PHIL WOLFSON, M.D., AND GLENN HARTELIUS, Ph.D., have edited a new book entitled, The Ketamine Papers: Science, Therapy, and Transformation, published by the Multidisciplinary Association for Psychedelic Studies (MAPS). Ketamine is a Schedule 3 prescription drug that has been safely used in anesthesia for decades. Many years ago, it was discovered that as anesthesia wore off, patients were having unique and often disturbing psychedelic effects for which they were unprepared. These effects were dubbed an “emergent syndrome.” This propensity of ketamine to occasion psychedelic experiences was pursued and used in psychedelic psychotherapy following the lead of the Mexican psychiatrist Salvador Roquet. In one of the many illuminating chapters of The Ketamine Papers, Richard Yensen recounts his direct experience with Roquet’s methods and describes their evolution in psychedelic practice.

With the familiarity that arises from widespread applications, anecdotal information indicated that ketamine produces relief from depression. This was pursued in the late 1990s and thereafter by researchers at the National Institute of Mental Health, who made every effort by reducing dosage to exclude the psychedelic effects but still produce an antidepressant response.

Wolfson and others have come to understand from their practice that while psychedelic effects may not be necessary for the antidepressant response, if you eliminate them entirely then you lose the therapeutic effect. At a minimum, a state of dissociation, or what Wolfson describes as a “trance,” appears to be both necessary and desirable. It is necessary to use a sufficient dose of ketamine that occasions a full immersion experience in order to benefit from its available therapeutic effects.

Pharmaceutical approaches to treat depression have met with limited success over the preceding decades. Ketamine’s addition to the psychiatric toolbox has therefore been hailed as an important breakthrough. The current generation of doctors and psychotherapists have pioneered new uses for ketamine which can provide opportunities for drug treatment and psychotherapeutic work. These uses are considered to be “off label.” That is to say, the drug is being used for applications that were not specifically indicated for the molecule as an anesthetic agent, for which it was originally given Food and Drug Administration (FDA) approval. At sub-anesthetic dosages, that produce at least a trance effect on recipients, ketamine has been increasingly revealed to be effective in the treatment of severe and unresponsive depression, suicidality, PTSD, and other psychiatric diagnoses, as well as for treating addiction and drug dependencies (specifically alcoholism and opioid dependency).

Some of ketamine’s more profound effects, which are generally occasioned at higher but sub-anesthetic doses, include the simulation of a near-death experience, the complete dissolution of the identity of the participant, and visionary states that can occur with other psychedelic molecules. Given the potentially profound and singular nature of the ketamine psychedelic experience, the meaning-making that can be de-
rived from such experiences can effect a radical transformation of an individual’s worldview.

The contributors to this book weigh in on their fruitful personal experiences regarding how to use the material (dose and delivery system), and their clinical strategies for ketamine psychotherapeutics. *The Ketamine Papers* provides an exposition of how this unique molecule can specifically be used in clinical settings to ameliorate difficult states of mind, by relaxing and enabling recipients to be more receptive to compassion and understanding for themselves and others. The book provides a clear exposition of the different protocols utilized for ketamine. Physicians and lay persons looking for an understanding of this new and controversial set of methodologies will benefit from a careful read of the collected papers in this book.

Ketamine’s potential lies in its ability to catalyze individual transformation. The primary effect of ketamine seems to be its ability in recipients to shift their awareness from one fixated mind-state or perspective to a new one. Hopefully and usually, this kind of paradigm shift leads to a more enlightened view of their human condition. With adequate attention given to set and setting in its application, this can lead to better personal behavior. A radical shift of awareness can break the cycle of depression. A paradigm shift of awareness can also bring a person into a new relationship with their addictions. Users have reported that ketamine can also occasion profound non-dual and transpersonal experiences that provide them with a deeper understanding of their place in the world. Our evolving relationship with consciousness as revealed with this unique molecule may move us towards greater sensitivity, awareness, and compassion for ourselves and our fellow travelers on the planet.

Transformation can be either personal or political. The journey of transformation implies that we are capable of moving from one state to another. Sometimes with this perceptual shift comes the ability to stay in that new awareness. We are able to overcome the constraints of past inertia, habit and the “rubber band effect” (which describes how after an expansion we tend to go back to where we started). Political transformation of unjust systems, or personal transformations out of depression or addiction, may be aided by particularly potent catalysts. Ketamine may be a unique molecule that provides individuals with an experience which so powerfully shifts their awareness that it can, with the proper support, provide a tool for individual transformation.

Although there has been much publicity recently about the possible beneficial transformative powers of currently illegal psychedelic drugs such as MDMA, DMT, LSD, and psilocybin, today ketamine is the only psychedelic drug that can currently be legally administered and prescribed by physicians. All of the other psychedelic drugs are confined to Schedule 1, and thus their use outside of research is prohibited and criminalized. Recently a small number of these Schedule 1 molecules have been studied in tightly controlled research settings. Psilocybin and MDMA (the latter research being sponsored by MAPS) are the first of these medicines to be put through a rigorous screening process by the FDA after decades of suppression. All the while, many tens of millions of people worldwide use psychoactive substances to explore their awareness, in spite of the risk that their actions could land them in jail. What makes the ketamine molecule unique is that it is the only potentially transformative catalytic (psychedelic) now available for use by the medical community.

