A. Research addressing misleading information about scientific issues; and research and scholarship bringing sound evidence to bear in a public or policy debate:

1. Conceptual insights and research applications regarding mitigation:

The science of psychology is deterministic, with extensive research demonstrating the role of adverse developmental factors in subsequent negative outcomes in adulthood, including criminal violence. This research, however, was often not effectively brought to bear at capital sentencing. Jurors too often viewed mental health experts as failing to “link up” or establish a nexus between the defendant’s childhood or impairments and his criminal offending. Dr. Cunningham made several fundamental innovations in this regard (see Cunningham, 2008, 2010, 2013, 2016; Cunningham & Goldstein, 2003, 2013; Cunningham & Reidy, 2001). He applied findings from research sponsored by the U.S. Department of Justice and other scholarly sources on the developmental pathway (i.e., risk and protective factors) leading to criminality and violence. He facilitated jury recognition of these by aggregating categories of adverse developmental factors in broader arenas: transgenerational, neurodevelopmental, family and parenting, community, and disturbed trajectory.

Dr. Cunningham also pioneered the use of digital demonstrative aids (i.e., Powerpoint slides) to accompany mental health expert testimony in capital cases. These provided a visual as well as auditory channel to assist jury attention, retention, and understanding of developmental history and associated research findings. Finally, Dr. Cunningham created innovative graphic models, transforming complex concepts into simplified physical representations. Dr. Cunningham not only invariably made extensive use of these innovations in his testimony, but also encouraged their adoption – through his scholarship, workshops for psychologists, and training conferences for attorneys.

2. Violence risk assessment in capital sentencing:

A primary rationale for imposing the death penalty has been a belief that the offender would inflict serious injury or even death on future victims, even in prison, i.e., “once a killer, always a killer.” This issue is a central aspect of the death penalty sentencing statutes in Texas and Oregon, and is available as a statutory or non-statutory aggravating factor at capital sentencing in federal and many state jurisdictions. Further, research studies involving both actual capital jurors and mock capital jurors demonstrate these jurors are concerned with the potential for future violence by a capital offender, regardless of whether this is overtly alleged at trial.
Capital juries are prone to make inferences regarding future violence risk based on factors that have no relationship to actual risk, i.e., the perceived level of remorse, offense viciousness, and personality pathology. Similarly, the factors asserted by prosecutors in arguing certain future violence are also often characterized by illusory correlations.

**The role of base rate data:** Mental health expert testimony regarding the likelihood of future acts of violence by a capital defendant from the resumption of the death penalty in the United States in the 1970s through the mid-1990s had been notoriously unreliable and ethically controversial. This was largely due to the absence of either a reliable methodology or relevant group statistical data (i.e., base rate data) to anchor these predictions. These same deficiencies also drove public policy decisions regarding capital prosecutions, legislative and clemency considerations, and conditions of death row confinement.

Initially in testimony, and subsequently in scholarship and research, Dr. Cunningham articulated a scientifically sound capital risk assessment methodology based on rates and correlates of violence in prison. Though such models had been utilized in other risk assessment arenas, they had not previously been applied to capital sentencing determinations. Dr. Cunningham’s scholarship began with articulating this model and synthesizing research and correctional data (Cunningham & Reidy, 1998b). These base rate data demonstrated that capital offenders were quite unlikely to commit serious violence in prison. Subsequent scholarship refined the applications and implications of this methodology and data (e.g., Cunningham, 2006, 2008, 2010, 2016; Cunningham & Goldstein, 2003, 2013; Cunningham & Reidy, 1999, 2002; Cunningham & Sorensen, 2010, 2014; Cunningham et al., 2010, 2011; Sorensen & Cunningham, 2010). Importantly, Dr. Cunningham and his colleagues undertook original research, some quite large in scale (i.e., \( N = 2,000-50,000 \)), on the rates and correlates of institutional misconduct of capital offenders and other inmate groups (e.g., Cunningham, Reidy, & Sorensen, 2005, 2008; Cunningham, Sorensen, & Reidy, 2005; Cunningham & Sorensen, 2006a, 2006b, 2007a, 2007b, 2010; Cunningham et al., 2010, 2011; Hanlon et al., 2015; Reidy, Cunningham, & Sorensen, 2001; Reidy, Sorensen, & Cunningham, 2012; Sorensen & Cunningham, 2007, 2010; Sorensen et al., 2011).

