

JUNE - JULY 2021

# CURRENT REPERTOIRE



## ETHICS in Professional Practice Conference Friday, August 6

Cape Ann, Beverly, MA

### INSIDE THIS EDITION

A Note from our Executive Director, Rob Holdsambeck	2	"Who Are You Going to Believe, Me or Your Own Eyes" by Thomas Zane	10
What Do We Do at Our Annual Meeting of the Trustees?	3	FAMILIAR FACES in NEW PLACES - Trustees Terry McSwen & Angelica Grindle at DEKRA	12
MEANINGFUL DIFFERENCES - A contribution from TV Joe Layng	5	Memorable Annual Meeting Moments by Rebekah Pavlik	13
Thank You to Our Sponsors - Melmark & Bierman ABA	7	IMPORTANT Upcoming Events 14-15	
HISTORIANS' CORNER - "Mirror, Mirror on the Wall" by Andy Lattal	8	WAYS YOU CAN HELP	16

### CONFERENCE DATES

#### Friday, August 6

9th Annual Ethics in Professional Practice Conference

#### Saturday, August 7

Annual Meeting of the Trustees 2021 following our Ethics Conference in MA

#### August 17-19

Behavioral Safety Now is now part of Safety in Action - DEKRA

#### Friday, November 12

3rd Behavioral Science: Applications in Leadership & Supervision Conference

# A Note from our Executive Director

## Celebrating Our Past and Investing in Our Future



The Cambridge Center for Behavioral Studies™ is a nonprofit organization that harnesses the expertise of hundreds of behavioral scientists to solve problems in the home, school, community, and the workplace. As we celebrate our 40th anniversary this year we invite you to [noodle around our website](#) and get a feel for all the interesting things that are happening. Our annual [August Ethics conference](#) is just around the corner, and we are hoping to see many of you there. As luck and the generosity of Endicott College would have it, we will be using a large facility. Distancing attendees should be an easy process. The

one-day conference will be followed by our [Annual Meeting of the Trustees on Saturday morning](#). Both events will be “hybrid” so if you do not yet feel comfortable traveling, you have options. We all owe a big round of support and applause to Dr. Mary Jane Weiss for taking the lead and doing the heavy lifting. CHEERS!

I’m pretty sure many of you reading this newsletter have not recently attended one of our annual trustee meetings and might not even understand its purpose. When I attended my first, it was cool to look around the room and see Murray Sidman, Beth Sulzer-Azaroff, Aubrey Daniels, Hank Pennypacker, Kurt Salzinger, Phil Himeline, Sigrid Glenn and others that to me, were incredibly important to our field. Dwight Harsbarger was our Executive Director and it was clear to me, I wanted to be as involved as I could. The purpose of our annual meeting is to gather the voting members (trustees), some interested non-voting members (advisors) and select guests to hear about the activities of the center. Our trustees confirm our board of directors and vote on accepting new trustees when openings

occur. (We are limited by charter, to 75 trustees). They are also there to welcome and confirm new advisors and distinguished scholars. Trustees who are unable to attend select a proxy to cast their ballots. This is an important function as it allows us to confirm a quorum. Once the voting is over, we spend some time “looking under the hood” of our center to see how well or poorly we did in meeting our goals and maintaining fiscal solvency. During this time, various trustees conduct short briefings on the center projects they have been leading. It is a great way to learn about what we do and to join in, when a project suits your talents (or just your interests). In years past, we had lots of time to socialize, catch up with old friends and to make new ones. My sincere hope is that we get back to that model soon. Our August meeting will be the first small steps in that direction. Please join us any way that you can.

*Rob*

**Rob Holdsambeck, EdD, LCP, BCBA-D**  
Executive Director, CCBS  
Founder, Holdsambeck Behavioral Health

## In-Person Fun 2019 Annual Meeting of the Trustees





# What Do We Do at Our Annual Meeting of the Trustees?

## One Thing is We Vote!

**Trustees, Advisors and Friends of the Center are invited to attend!** Our meeting provides an in-depth look at us — what we are doing and where we are headed to achieve our mission.

It is also the time that our voting members, our Trustees, elect new Trustees and Advisors to the Center to help us achieve our mission.

We also welcome our new and returning members of our Distinguished Scholar group.

[Learn more about our Annual Meeting and register through a donation - attend in-person or via webcast - for Saturday, August 7.](#) If you missed it, we are meeting at Endicott College in MA following our [Ethics in Professional Practice Conference](#). Come and attend both!

We welcome  
**ALL** at our  
Annual Meeting of  
the Trustees

### Nominated Trustees

LR: Tara Fahmie, PhD, BCBA-D; Eric V. Larsson, PhD, LP, BCBA-D;  
Kerri Milyko, BCBA-D, LBA (NV)



### Nominated Advisors

LR: Nicole M. Davis, PhD, BCBA, LABA; Marcin Nazaruk, PhD;  
Catherine Williams, BS, BCBA (Soon to be PhD!)



[Read their biographies on behavior.org.](#)

### Our 2021-2022 Distinguished Scholars (\*New & Returning)

LR: **Abigail Blackman, MS, BCBA**, University of Kansas; **Maya Fallon, BA, BCBA**, University of Nebraska Medical Center; **Nicole Kanaman, MA, BCBA**, University of Kansas; **Matthew Laske, BS**, University of Kansas; **Alyssa McElroy, MA, BCBA, LBA** Western Michigan University  
2nd Row LR: **Alyssa Rojas, BS, BCBA**, University of South Florida; **Kristen Rolf, MEd**, Utah State University; **Ashley Romero, MA, BCBA**, University of Kansas; **Andressa Sleiman, MS, BCBA**, University of Florida; **Valeria Squatrito, MA**, Kore University, Enna (Italy)



### LEADERS



**Chair:**  
Michael Kranak, PhD,  
BCBA-D



**Outgoing Chair:**  
Mary Sawyer, PhD,  
BCBA-D

# 2021 Annual Meeting of the Trustees Saturday Morning, August 7

Endicott College Campus  
Beverly, MA or  
through webcast



**REGISTER  
In-Person or Webcast**

We have moved our 2021 Annual Meeting of the Trustees to Saturday, August 7, as a half-day, morning event, on the Endicott College campus in Beverly, Massachusetts.