Ketamine is also unique among psychedelic materials because it is relatively short-acting. A ketamine experience generally lasts 25 minutes to an hour, with another hour or more needed for recovery to baseline. Intravenous sessions run 45 minutes to an hour, and occasion the trance experience. Ketamine-Assisted Psychotherapy (KAP) sessions tend to run three hours, which covers the arc of an initiation or induction, the direct experience of the medicine, and recovery and integration.

Wolfson describes how ketamine works as follows: “A ketamine psychedelic experience tends to offer up the possibility for transformation of the self by isolating the mind to some extent from external sensations, altering body consciousness towards an experience of being energy without form, and by amplifying the contents of mind in unpredictable ways—all of this generating the potentiality for changes in consciousness that may be beneficial and persistent.”

Ketamine research has shown that the substance creates a high degree of neuroplasticity in rats. This may explain the so-called “cumulative effect” in humans that produces transformative results from multiple sessions in a relatively short time frame, often just two weeks. One attribute of neuroplasticity is the physical remodeling of the brain by dendritic shifts. It may be that the ability to occasion a shift in consciousness while under ketamine’s influence and its aftermath contributes to optimistic neuroplasticity among the challenging mind states such as depression, PTSD, and addiction. Ketamine seems to allow these uncomfortable diseases to be felt in their origins and subsequently relaxed and re-contextualized. As recipients of ketamine move forward, what was previously experienced as a “hell realm” may be released as another variant in the flow of mind states that spontaneously and constantly arise and pass away. There arises the visceral experience that these impacted mind states can be loosened and not felt as inevitable and intrinsic parts of the self. Instead, they can be experienced as transitory and impermanent.
Many of the book’s contributors describe how an individual’s experience of the ketamine mindstate can provide a doorway to another mode of seeing and being. Patients have reported that with a single session of ketamine, persistent and previously untreatable depressions and suicidal intentions have gone away. In some cases the transformative capacity of the ketamine experience needs to be contextualized and grounded within a longer-term guided psychospiritual healing process. In other practices, low dose applications of ketamine used repeatedly over time have been shown to be effective for treatment-resistant depression and other emotional difficulties by means of a straight forward application of the molecule itself, in medical settings, without a psychotherapeutic component. The Ketamine Papers expands on all of these applications.

For a transformative catalyst to have widespread clinical applications, it must also be economically viable. The cost for the molecule and its delivery has to reasonable, especially in this case, as at this stage ketamine therapy is not covered by insurance. The cost of all attending doctors, psychotherapists, nurses, and other caregivers has to be within the economic reach of those who are seeking treatment. In the cases of MDMA and psilocybin, these molecules require from four to eight hours of dedicated care. We must consider the delivery cost for any medicine if it is to find widespread prescription use. All the ketamine delivery options can be delivered at a reasonable cost. As the market for this new psychiatric medicine widens we would expect to see delivery costs fall. Ketamine itself is an inexpensive generic medicine, costing only a few dollars for a dose.

It appears that we are entering a new era in which our understanding of the relationship between neurochemistry, mind-states, and behavior is rapidly expanding. The careful observations of the clinical community have revealed that there are existing psychoactive molecules that possess underappreciated primary effects which can aid in transformation and relieve suffering. We are just at the beginning of a journey towards deeper understanding of the class of pharmaceuticals which Ralph Metzner has called “allies for our awakening.” The editors and contributors to The Ketamine Papers are to be applauded for their trailblazing efforts in bringing us a renewed vision of the ketamine molecule as an important ally for the therapeutic community, one which can provide relief for impacted mind-states, offer deep meaning-making possibilities, and serve as a catalyst for growth and transformation of consciousness.

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**The Ketamine Papers: Science, Therapy, and Transformation**

**About the Editors**

Phil Wolfson, M.D., is Principal Investigator for a Phase 2, FDA approved 18-person study of MDMA-Assisted Psychotherapy for individuals with significant anxiety due to life threatening illnesses. His clinical practice with ketamine has informed his role in the development of Ketamine Assisted Psychotherapy. Phil is a sixties activist, psychiatrist/psychotherapist, writer, practicing Buddhist and psychonaut who has lived in the Bay Area for 38 years. He is the author of Noe: A Father-Son Song of Love, Life, Illness, and Death (2011, North Atlantic Books). In the 1980s, he participated in clinical research with MDMA (ecstasy). He has been awarded five patents for unique herbal medicines. He is a journalist and author of numerous articles on politics, transformation, psychedelics, consciousness and spirit, and was a founding member of the Heffter Research Institute. Phil has taught in the graduate psychology programs at JFK University, CIIS and the UCSF School of Medicine Department of Psychiatry.

Glenn Hartelius, Ph.D. is Founding Director of the Ph.D. in Integral and Transpersonal Psychology at the California Institute of Integral Studies (CIIS) in San Francisco, where he serves as Associate Professor. He is also leading an initiative to develop a new research facility at CIIS for research in whole person neuroscience. Glenn is main editor for the International Journal of Transpersonal Studies, a peer-reviewed academic journal. He is co-editor of The Wiley-Blackwell Handbook of Transpersonal Psychology, and Secretary of the International Transpersonal Association. His research on the definition and scope of transpersonal psychology has helped to define the field. He is developing a model of attention and how to manage it in lived experience that is designed to simplify complex skills such as meditation, sustained focus, and leadership presence. He has also taught at the Institute of Transpersonal Psychology, Naropa University, Saybrook University, and Middlesex University in the UK.