**Actuarial models:** Dr. Cunningham and his co-investigators articulated actuarial models for prison violence and for prison violence among capital inmates (Cunningham, Sorensen, & Reidy, 2005; Cunningham & Sorensen, 2006, 2007a, 2007b; Cunningham, Sorensen, Vigen, & Woods, 2011). These studies further demonstrated that serious violence among capital offenders in prison was infrequent, extraordinarily so for the life-threatening injury assaults that would have some proportionality to an intervening sanction of death.
Impact of scientifically informed perspectives: Scientifically informed perspectives on violence risk assessment at capital sentencing that Dr. Cunningham pioneered have had significant impact at multiple levels of the capital sentencing process.

Testimony: The research findings and methodology that Dr. Cunningham and his research associates promulgated have acted to increase the reliability of death penalty sentencing in cases throughout the United States. Dr. Cunningham and subsequently other mental health experts anchored their capital violence risk assessments to base rate data and empirically derived correlates, and also testified regarding security measures that could be brought to bear on a case-by-case basis - negating almost any potential for violence. Such testimony not only substantially reduced the trial participation of mental health experts utilizing spurious risk methodology at capital sentencing, but also effectively rebutted prosecution arguments of certain future violence.

Appellate decisions: The evolution toward scientifically-grounded capital risk assessment testimony initiated by Dr. Cunningham culminated in the 2010 decision by the Texas Court of Criminal Appeals in Coble v Texas. This decision held that unsystematic methodologies of violence risk assessment at capital sentencing were not admissible, and favorably cited Dr. Cunningham’s methodology and testimony as curing any associated prejudice. Further, the frequency of assertions of “future dangerousness” as a non-statutory aggravating factor in federal capital cases nationwide has markedly decreased in response to informed testimony regarding these perspectives.

Sentencing commission: As Governor George H. Ryan’s capital sentencing review commission in Illinois weighed the implications of commuting Illinois death-sentenced inmates, a critical consideration was whether these offenders would commit violence if transferred to the general prison population. Dr. Cunningham testified before the commission regarding retrospective studies demonstrating the largely nonviolent prison behavior of commuted death-row inmates in other jurisdictions. Governor Ryan subsequently commuted the death sentences of 163 men and four women who had faced execution in Illinois.

Amicus curiae briefs: Dr. Cunningham was one of five identified consultants in the amicus curiae brief of the American Psychological Association (2005) filed with the U.S. Fifth Circuit in U.S. v Fields, and his publications regarding violence risk assessment at capital sentencing were heavily cited as scholarly authority. He was instrumental in securing the involvement of the Texas Psychological Association (TPA) as one of two amici curiae organizations in Noah Espada vs. The State of Texas, in the Court of Criminal Appeals of Texas (2007). Dr. Cunningham served as the primary consultant in this effort of TPA to create scientific standards for capital risk
assessments. He was cited as authority in the amici curiae briefs of the American Psychological Association and Texas Psychological Association in Billie Wayne Coble v. Texas (2011) in the U.S. Supreme Court.

3. Relationship of offense of conviction and LWOP sentencing to prison misconduct:

An argument advanced by the prosecution in many capital cases is that the offender, if spared the death penalty and sentenced to life-without-parole, will be violent in the future because he “has nothing to lose.” Dr. Cunningham’s research team conducted important projects examining the relationship of offense of conviction and length of sentence to prison violence (Cunningham, Sorensen, & Reidy, 2005; Cunningham, Reidy, & Sorensen, 2005; Cunningham & Sorensen, 2006a, 2006b, 2007; Reidy, Sorensen, & Cunningham, 2012; Sorensen & Cunningham, 2007, 2010). Their findings demonstrated that inmates serving life-without-parole were similarly or less likely to be violent in prison than parole-eligible inmates. Dr. Cunningham and his colleagues have developed actuarially derived risk assessment scales for prison violence among high security inmates, including those serving life-without-parole (e.g., Cunningham, Sorensen, & Reidy, 2005; Cunningham & Sorensen, 2006, 2007a, 2007b; Cunningham et al., 2011).

