louis, at George Washington University Hospital in Washington, D.C., and at the Institute for Experimental Psychiatry at Pennsylvania Hospital and the University of Pennsylvania.

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Simon Wessely, MA, BM, BCh, MSc, MD, FRCP, FRCP and a fellow of the U.K. Academy of Medical Sciences (FMedSci) and a foundation senior fellow of the National Institutes of Health Research, is Chair of the Department of Psychological Medicine at the Institute of Psychiatry, King's College London as well as Director of the King's Centre for Military Health Research. He is also honorary Consultant Psychiatrist at King's College Hospital and Maudsley Hospital, as well as Civilian Consultant Advisor in Psychiatry to the British Army. He has published over 550 papers on subjects including epidemiology, post traumatic stress, recall of events, medicine and law, history of psychiatry, chronic pain and chronic fatigue somatisation, Gulf War illness, chemical and biological terrorism and deliberate self harm. Dr. Wessely has cycled from London to Paris in 2006 and again in 2007, to raise money for veterans' charities. In 2006 he and his team completed a study on the health of 20,000 UK military personnel who took part in the invasion of Iraq, and has just completed a follow up on the impact of current operations in Iraq and Afghanistan

. Dr. Wessely has a long standing interest in how normal people react to adversity, and what, if any, responses are appropriate. He was a co-author of an influential Cochrane Review showing that the conventional response, to offer people who have been involved in disaster immediate psychological debriefing, was not only ineffective, but possibly did more harm than good. Since then he has published on civilian reactions to the Blitz, reactions to the July 7, 2005 London bombings, as well as studies of the plutonium poisoning incident in London and latterly reactions to swine flu.

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David Watson, Ph.D. serves as F. Wendell Miller Professor of Psychology at the University of Iowa. He has served as the Editor of the American Psychological Association's Journal of Abnormal Psychology. Dr. Watson has been a consulting Editor on many other journals including the Journal of Personality, Personality and Social Psychology Review, Psychological Bulletin, Personality and Social Psychology Bulletin, Journal of Research in Personality, Journal of Personality and Social

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Dr. Rosalind Cartwright received her Ph.D degree in Psychology from Cornell University 1949. She has taught at Mount Holyoke College, University of Chicago, University of Illinois, and Rush University where she was the Chairman of the Department of Psychology and Director of the Sleep Disorder Service and Research Center from 1977-2008. She has published 110 journal articles and 5 books one co-authored with Carl Rogers "Psychotherapy and Personality Change" in 1954. A new book is in press "The Twenty-four Hour Mind" with Oxford University Press . She has been supported by grants from National Science Foundation, National Institutes of Health and the National Institute of Mental Health continuously and served as a member of research review committees for NIMH and NIH from 1971-1995. and was a member of the National Advisory Mental Health Council and HLB NIH Sleep Disorders Research Advisory Board. She was awarded the Distinguished Scientist Award from the Sleep Research Society 2004.

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