Our meeting will follow our [9th Annual ETHICS in Professional Practice Conference on Friday, August 6](#).

During the meeting, we discuss our many programs and initiatives — accomplished and planned.

We are hoping that some of you may want to come to one or both August events in person, but we also have a webcast to broadcast simultaneously.

If you are planning to attend in person, the Wylie Conference Center affiliated with Endicott College, still has a few rooms available. <https://www.wyliecenter.com>

We do not have a formal roomblock available given the uncertainty of future travel, but there are lots of choices in the Cape Ann region: <https://goo.gl/maps/keskdkcvsgQM7xSq7>

We look forward to your participation as a **Trustee, Advisor, Distinguished Scholar or Friend** of the Cambridge Center.

Come enjoy a New England lobster and all Cape Ann has to offer. [Find out more about Cape Ann through Travel & Liesure.](#)



**\*Meet the Standard Celeration Society  
mascot - Almafie the CHART Hound**



**Support our Partner  
Attend [Charting in Autism](#) in July**

# Meaningful Differences

## After Wandering 40 Years in a Linear Desert, Are We Ready to Emerge? The Meaningful Difference of Israel Goldiamond

In the Forward to an upcoming book Andronis and Layng recently wrote, "Goldiamond lived in, and distinctively saw a world of behavioral contingencies. He not only spoke about contingencies, he lived them and perceived them with a unique clarity." He saw that behavior was a function of (mostly) nonlinear consequential contingencies, and that to understand behavior is to understand the contingencies, and their history, of which the behavior is a part. Though Goldiamond's work has implications for both basic and applied behavior analysis, the work has had its primary impact in the clinic.

Goldiamond's background in psychophysics and decision theory contributed to what became nonlinear contingency analysis (NCA). The behavior of interest was not only under control of its consequences, but of the consequences of the available alternative behaviors, and further, those consequences came in packages. Both aversives and reinforcers were involved, or what patients understood as costs and benefits. One has to consider the costs and benefits for the behavior of interest and its alternatives to understand its function. This analysis results in a matrix of relations whose resolution determines the behavior of interest, clinically designated as the presenting complaint or disturbing behavior. The examination of alternatives reveals the disturbing behavior to be a rational outcome of the matrix and is adaptive, not maladaptive nor dysfunctional. Intervention must consider these nonlinear matrix relations.

But there was more. Other sets of contingencies occurring at different times or places were frequently found to potentiate the consequences found in the matrix of which the disturbing pattern was a part. Interventions focused on these "systemic" relations resulted in a change in the disturbing pattern without it being directly targeted. Rumination, phobias, outbursts, self-injury, among other behaviors, would "drop out" without being addressed. His approach was entirely constructional. The goal was never to decelerate behavior or remove a consequence, it was to "establish behavior the absence of which is the problem." Many of today's ethical controversies could be resolved by adopting this Constructional Approach.

Few therapies or approaches available today employ a nonlinear analysis and are left trying to account for behavior in a Linear A-B-C analysis. This results in investigators employing a range of inferences or hypothetical constructs or private meditational variables. This is particularly true where C appears solely to involve costs or is absent. Goldiamond showed how to understand behavioral complexity and how to make sense out of seemingly irrational or costly behavior. Nonlinear analysis is as important today as when it was first developed over 40 years ago.



by Trustee  
T.V. Joe Layng, PhD

For readers interested to learning more about Goldiamond and his work a good place to begin is Layng, T. V. J. (2009). The search for an effective clinical behavior analysis: The nonlinear thinking of Israel Goldiamond, *The Behavior Analyst*, 32, (1) 163-184. It contains a rich source of references to Goldiamond's work. To understand Goldiamond's approach to emotions see Layng, T. V. J. (2017). Private emotions as contingency descriptors: Emotions, emotional behavior, and their evolution. *European Journal of Behavior Analysis*, 18 (2), 168-179. <http://dx.doi.org/10.1080/15021149.2017.1304875>, which has its foundation in his research and insights.

A detailed and updated introduction to Nonlinear Contingency Analysis and the Constructional Approach, is provided by Layng, T. V. J., Andronis, P. T., Codd, R. T., & Abdel-Jalil, A. (2021). *Nonlinear Contingency Analysis: Going beyond cognition and behavior in clinical practice*. London, UK: Routledge, Taylor & Francis Group (available October 2021). The forthcoming book in the ABAI book series *A Programming Contingency Analysis of Mental Health* by Israel Goldiamond, written in the early 1980s, is a comprehensive treatment of patterns clinical interest that is as relevant today as it was 40 years ago.

---

"Meaningful Differences" is a new, recurring newsletter section where CCBS Directors and Trustees recommend an article, chapter, or book that had a meaningful impact on them. And now, hopefully an impact on you. Thanks Directors Andy Bondy and Janet Twyman for the idea. If you have a recommendation for "Meaningful Differences," [contact the Center](#).



Cambridge Center for Behavioral Studies™ in cooperation with Endicott College is proud to present

9th Annual

# ETHICS in Professional Practice

**Friday, August 6, 2021**

8:30 am ~ 5:00 pm

Endicott College Campus or  
Remote Access  
Beverly, Massachusetts

**[www.behavior.org](http://www.behavior.org)**

**REGISTER NOW**

## A HYBRID EVENT

A smaller in-person gathering with  
electronic options for virtual attendance.

[Info found on our event listing on behavior.org](http://www.behavior.org)

**Behavior Analysts • Psychologists • Speech-Language Pathologists • Teachers  
Special Education Providers • Parents & Caregivers**

A one-day live online conference features leaders in the fields of Psychology, Business, Autism & Applied Behavior Analysis.