These studies have had direct public policy impact beyond expert testimony in capital sentencing trials. Dr. Cunningham testified regarding these research data before the Criminal Justice Committee of the Texas Senate in 2005 as this legislative body considered legislation to provide a life-without-parole (LWOP) sentencing option at capital sentencing. Previously, this legislation had failed in the face of assertions by prosecutors that an unmanageable class of inmates would be created (i.e., inmates who had nothing to lose). His testimony and the associated research findings were identified by Senator Eddie Lucio, the sponsor of the bill, as critical to the passage of this legislation – which was signed into law. With the availability of a life-without-parole option, the frequency of death verdicts in Texas capital trials has dramatically fallen.

4. Antisocial Personality Disorder and psychopathy in capital sentencing determinations:

Mental health experts asserting at death penalty sentencing a high likelihood of future violence by the defendant often base this risk appraisal on their classification of the defendant as a “psychopath” or as having an Antisocial Personality Disorder (i.e., the clinical personification of an “evil heart.”) Dr. Cunningham was pivotal in critically analyzing research on the institutional implications of Antisocial Personality Disorder and psychopathy – demonstrating that the primary role these had assumed in risk pronouncements by experts at capital sentencing was not supported by empirical findings (Cunningham, 2006, 2010; Cunningham & Goldstein, 2003, 2013; Cunningham & Reidy, 1998a, 1999, 2002; Cunningham, Sorensen, & Reidy, 2005; Reidy, Cunningham, & Sorensen, 2001). Other researchers
have corroborated Dr. Cunningham’s conclusions.

The conceptual foundation provided by Dr. Cunningham and his colleagues has prompted more rigorous empirical scrutiny by criminal justice researchers of the validity of risk assessment instruments and diagnoses in forecasting institutional violence, more informed testimony by mental health experts, and greater scrutiny of these instruments by courts (see, e.g., *U.S. v Barnette* in the U.S. Fourth Circuit Court of Appeals, 2000, referencing Dr. Cunningham’s testimony).

5. **Capital jury predictive accuracy:**

In *Jurek v Texas* (1976), the U.S. Supreme Court utilized an intuitive analysis in affirming the ability of capital jurors to predict the future violence of a capital offender, and to utilize this as a consideration in death penalty sentencing. Dr. Cunningham and his colleagues (Cunningham, Sorensen, & Reidy, 2009) conducted “clinical trials” involving federal capital defendants to test this assumption, finding that the predictions of these jurors were no better than random guesses. Subsequently, Dr. Cunningham and colleagues investigated the accuracy of Texas (Cunningham et al., 2011) and Oregon (Reidy, Sorensen, & Cunningham, 2013) capital jury predictions of future violence, with the same results. These findings have profound public policy implications, as “future dangerousness” is an available aggravating factor in most jurisdictions providing for the death penalty. This future violence question is a “special issue” in Texas, the jurisdiction with the highest execution rate; a question that must be answered affirmatively in order to sentence an offender to death. It is also an available statutory or non-statutory aggravating factor at capital sentencing in many other jurisdictions.

Courts in Texas, Oregon, and elsewhere are beginning to hear challenges to “future dangerousness” as a capital sentencing determination. Dr. Cunningham has provided testimony or affidavits in a number of these cases. These challenges draw on the illumination of science that Dr. Cunningham has directed on this long-entrenched and often notorious consideration. To date, the courts hearing these challenges have demurred, setting this issue aside and citing the controlling precedent of *Jurek*. The U.S. Supreme Court has not granted cert in reviewing this decision. Should the U.S. Supreme Court revisit *Jurek* in light of the “clinical trials” of jury predictive capability published by Dr. Cunningham and his colleagues, hundreds of death-sentenced inmates nationwide, who were sentenced under this speculative consideration, may have their sentences commuted or secure new sentencing hearings.
6. Conditions of confinement for death-sentenced inmates:

Embodying a mythology of enduring evil and dangerousness, death-sentenced inmates nationwide are typically held in segregated, isolated, psychologically arduous conditions under a security rationale. Dr. Cunningham and his research colleagues tested this rationale by conducting the first empirical validation of an innovative 11-year policy (1991-2002) of the Missouri Department of Corrections of “mainstreaming” death-sentenced inmates in the general prison population of a maximum-security prison rather than segregating them on a death row (Cunningham, Reidy, & Sorensen, 2005; Cunningham, Sorensen, & Reidy, 2005; Lyon & Cunningham, 2006). Dr. Cunningham and colleagues have recently published a replication and extension of this investigation (Cunningham, Reidy, & Sorensen, 2016, in press). These studies demonstrate that death-sentenced inmates are no more likely to be violent in general population than inmates sentenced to life or parole-eligible terms. This has enormous Constitutional and public policy implications. If death-sentenced prisoners are not a disproportionate risk of serious violence in prison, then their confinement under draconian super-maximum conditions does not serve a legitimate penological interest and arguably represents a violation of the Eighth Amendment bar against cruel and unusual punishment (see Lyon & Cunningham, 2006; Cunningham et al., 2016).

These studies were extensively cited by a brief in *amicus curiae* in *Alfred Prieto* in the U.S. Fourth Circuit Court of Appeals, as well as in other litigation (e.g., *Thomas Porter, et al., vs. Harold C. Clark et al.*). After initial vigorous resistance, in the face of the scientific illumination, the Virginia Department of Corrections recently substantially reduced the isolation and deprivations in their confinement of death-sentenced offenders in Virginia. Dr. Cunningham consulted with Porter’s counsel and filed a declaration in this litigation.

7. Intellectual disability (Atkins) assessments at capital sentencing:

In *Atkins v. Virginia*, the U.S. Supreme Court held that it was unconstitutional to execute persons with mental retardation (now intellectual disability). Courts in some jurisdictions have responded by attempting to narrow eligibility for this exemption, imposing restrictions beyond clinical diagnostic criteria. Dr. Cunningham has been a central scholar in disseminating psychometric considerations that have served to guide public policy away from IQ score “bright line” and other restrictive determinations of intellectual disability in death penalty cases. He was cited as authority in the American Psychological Association *amicus curiae* brief filed in the U.S. Supreme Court in *Hall v. Florida*, as well as in the American Association on Intellectual and Developmental Disabilities (AAIDD) *amicus curiae* briefs in *Juan Lizcano v. Texas* (2015) and *Moore v. Texas* (2017). Earlier this year, the U.S. Supreme Court in *Moore v. Texas* turned aside the restrictive *Briseno* criteria that had been crafted by the Texas Court of Criminal Appeals. In this decision, the U.S. Supreme Court cited a peer-reviewed paper Dr.
Cunningham coauthored (Macvaugh & Cunningham, 2009). This article was the first to propose recommendations for best practices for intellectual disability evaluations at capital sentencing. In that paper, Dr. Cunningham had critiqued the *Briseno* criteria. Previously, Dr. Cunningham was one of the early scholars in asserting that “best science,” rather than prevailing practice, was the standard for whether to correct IQ scores for norm-obsolescence in capital cases (see Cunningham & Tassé, 2010). He was a coauthor of a chapter in an edited text published by AAIDD on professional issues in *Atkins* assessments (Macvaugh, Cunningham, & Tassé, 2015). His involvement in over 35 *Atkins* cases throughout the United States has further informed trial and appellate courts of important psychometric science considerations in interpreting intelligence test scores.

8. *Self-representation capability of Mississippi death row inmates:*

Indigent death row inmates in Mississippi had not been provided with state-funded attorneys at a critical stage of their appeals. At the request of the Southern Poverty Law Center, Dr. Cunningham and Dr. Mark Vigen systematically evaluated the competency of these condemned inmates to represent themselves in state post-conviction proceedings (Cunningham & Vigen, 1999). By comprehensively assessing the intellectual capabilities, literacy level, psychological status, specific knowledge of post-conviction law, and legal aptitude of inmates on Mississippi’s death row, Drs. Cunningham and Vigen irrefutably established that these prisoners were wholly deficient to represent themselves.

Soon after being informed of the findings of this study through an extensive affidavit that Dr. Cunningham prepared, the Mississippi Supreme Court in a parallel case *reversed* its prior rulings and found that death row inmates did not have the capability to represent themselves in state post-conviction efforts, and thus their meaningful access to the courts did entail a right to appointed and state-funded representation in post-conviction proceedings. This was the *first* such ruling by a high court in the United States. The research findings of Drs. Cunningham and Vigen were credited for this highly significant change in public policy and advancement of social justice.

