# 18th Annual Meeting

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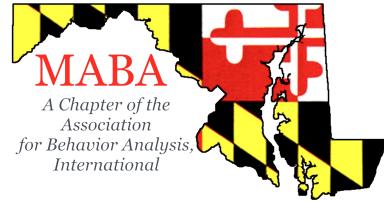
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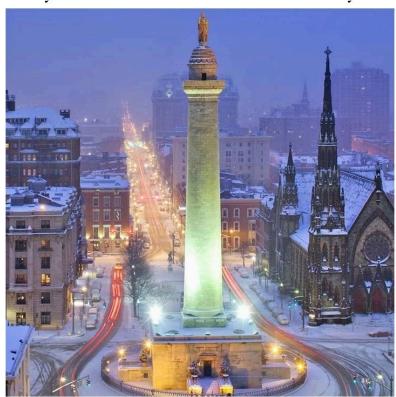
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### MARYLAND ASSOCIATION FOR BEHAVIOR ANALYSIS



### Maryland Association for Behavior Analysis



December 11, 2015

### FEATURED SPEAKERS

Hilton Baltimore

JAMES E. CARR, PH.D., BCBA-D
Behavior Analyst Certification Board
ISER G. DELEON, PH.D., BCBA-D
University of Florida
MARK H. LEWIS, PH.D.
University of Florida
MICHAEL PERONE, PH.D.
West Virginia University

TIMOTHY R. VOLLMER, PH.D., BCBA-D University of Florida

### 18TH ANNUAL MEETING

### MARYLAND ASSOCIATION FOR BEHAVIOR ANALYSIS

# SCHEDULE OF EVENTS Holiday 1, 2, 3 (Hilton)

- 7:30 Registration & Continental Breakfast
- 8:30 Presidential Address
  Jennifer Zarcone, Ph.D., BCBA-D
- 9:00 Invited Address \*BACB\*APA\*

James E. Carr, Ph.D., BCBA-D

Behavior Analyst Certification Board

Introduced by: Samantha Young, UMBC

Title: The Evolution of BACB Standards: A History

Abstract: The Behavior Analyst Certification Board (BACB) has been certifying and developing professional standards for behavior analysts since 1999. However, the BACB grew out of the state of Florida's behavior analyst certification program, which had been in operation for two decades earlier. In 2007, the BACB's Board Certified Behavior Analyst (BCBA) and Board Certified Assistant Behavior Analyst (BCaBA) credentials were accredited by the National Commission for Certifying Agencies (NCCA). The NCCA accredits certification programs that adhere to the best practices of the credentialing and testing industries, including highly prescribed procedures for establishing and revising key standards. In this presentation, I will describe the evolution of certification standards in behavior analysis over the years, including the systematic NCCA-mandated procedures the BACB has followed to develop and revise its standards over the years. This process has been akin to shaping and has allowed behavior analyst certification to grow and flourish alongside consistently increasing standards towards an eventual steady state. Special focus will be paid to standards where the steady state appears to have been reached.

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**Dr. Carr** is the Chief Executive Officer of the Behavior Analyst Certification Board. His professional interests include behavior analyst credentialing, behavioral assessment and treatment of developmental disabilities, verbal behavior, and practitioner training. Dr. Carr has published over 125 scientific articles on these and other topics. Dr. Carr is a Fellow of the Association for Behavior Analysis International. He is the editor-in-chief of the journal The Analysis of Verbal Behavior and has served on the editorial boards of 10 other behavior analysis journals, including 4 appointments as associate editor. Dr. Carr is the president of the Colorado Association for Behavior Analysis and past president of the Mid-American and Alabama Associations for Behavior Analysis. He received his doctorate in 1996 from Florida State University under the mentorship of Dr. Jon Bailey and previously served on the behavior analysis faculties at University of Nevada-Reno (1996-1999), Western Michigan University (1999-2008), and Auburn University (2008-2011).

### 10:00 Invited Address \*BACB\*APA\*

**Iser G. DeLeon, Ph.D.BCBA-D,** *University of Florida* Introduced by: Andrew Bonner, *UMBC* 

Title: Reinforcer Accumulation and Implications for Applied Settings

Abstract: Reinforcer accumulation involves earning multiple reinforcer units before consuming them, thus tolerating an inherent delay to initial consumption. We can contrast this pattern to "distributed reinforcement," in which subjects consume each unit immediately after completing each response requirement. For reasons I will describe, accumulation is a pattern we want to promote in applied settings. In nonhuman research, accumulation has varied positively with the costs of

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consuming the reinforcers, but other variables may come into play when considering the reinforcers used in applied settings. I will present a series of studies involving children with intellectual disabilities, preschool children, and neurotypical adults that: a) compared the effects of accumulated and distributed reinforcement arrangements, b) examined variables that influence participants' tendency to accumulate, and c) explored implications of accumulation for therapeutic arrangements. I will argue that reinforcer "continuity"--uninterrupted access to a quantity of a reinforcer, separable from magnitude--may be important in driving the choice to accumulate, but will introduce selected bits of data that suggest additional explanations.