## Invited Speakers



### **Andy Bondy, PhD**

President & Co-Founder  
Pyramid Educational Consultants (PECS)  
Vice Chair Board of Directors  
Cambridge Center for Behavioral Studies



### **Gerald P. Koocher, PhD, ABPP**

Senior Associate in Psychology  
Boston Children's Hospital  
Senior Lecturer, Department of Psychiatry and Behavioral  
Sciences & Faculty Member  
Center for Bioethics, Harvard Medical School



### **Janet S. Twyman, PhD, BCBA, LBA**

Founder  
blast: A Learning Sciences Company

## Panel



### **Moderator**

### **Mary Jane Weiss, PhD, BCBA-D, LABA**

Director, Graduate Program in Autism/ABA Studies  
Endicott College



### **Brian Connors, PhD, BCBA**

BRIAN CONNORS, BCBA, LLC  
Speaker, Consultant, Author



### **Ksenia Gatzunis, PhD, BCBA-D**

Adjunct Faculty, Endicott College & Northeastern University

**Kimberly Edwards, MEd**, National Certified Speech-Language Pathologist

**Adriana Rodriguez, MA, BCBA**, St. Lucie County Public Schools



### **Susan G. Friedman, PhD**

Professor Emeritus, Department of Psychology  
Utah State University  
Founder, Behavior Works

# ETHICS in Professional Practice Conference

## Sponsors



[Melmark](#) is a multi-state human service provider with premier private special education schools, professional development, training, and research centers in Pennsylvania, Massachusetts and the Carolinas. The not-for-profit organization provides clinically-sophisticated evidence-based special education, residential, vocational and therapeutic services for children and adults diagnosed with autism spectrum disorders, developmental and intellectual disabilities, acquired brain injuries, medical complexities, and other neurological and genetic disorders. [Melmark](#)'s applied behavior analytic programs are offered in the least restrictive environment possible.

[Melmark](#) is committed to providing exceptional applied behavior analytic services to every individual, every day. With a vision to expand and raise the quality of service delivery systems throughout the country by disseminating and replicating the Melmark Model of Program Development and Clinical Treatment, [Melmark](#) embraces the following core commitments: Compassionate Care, Integrity in Everything We Do, Highly Skilled Workforce, Evidence-Based Practices, and Best Outcomes. [To learn more, visit www.melmark.org](http://www.melmark.org).



Founded in 2006, [Bierman ABA](#) is a leading provider of intensive research-based ABA therapy to children with Autism. [Bierman ABA](#) has multiple locations in Indiana, New Jersey, Massachusetts, Rhode Island and Arizona. ABA is considered to be the 'gold standard' treatment for Autism Spectrum disorders by the Surgeon General and the American Academy of Pediatrics. Therapy programs are individualized and are implemented on a one-on-one basis with a therapist overseen by Board Certified Behavior Analysts (BCBAs). Focusing on outcomes-based clinical excellence, [Bierman ABA](#) is dedicated to measurement and consistent improvement with the goal of fusing science and learning to accelerate progress and transform lives. To date, [Bierman ABA](#) has graduated more than 100 children from its therapy programs.



## Can Behavior Analysts Behave Ethically?

Find Out from Dr. Janet Twyman! **REGISTER** for Our ETHICS Conference - Friday, August 6

**Janet S. Twyman, PhD, BCBA, Founder, blast: A Learning Sciences Company and Member of the Cambridge Center for Behavioral Studies Board of Directors is an invited speaker to our 9th Annual ETHICS in Professional Practice Conference on Friday, August 6.**

**Abstract:** Ethics is said to represent the moral code that guides one's choices and behaviors; a moral code that often extends beyond one person to include what is right or wrong for groups, organizations, or society at large. Most humans share a common belief that we all should behave ethically, both personally and professionally. Inherent in the idea of ethics or morality is the perception of free choice. Given a conflicting situation one should choose

to behave ethically. Yet in a deterministic science such as behavior analysis, behavior is viewed as a product of the intersection of genetic inheritance, learning history, current conditions, and available alternative contingencies. Can a behavior analyst (or anyone) choose to behave ethically? When behavior tacted as unethical occurs, is it right to blame or punish the individual? As B.F. Skinner famously noted, "the rat is always right." Given the stance that behavior is lawful, how should we as a field view and respond to unethical professional behavior? These issues will be analyzed from a non-linear perspective which will lead to suggestions towards a more systemic, contingency-analytic approach to ethical behavior.



**REGISTER NOW**





## HISTORIANS' CORNER

### Mirror, Mirror on the Wall, Who was First of All?

#### Simultaneous Discovery in Psychology and Behavior Analysis

By Andy Lattal, Board of Directors

The historian Barbara Tuchman titled her history of the Late Middle Ages, *A Distant Mirror: The Calamitous 14th Century*, suggesting we view the past as but an image seen from far away. Scientists who created the histories we now view as mirrored reflections themselves also looked into Tuchman's mirrors. They saw not only the past, but sometimes also saw, standing over their shoulder, an eerie scientific doppelgänger, their own ideas created concurrently by another.

Simultaneous discovery in science is as old as science itself. In the late 1600s, Gottfried Wilhelm Leibniz and Isaac Newton had quite a row over who got to calculus first. A little later, Lavoisier, Priestly, And Scheele all bumped into oxygen at about the same time. In 1858, a letter from Alfred Wallace to Charles Darwin described the former's own theory of natural selection that closely paralleled Darwin's then-still-simmering account. Wallace and Darwin soon thereafter jointly reported their findings to the Linnaean Society, only two or three months after Wallace's letter had arrived.