9. *Death row inmate characteristics, adjustment, and confinement:*

Dr. Cunningham and Dr. Vigen coauthored the first comprehensive critical review of research regarding death row inmates (Cunningham & Vigen, 2002). Dr. Cunningham updated this literature review (Cunningham, 2013) in examining the special institutional needs of these offenders. These literature reviews examined both demographic descriptive data and clinical studies. As such, they are an
important contribution to psychologists, correctional professionals, and public policy makers regarding these offenders.

10. Competency for execution:

Scott Panetti is a Texas death row inmate with a long history of severe mental illness. With Mr. Panetti’s execution imminent, Dr. Cunningham agreed to a pro bono emergency evaluation to determine whether he was competent for execution. Dr. Cunningham's report resulted in a stay of the execution. Conceptualizations Dr. Cunningham articulated in testimony in an evidentiary hearing in federal district court regarding the role of a rational as well as factual appreciation of the impending execution, became the primary focus of an appeal, and eventually led to review by the United States Supreme Court in Panetti v. Quarterman (2007). Counsel for Mr. Panetti observed:

While we called three other forensic psychiatrist and psychologists, Dr. Cunningham alone recognized a fundamental conceptualization that was ultimately essential to the issue being considered by the Supreme Court – that Mr. Panetti acknowledged that his execution by the State of Texas was pending, but believed that this was the State “under false colors” and not as a lawfully constituted authority (i.e., factual but not rational awareness of the reason for his execution). In a rather complex legal issue, Dr. Cunningham’s thoroughness, generosity, and sharp and clear analysis may well be responsible for a new standard for competency to be executed. (Keith Hampton, Esq., 05/31/07)

The Supreme Court did in fact subsequently hold that death row inmates must have a rational as well as factual appreciation of the impending execution. This reflected the first elaboration of the Court regarding standards for competency for execution in over 20 years. Both the majority and the dissent cited Dr. Cunningham in this decision.

11. Differentiating delusional disorder from the radicalization of extreme beliefs:

Threat assessment professionals and forensic mental health experts face a challenging differential in determining whether a potential violent actor or post-violence defendant suffers from a delusional disorder or is simply radicalized in his extreme religious or political beliefs. No published model for analysis (i.e., structured professional judgment, SPJ) has been available to aid in systematically distinguishing these cases or promoting transparency in associated reports and testimony. In a model of analysis (SPJ) developed by Dr. Cunningham, seven primary arenas of analysis were distilled from scholarship regarding features of delusions and delusional disorder: belief content; belief style; subjective distress and social dysfunction associated with the belief; social influences in belief formation, maintenance, and behavior; social inclusion; prodromal factors; and behavioral/action factors. Seventeen factors are specified for operationally defining and
qualitatively describing the seven primary arenas of analysis. Within each factor, features may be specified that further disaggregate the analysis (see Cunningham, 2018). This SPJ tool is termed: Model of Analysis for Differentiating Delusional Disorder from the Radicalization of Extreme Beliefs – 17 Factor (MADDD-or-Rad-17).

**B. Helping people make sense of complex scientific issues:**

1. *Professional issues and ethical considerations in capital cases:*

   Capital sentencing evaluations are ethically complex, with profound implications for the constitutional rights of the defendant. Dr. Cunningham’s contributions are the primary scholarship in the field, articulating the ethics and Constitutional complexities, the associated requirements for informed consent, and the heightened practice standards of best science in conducting these evaluations of ultimate gravity. He is the invited author of a text (Cunningham, 2010) on evaluations at capital sentencing, an edited volume in the “Best Practices in Forensic Psychology” series published by Oxford University Press. His scholarship articulating ethics, practice, and Constitutional considerations of mental health evaluations at capital sentencing further includes eight edited book chapters (Cunningham, 2008, 2013a, 2013b; 2016; Cunningham & Goldstein, 2003, 2013; Cunningham & Sorensen, 2014; Macvaugh, Cunningham, & Tassé, 2015) and four peer-reviewed papers (Cunningham, 2006; Cunningham & Reidy, 2001; Cunningham & Tassé, 2010; and Macvaugh & Cunningham, 2009). Dr. Cunningham has also contributed to advancements in the standard of practice by illustrating the applications of science in model capital sentencing and capital risk assessment reports in forensic psychology texts (Cunningham, 2002a and 2002b, in Heilbrun, Marczyk, & DeMatteo (Eds.); Cunningham, 2007, in Conroy & Murrie (Eds.); and Cunningham 2014, in Heilbrun, DeMatteo, Holliday, & LaDuke (Eds.)). These reflect only the scholarship addressing best practices in capital sentencing evaluations. He has over 60 scholarly publications in total, many providing scientific findings to illuminate these determinations.