Years after his discovery of the conditioned reflex, Ivan Pavlov wrote the following about the discovery of the type of conditioning that bears his name:

Some years after the beginning of the work with our new method I learned that

somewhat similar experiments had been performed in America, and indeed not by physiologists but by psychologists. Thereupon I studied in more detail the American publications, and now I must acknowledge that the honor of having made the first steps along this path belongs to E. L. Thorndike. By two or three years his experiments preceded ours and his book [Animal Intelligence] must be considered a classic, both for its bold outlook on an immense task and for the accuracy of its results. (Pavlov, 1928)

Pavlov seems to have missed the pioneering work of another contemporary, an American psychologist, whose work more precisely than Thorndike's, paralleled Pavlov's own, which, according to Boakes (1984, p. 120) began in 1897. Working at Johns Hopkins University in Baltimore, E. B. Twitmyer (Figure 1) paired a tone with a stimulus that elicited the knee-jerk response of human subjects only to discover that after a few pairings, the tone presented by itself came to elicit the knee-jerk response. Pavlov first reported his work on conditioning at the International Congress of Medicine conference in Madrid in 1903. Twitmyer's dissertation describing the conditioned knee jerk response was published in 1902. Seligman (2018) noted that Twitmyer described the work at a meeting of the American Psychological Association on December 29, 1904, presided

over by none other than the father of American psychology, William James. Seligman suggested that Twitmyer's work received relatively little attention because James called for lunch immediately following Twitmyer's presentation, cutting off any discussion of his potentially discipline-changing research. Indeed, it was not until five long years later that, following a visit to Pavlov's lab in Russia that Yerkes and Morgulis published the first English-language account of "Pawlov's" (as they spelled it) research (Yerkes & Morgulis, 1909).

In 1930, Skinner published a paper involving what eventually would be labeled operant



Figure 1. E. B. Twitmyer shown, ironically, holding two dogs.



conditioning. The topic was satiation and in it Skinner described a feeding device that permitted “the animal to obtain uniform pieces of a prepared food ... in such a way to make an electrical contact for each piece taken” (p. 434). In a subsequent article accepted for publication on February 15, 1932, Skinner (1932) changed the hinged door out for “a horizontal section of heavy wire ... forming part of a lever” (p.278) that when moved downward completed an electrical circuit that recorded the response.

Three months after Skinner’s first description of a rat lever, on April 12, 1932 a British psychologist named G. C. Grindley submitted for publication a paper describing the apparatus shown in Figure 2. A guinea pig was restrained in a two-element harness similar to that used by Pavlov to restrain dogs in his experiments on classical conditioning. Rather than recording salivation from the guinea pigs, however, movements of the guinea pig’s head were detected mechanically. This was done via “two cloth-covered metal strips (of which S-S is one) pressing lightly against the animal’s cheeks [to] ensur[e] that any movement of the head to either side [vertical movements were not recorded] was transmitted to a...” (Grindley, 1932, p. 129) wooden arm (EE). This arm in turn was connected with fish line to the pen on a kymograph located above the enclosure housing the guinea pig and to an electrical switch (U). Head movements thus were recorded mechanically on the kymograph. The switch (U) was connected to an electromagnet (M) that, when activated, held in place a metal plate at the end of a lever (G). At the other end of the lever (G), Grindley tied a piece of carrot that was accessible to the guinea pig only if the metal bar was released from the other end of the lever by de-activating the electromagnet. After the guinea pig partook briefly of the carrot, the experimenter, observing from another room through a telescope, (O; recall last month’s piece in this newsletter about Ogden Lindsley’s behavior scope, a later version of a recording system for surreptitious observation), the experimenter could pull

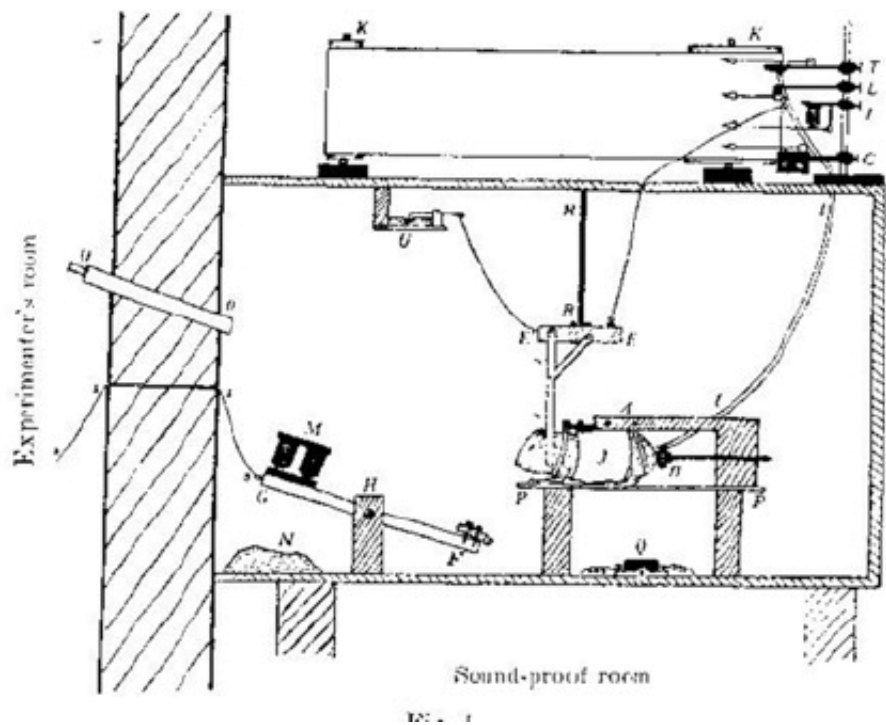


Figure 2. Grindley’s (1932) apparatus for studying the behavior of guinea pigs.

the string (s s s) and reactivate the magnet, holding the bar to it and thereby removing access to the carrot. Grindley generate data on acquisition, extinction, and what he called “reversal of habit” – turning to the opposite side to which they originally were trained. Although the data were orderly and consistent with other instances of such behavioral phenomena, Grindley reported that the apparatus was not optimal. The automatic recording of head movements seems to have been unreliable, or at least inconsistent. Thus, some of the data he collected and reported in the paper were based on direct visual observation. Predicting what Skinner (1932) already had reported, Grindley concluded that “[i]t is desirable that in future work of this kind the response used should be one which can be recorded automatically and accurately” (1932, p. 131).

Grindley (1932) discussed whether his findings revealed a type of conditioning different from that described by Pavlov, concluding that explanations of the type of learning exhibited by the guinea pigs “...seem to involve a number of fresh assumptions in addition to the

assumptions made by Pavlov” (1932, p.145). Thus, along with Kornorski and Miller (e.g., 1928; Miller & Kornorski, 1937) and Skinner (1935), a distinction between Pavlov’s type of conditioning and what would come to be called operant or instrumental conditioning was on the horizon. As with other instances of concurrent discovery, the apparatus that led to the operant-respondent distinction seems to have been brewing in the Zeitgeist of the 1930s. Grindley subsequently conducted research on visual perception and was a founding member of the Experimental Psychology Society. Reflected through Tuchman’s distant mirror, his work stands near the shoulders of both Skinner and Kornorski and Miller.

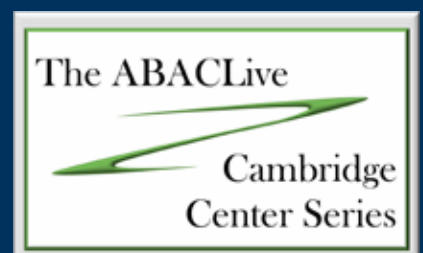
#### Footnote

I thank Professor Phil Reed of the University of Swansea for directing me, in 1997, to Grindley’s work and Professor Iver Iversen of the University of North Florida for valuable background information about Grindley.

[Find references online at behavior.org.](http://behavior.org)

**Dr. Russell W. Magure Presents a FREE Webinar**  
**Save Thursday, August 19 (NOON-3 PM EST)**  
**"Introduction to Stimulus Equivalence: Concepts and Practice"**

**LEARN MORE & REGISTER**



# Who Are You Going to Believe, Me or Your Own Eyes:

## The Importance of Skepticism in Evaluating Claims, Selecting Treatments, and Enhancing Science-Based Treatment for Autism

The ivory-billed woodpecker (*Campephilus principalis*) was last known to exist in 1944. Unexpectedly, in 2004, it was purportedly seen near Brinkley, Arkansas. This claim resulted in a scientific expedition that produced an inconclusive video that was used to confirm the bird's reemergence from extinction, an article in *Science* magazine extolling the excitement that the bird was indeed back, and a worldwide fascination towards a species supposedly extinct but now here again.

Yet, despite over 5 years of searching at a cost of over \$10 million, there remains no physical proof that the woodpecker is in fact alive (Radford, 2009).

At a 2004 Florida conference about treatment for Autism Spectrum Disorders (ASD), a medical doctor spoke to a group of parents about electromagnetic fields and their impact on autism. The doctor asked one parent if she used cell phones, to which the parent replied in the affirmative. With a grand wave of the hand, the doctor pronounced, "throw them out!" advocating for the unproven belief that the electrical energy emanating from cellular phones was somehow either responsible for or negatively impacting the symptoms of this neurological disorder.

When confronted with claims that are presented as true, how can we make a reasonable evaluation to ascertain, as confidently as possible, whether such claims have merit? This fundamental question impacts virtually all areas of our society. Claims abound – of alien

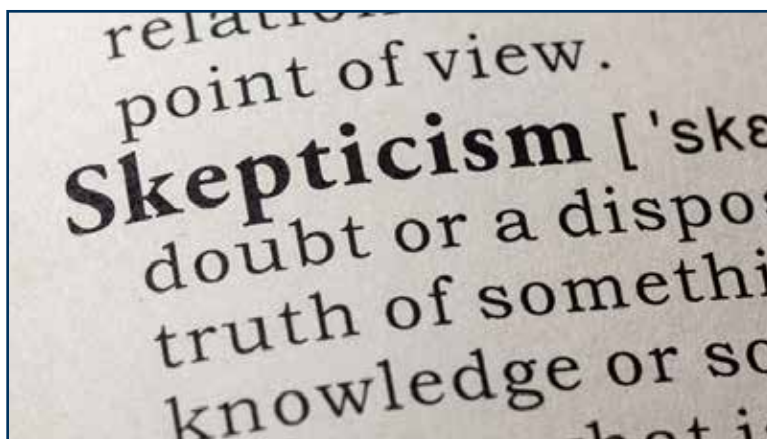
abductions, the existence of the Loch Ness monster and Bigfoot, and the eating of wild boar meat to cure autism. How can we "separate the wheat from the chaff" in a way that both prevents the acceptance of wildly suspicious claims that have no support, and permits adoption, with some level of certainty and comfort, claims that are likely to in fact be true?

The best way known to evaluate claims is to adopt the intellectual discipline of science

Association for the Advancement of Science, 2009), the continued adoption of unproven beliefs, claims, and bizarre treatments (particularly in the field of autism) remains strong, suggesting that although science is lauded, skepticism – and scientific thinking in general – is not widely practiced.