2. *Impact of scholarship on the scientific literature:*

   Dr. Cunningham’s research and scholarship has had significant impact on the field. His scholarship has been cited in 1,179 scientific articles and texts.

3. *Contributions to the standard of practice by training of psychologists and psychology students:*

   Dr. Cunningham has been actively involved for almost two decades in the training of psychologists regarding their evaluations in capital cases. He has presented at 22
regional or national conferences or trainings for psychologists and psychology students. These include full-day workshops regarding capital sentencing evaluations under the auspices of the American Academy of Forensic Psychology, as well as presentations at American Psychological Association and American Psychology-Law Society conferences. He was the 2009 Spring Symposium speaker for graduate psychology students at Sam Houston State University and the invited scholar for the 2013 Goldman Trust Colloquium at Oklahoma State University. In scholarly literature since 1998, Dr. Cunningham has been among the most heavily published psychologists regarding capital sentencing issues and death row inmates. His workshops, invited addresses, and publications have resulted in his conceptualizations and research findings becoming familiar to hundreds of informed forensic mental health experts practicing in the capital sentencing and capital violence risk assessment arenas throughout the United States.

4. Disseminating sound science through amici curiae (i.e., friend of the court) briefs:

Dr. Cunningham has been a primary consultant or cited authority in amici curiae briefs regarding capital violence risk assessment and determinations of intellectual disability in capital cases. These include the following:

Consultation and assistance in preparation of:


Cited as authority:

Moore v. Texas (2017), in the Supreme Court of the United States.

Brief of Amici Curiae, American Association on Intellectual and Developmental Disabilities (AAIDD) and the ARC of the United States, In Support of Petitioner, Bobby James Moore v. Texas, No. 15-797, in the Supreme Court of the United States (2016) on Petition for a Writ of Certiorari to the Court of Criminal Appeals of Texas.


C. Evidence of importance of contributions:

As testament to his seminal contributions in illuminating forensic mental health determinations with science, Dr. Cunningham has been recognized with the:

*International recognition:*

- Commendation – John Maddox Prize

*National recognition:*

- American Psychological Association Award for Distinguished Contribution to Research in Public Policy
• American Correctional Association Peter P. Lejins Research Award

• National Register of Health Service Psychologists Alfred M. Wellner, Ph.D. Lifetime Achievement Award

• Fellow of the American Psychological Association (Division 41)

• National Association of Sentencing Advocates John Augustus Award

• American Psychology-Law Society Book Award [shared with editors and chapter authors]

*Regional recognition:*

• Texas Psychological Association Award for Outstanding Contribution to Science
Biographical Information

Dr. Cunningham is a clinical and forensic psychologist, and independent research scientist. His offices are in Seattle, Washington and his practice is national in scope. Dr. Cunningham is licensed as a psychologist in 17 states. He is board-certified in both clinical psychology and forensic psychology by the American Board of Professional Psychology (ABPP), and is a fellow of the respective academies. Dr. Cunningham earned his Ph.D. in clinical psychology from Oklahoma State University. He did postdoctoral study at the Yale University School of Medicine, where he received the Al Brown Memorial Award as the outstanding trainee. He was an active duty naval officer and clinical psychologist during the first several years of his professional career. During this tenure, he was decorated with a Navy Commendation Medal. His scholarship and professional practice have subsequently been recognized with regional, national, and international awards. For many years, Dr. Cunningham was heavily engaged in the delivery of clinical mental health services, with an evolution toward providing forensic consultations across the course of his career.