Skepticism is not a view that promotes the disbelief of every truth or claim (Normand, 2008). Skepticism is more refined. Merriam-Webster Online (2010) defines it as,

"an attitude or doubt or a disposition to incredulity either in general or *towards a particular object*" (emphasis added). The word is from the Greek "skeptikos," meaning "inquirer" or "investigator" (DiCarlo, 2009). Pigliucci (2009) defines skepticism closer to the original Greek meaning as the suspension of judgment (either to adopt or reject) until sufficient evidence is examined.



and the scientific method of investigation. This methodology involves carefully defining terms, conducting controlled experiments when possible, practicing the law of parsimony, and adopting "philosophic doubt" or skepticism (e.g., Cooper, Heron, & Heward, 2020). Although all of the methods of science are important, practicing skepticism is crucial to protecting oneself from believing unsubstantiated claims. Though the American public views science's effect on society as positive (in a recent survey, 84% of respondents said that the effect of science was mostly positive and that the scientists were ranked as the third-most contributing profession to society, after the military and teachers; American

Kurtz (2010) stresses this perspective with his discussion of "skeptical inquiry," an approach that promotes the examiner to "...seek, when feasible, adequate evidence and reasonable grounds for any claim to truth in any context." (p. 21, as quoted in Normand, 2008). Claims of all kinds should be, before adoption or rejection, examined for the amount and quality of evidence that supports them. Thus, if there is a particular treatment for which there is valid scientific evidence for support, that treatment should be adopted and viewed as evidenced-based. However, when a claim is shown to have no evidence, or evidence that is weak and of poor quality (such as solely relying

**by Thomas Zane, PhD, BCBA-D**

Professor of Practice and Director of Online Programs, Department of Applied Behavioral Science,  
University of Kansas



on the opinion of the claim maker), the rejection of such a claim or position should be the decision. Simply put, skepticism is the position of objectively evaluating, by looking for empirical evidence, the validity of any claim of fact, and basing adoption or rejection on the evidence (or lack thereof; Normand, 2008).

This skeptical attitude, and the corresponding investigatory approach, reduces the possibility of adopting, as true, a claim (or treatment) that may not be true. As is often said, extraordinary claims could be true, but a skeptical approach towards them would require extraordinary evidence and evaluation of that evidence. To reiterate, a skeptical thinker does not reject all claims; nor does s/he accept all claims as true. Rather, the position of a skeptical thinker is one of assessing the validity of the evidence before rendering a decision. The type of evidence is important, and there is an acknowledgement that there exists quite a bit of variation and debate regarding what evidence constitutes “valid” evidence (Zane & Hanson, 2008). But there is general agreement that the methods and criteria used by science is the most acceptable perspective to take.

Normand (2008) smartly acknowledged that the literature provides little specification on exactly how to behave skeptically. To increase the number of people who are “scientific skeptics” (a term coined by Normand; those who think and act skeptically), several suggestions are offered.

First, study and adopt the methods of science, scientific investigation, and skepticism, as described by numerous textbooks that exist on these subjects (e.g., Cooper, Heron, & Heward, 2007; Sagan, 1996). The scientific perspective and method of inquiry will inoculate against

the reflexive acceptance of claims that are baseless.

Second, require that anyone making extraordinary claims provide extraordinary evidence to substantiate those claims. For example, when the practitioners of craniosacral therapy assert that they do not even need to touch the client’s body in order to change the course of the cerebral spinal fluid (Zane, 2005), they should be required to present evidence that this is in fact true. When Gutstein, the developer of Relationship Development Intervention, asserts that, “The RDI Program is for every age group and for every range of severity, including those who are severely affected by autism” (Connection Center, 2005), he should be required to present the evidence that backs up this extraordinary claim.

Third, don’t be gullible – do not accept claims without evaluation. Accepting all claims is not only intellectually dishonest, but potentially dangerous and fatal (Pigliucci, 2009). For example, promoting holistic remedies for curing AIDS will likely result in the unnecessary deaths of persons with the disease. Gullibly accepting the false claim that vaccines cause autism may lead to parents not vaccinating their children, and such an action puts children at risk for serious diseases. Furthermore, accepting claims without critical evaluation will result in significant costs in money, time, and emotion (Zane, Davis, & Rosswurm, 2009). Gullibility is the opposite of skepticism, so by demanding evidence of truth will naturally protect one from being gullibly accepting every claim.

Fourth, behave according to this rule - “In science, keeping an open mind is a virtue—just not so open that your brains fall out.” (James Oberg; Sagan, 1996). In other words, be intellectually willing to accept any claim,

but always seek for evidence and proof of truth before acceptance is granted.

Finally, find contexts that promote skepticism. For example, attending meetings of other skeptics and listening to podcasts such as *The Skeptics Guide to the Universe* will prompt and reinforce skeptical behavior (Loxton, 2009). Consider following some of the suggestions in *What Do I Do Next*, a call for action on the part of all skeptics (Loxton, 2009).

Although many organizations officially promote the use of science-based treatment and services for individuals with autism (e.g., Association for Science in Autism Treatment; American Academy of Pediatrics. The Cambridge Center), antiscience, pseudoscience, and bizarre claims continue to gain influence in the arena of autism treatment and this is partly due to the lack of understanding of the nature of science (Lamal, 2009). Skepticism is a key concept in understanding how to assess the level of believability of something. Pigliucci (2009) goes so far as to believe that there is an ethical requirement to be skeptical and question the veracity of claims. He asserts that everyone must seek the truth and this requires a “baloney detection toolkit” (Sagan, 1996). This set of analytic and decision-making procedures and rules allow us to, as best as we are able, ascertain what might be true and what does not have evidence of believability. The adoption of healthy skepticism will result in a more informed public, more informed decision making about claims and treatments for autism, and have the overall effect of the promotion of truth and validity to protect us from extraordinary claims that have little reason to be believed. Persons with autism will be the beneficiaries.

**[Find References online on behavior.org](#)**



Choose the Cambridge Center for Behavioral Studies™ as your charity on Amazon Smile! Remember, always start at [smile.amazon.com](https://smile.amazon.com) Amazon will donate .5% of the price of your eligible AmazonSmile purchases. <https://smile.amazon.com>

## Familiar Faces in New Places



**Trustee Terry McSween, PhD**

Terry McSween, Ph.D. is an executive consultant with DEKRA. Considered

one of the world's leading authorities in behavior-based safety, Terry has 40-plus years of experience consulting in educational, institutional, and business settings.

He is the recipient of local and national awards for his work in behavioral safety and is actively involved with a number of business and professional organizations. A speaker at safety conferences worldwide, Terry also founded the annual Behavioral Safety Now Conference (BSN), which today is an important part of

DEKRA's Safety in Action conference.

He has published over 100 articles and authored the seminal book on behavior-based safety: *The Values-Based Safety Process: Improving Your Safety Culture with Behavior-Based Safety*.

"My passion is helping organizations adopt evidence-based strategies to improve the health and well-being of people at work and at home."



**Trustee Angelica Grindle, PhD**

Angelica Grindle is Vice President, Client Engagement within the Executive Consulting team at DEKRA OSR. This team focuses on projects dealing with culture change, serious injury and fatality (SIF) prevention, safety leadership development, increasing hourly-employee safety participation, and

assessing and understanding the systems that influence exposure.

As a Ph.D. level behavior analyst with two decades of experience, Angelica specializes in creating safety excellence through the application of behavioral science at all organizational levels. She guides organizations to tailor their change initiatives to their unique organizational needs and generate the support needed from key stakeholders to create change that is embraced and lasts.

Angelica has published articles in *Safety and Health Magazine*, *Food Safety Tech Magazine*, the *Journal of Organizational Behavior Management*, the *Journal of Applied Behavior Analysis*, and other publications. She also contributed to the book "The Values-Based Safety

Process: Improving Your Safety Culture with Behavior-Based Safety" by DEKRA Executive Consultant Terry McSween.

Angelica is a sought-after speaker at domestic and international forums and corporate events. She is the Content Director for DEKRA OSR's annual Safety in Action® Conference.

She received both her Master's in Industrial Psychology and her Doctorate in Applied Behavior Analysis from Western Michigan University.

"Empowering my clients to make their workplaces safer has always been my mission."

**BEHAVIORAL SAFETY NOW is now part of the SAFETY in ACTION® CONFERENCE**

 **DEKRA**  
SAFETY IN  
ACTION®  
Conference

**Navigating the New Normal**

August 17-19, 2021 | Orlando, Florida

**REGISTER NOW**

A 360 Approach to Safety of Work



I've been with the Center nearly half its lifetime. Three positions, three websites, three executive directors. The Center has changed and evolved as did our leadership and volunteers. One constant is the friendship and memories made. Our Annual Meeting of the Trustees, a smaller professional meeting than most, offers more personal time and interaction with old and new friends. I have many fun, fond memories of time with our Trustees, Advisors, friends and, in the years I travelled, with our Distinguished Scholars.

Amanda Laprime, now Trustee and Assistant to our Executive Director, made one of those memories. Our Annual Meeting was hosted by Aubrey Daniels and his team at Aubrey Daniels International (ADI) at their headquarters in Atlanta. I helping the lost in the hallway find their destinations when I heard a muffled plea. I kept listening and looking until I found the source. Amanda was locked in the stairwell while taking an important family call. We both had a belly-laugh and that shared moment made us closer. Amanda recently joined the University of Rochester Medical Center as an Assistant



Reb & Mary Sawyer

Professor of Pediatrics.

Onto Dr. Mary Sawyer, my bubbliest Distinguished Scholar. Always smiling, energetic and inviting, she was a most welcome sight

with a seat empty beside her after the meeting. We enjoyed a couple giggles and I was introduced to the Dirty Martini. Mary became a CCBS Advisor and lead our Distinguished Scholar group for 5 years. She is now partnering with Aubrey Daniels at FIT Learning to transform educational outcomes for kids in Atlanta and Aubrey's hometown in South Carolina.

Josephine Southwick was Dr. Thomas Zane's student at Endicott College during her Distinguished Scholar days. She arrived late on a Friday, a tad frayed from travel delays, missing the evening happy hour with the group. While watching for latecomers, I was happy to recognize her from working with her photograph. We enjoyed sharing life stories while relaxing. She visited the "CCBS Catskills Office" - my home office in NY for the past 15 years - and she sends me an annual package of delectable homemade fruits concoctions. Josephine was our copyeditor for *Behavior & Philosophy* and had the opportunity to work with Phil Hineline as such. She is now the Clinical Director of Behavioral Perspective Inc. in Illinois.

This year's meeting is my first in-person since 2017. CCBS changed the meeting date, following the annual ABAI Convention. to save costs, reduce travel and entice more attendees. *Plus I'm an odd duck who doesn't enjoy travel.* However, I am happy for the opportunity to see all again, give a customary hug and make a new friend at this year's meeting. While recalling



other Annual Meeting interactions, I realize how much I appreciate these opportunities as a perk of my job. It is one of your benefits, too, as a supporter and friend of the Center. Visit Cape Ann, eat some fabulously famous New England lobster and enjoy friends while [attending our August 7 meeting on the picturesque Endicott College campus in Beverly, Massachusetts](#). I hope to see you!



Josephine Southwick & Reb

*Reb*

Rebekah Pavlik  
Communications and  
Member Services  
Coordinator

## Distinguished Scholar Highlight



Maya Fallon, BA

**Maya Fallon is a third-year student in the Applied Behavior Analysis doctoral program at the University of Nebraska Medical Center's Munroe-Meyer Institute, working under the mentorship of Dr. Kevin Luczynski. Maya works as a clinical supervisor in the Prosocial Interactions Program at Munroe-Meyer Institute, where her primary area of focus is advanced social skills. As a graduate research assistant, Maya works with children with deficits in verbal behavior and social skills. Her research currently includes evaluating procedures to increase remembering and reporting on past events, establishing echoic control and increasing mand responses, and teaching children how to respond to instances of unkindness and threats of harm. This year, Maya was a recipient of the Giri Hedge Research Grant from the Speech Pathology Applied Behavior Analysis SIG. She enjoys conducting research in verbal behavior and social skills and hopes to continue working in these areas after earning her doctoral degree.**

3rd ANNUAL BEHAVIORAL SCIENCE: APPLICATIONS in

# Leadership & Supervision

CONFERENCE

Friday, November 12, 2021



**KU** THE UNIVERSITY OF KANSAS  
Department of Applied Behavioral Science

A one-day conference featuring leaders in the field of Applied Behavior Analysis, Organizational Behavior Management, and Autism, to discuss critical issues in supervision important to Behavior Analysts (BCBA-Ds, BCBAs, BCaBAs & RBTs) and other professionals, such as psychologists, teachers, and special educators.

## Invited Speakers



**RAYMOND G. MILTENBERGER, PHD, BCBA-D**

University of South Florida



**LORI DIENER-LUDWIG, PHD**

Performance Ally



**TERRY MCSWEEN, PHD**

DEKRA



**AMBER VALENTINO, PSYD, BCBA-D**

Trumpet Behavioral Health



**TIMOTHY LUDWIG, PHD**

Appalachian State University  
Safety-Doc.com

## Panel



**Claudia L. Dozier, PhD, BCBA-D**  
**Pamela L. Neidert, PhD, BCBA-D**  
**Jomella Watson-Thompson, PhD**

University of Kansas  
Department of Applied Behavioral Science



## Introduction by



**Rob Holdsambeck, EdD, LCP, BCBA-D**

Cambridge Center for Behavioral Studies  
Holdsambeck Behavioral Health



# SAVE THE DATE

15th Annual Conference on  
**Autism & Related Disorders:  
Research-Based Solutions**  
**Friday, April 29, 2022**  
**Let's meet up in California!**

[www.behavior.org](http://www.behavior.org)

A one-day conference featuring leading experts in fields of Science,  
Special Education, and Autism Spectrum Disorders.

## ANNOUNCING ANOTHER E-BOOK - SAVE \$\$\$

If you have purchased the hard copy of  
**Tactics of Scientific Research** from CCBS  
in the last 2 years and want to add the  
e-version to your library, contact  
[Tara Kasey](#). We will send you a coupon code  
to get the electronic version for only **\$15!**

### TACTICS OF SCIENTIFIC RESEARCH

*Evaluating Experimental  
Data in Psychology*

MURRAY SIDMAN

**\$34.50**

# OUR TRUSTEES

Mark Alavosius, PhD  
**Ronald F. Allen, PhD\***  
Paul Andronis, PhD  
Erik Arntzen, PhD  
Judah B. Axe, PhD  
Leasha M. Barry, PhD  
Carl Binder, PhD  
**Andy Bondy, PhD\***  
Darrel Bostow, PhD  
José E. Burgos, PhD  
Robyn M. Catagnus, EdD  
Joseph Dagen, PhD  
Ronnie Detrich, PhD  
Michael F. Dorsey, PhD  
Eitan Eldar, PhD  
**Stephen Eversole, EdD\***  
Edward Feeney,  
Hua Margarate Feng, PhD  
Lanny Fields, PhD  
Richard Foxx, PhD  
Patrick C. Friman, PhD

**\*Board of Directors Members**

R. Wayne Fuqua, PhD  
Peter F. Gerhardt, EdD  
Celia Wolk Gershenson, PhD  
Nicole Gravina, PhD  
Angelica C. Grindle, PhD  
Gregory Hanley, PhD  
D. Dwight Harshbarger, PhD  
William L. Heward, EdD  
**Philip Himeline, PhD\***  
Rob Holdsambeck, EdD  
Ramona Hومانfar, PhD  
Kent Johnson, PhD  
Mickey Keenan, DPhil  
Jeff Kupfer, PhD  
Amanda P. Laprime, PhD  
**A. Darnell Lattal, PhD\***  
**Kennon (Andy) Lattal, PhD\***  
T. V. Joe Layng, PhD  
Justin Leaf, PhD  
Marta León, PhD  
Lori Ludwig, PhD  
**Timothy D. Ludwig, PhD\***  
Russell W. Maguire, PhD  
M. Jackson Marr, PhD  
Tetsuro Matsuzawa, PhD

Thomas C. Mawhinney, PhD  
Terry McSween, PhD  
Francis Mechner, PhD  
Paolo Moderato, PhD  
Edward K. Morris, PhD  
James Mulick, PhD  
Martha Pelaez, PhD  
Robert Pennington, PhD  
**Henry S. Pennypacker, PhD\***  
Francisco I. Perez, PhD  
Chuck Pettinger, PhD  
Ruth Anne Rehfeldt, PhD  
Marius M. Rietdijk, PhD  
Jesús Rosales-Ruiz, PhD  
Claire St. Peter, PhD  
Henry Schlinger, PhD  
Julie M. Smith, PhD  
J.E.R. Staddon, PhD  
Kenneth Stephens, PhD  
**Janet Twyman, PhD\***  
Karen R. Wagner, PhD  
Michael Weinberg, PhD  
Mary Jane Weiss, PhD  
Oliver Wirth, PhD  
**Thomas L. Zane, PhD\***

Most of our work is through the voluntary efforts of our directors, trustees, and advisors. These individuals represent the best experts in behavioral science and practice. [Find out "Who We Are" on behavior.org.](#)

**GIVE  
TODAY**

## DONATE

Your generosity brings the best of behavioral science to the public.



## AMAZON SMILE

Choose the Cambridge Center for Behavioral Studies™ as your charity on Amazon Smile! Remember, always start at smile. amazon.com Amazon will donate .5% of the price of your eligible AmazonSmile purchases. <https://smile.amazon.com>



## GIVING ASSISTANT

Giving Assistant shoppers earn cash back, and donate a percentage of that cash back to organizations like us! Just sign up for free to start earning and giving. You'll also enjoy huge savings at 3,000+ popular retailers like Sears and Target, as well as limited-time offers including exclusive Lowe's coupons! It's never been easier to change the world.

## SOCIAL MEDIA

Join and follow us on  
[Facebook](#) and [LinkedIn](#).



**on behavior.org**

The Cambridge Center is a non-profit 501 (c) 3 organization whose mission is to advance the scientific study of behavior and its humane application to the solution of practical problems, including the prevention and relief of human suffering.

Telephone contact: (978) 369-2227  
E-mail contact: [center@behavior.org](mailto:center@behavior.org)  
Address: 410 Newtown Road, Littleton, MA 01460