**Dr. DeLeon** received his Ph.D. from the University of Florida, where he is currently an Associate Professor of Psychology. Prior to this, he was an Associate Professor of Psychiatry and Behavioral Sciences at the Johns Hopkins University School of Medicine and Director of Research Development for the Department of Behavioral Psychology at the Kennedy Krieger Institute. Dr. DeLeon is a Board Certified Behavior Analyst and currently serves the behavior analytic community through membership on the Board of Directors of the Behavior Analyst Certification Board, Board of Directors of the Society for the Experimental Analysis of Behavior, and the editorial boards of The Behavior Analyst, the Journal of the Experimental Analysis of Behavior, and the Journal of Applied Behavior Analysis. His research has focused on assessment and treatment of behavior problems in persons with intellectual and developmental disabilities, determinants of choice and preference in this population, and translation of basic behavioral processes towards enhancing therapeutic and instructional arrangements.

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### POSTER SESSION 4:30-6:30 Peale

26. Behavioral Sensitivity to Operant Contingencies in Individuals with Automatically and Socially-Maintained Self-Injurious Behavior.

Griffin W. Rooker, Nabil Mezhoudi, Jennifer R. Zarcone, Andrew C. Bonner, Alyssa B. Fisher, Christopher M. Dillon, Chloe J. McKay, & Louis P. Hagopian (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

27. Teaching a Student with Autism to Find Assistance when Lost.

Kristen Stricks & Chelsea Cook (Ivymount School)

28. Using the Test-Control (Pairwise) Design to Clarify Inconclusive Functional Analysis Outcomes.

Craig Strohmeier, Ashley Carver, & Jennifer Zarcone (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

29. An Assessment of Caregiver Compliance with Child Mands.

Monica A. Urich, Samantha L. Hardesty, & Lynn G. Bowman (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

30. Assessment and Treatment of Problem Behavior Evoked by Ritual Interruption.

Cara Phillips, Jennifer Weyman, & Bo Kim (Kennedy Krieger Institute)

### **RECEPTION**

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### POSTER SESSION 4:30-6:30 Peale

- 20. Analysis of Within-Session Responding in the Presence and Absence of Establishing Operations for FA Clarification. Jonathon Metz, Sean Smith, Susan Field, Sonam Dubal, & Tracy Kettering (Bancroft)
- **21.** The Effects of Staff Preference on Functional Analyses. **Jonathon Metz**, Sean Smith, Nicole Ruggiero, Sonam Dubal, & Tracy Kettering (*Bancroft*)
- 22. Use of a Competition Assessment with Multiply-Maintained Problem Behavior.

Caitlin Parker, Kathleen Donahoe, Nicole Sullivan, Sean Smith, Patrick Thulen, Susan Field, & Tracy Kettering (Bancroft)

23. The Use of Concurrent Operant Choice Assessment for Determining Functions of Problem Behavior.

Jennifer Petrelli, Patrick Thulen, Sonam Dubal, Sean Smith, & Tracy Kettering (Bancroft)

24. Probing End of Treatment Goals to Guide Treatment Fading.

Allen Porter, Craig Strohmeier, Sara Deinlein, & Jennifer Zarcone (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

25. Functional Assessment and Treatment in High School Students with Autism Spectrum Disorder Exhibiting Perseverative Speech.

**Erica Ranade,** Brittany Frey, & Lauren Lestremau (*Ivymount School*)

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SCHEDULE OF EVENTS Holiday 1, 2, 3 (Hilton)

### 11:00 MABA Student Paper Symposium \*BACB\*

Chair: John C. Borrero, Ph.D., BCBA-D, LBA, UMBC

**Kelly A. Carlile,** *Caldwell University*Title: Teaching Help Seeking When Lost to Individuals with Autism

**Barbara J. Davis, M.A., BCBA, LBA,** *UMBC*Title: Some Effects of Loss Aversion in Token Systems

Julia A. Iannaccone, M.A., UMBC
Title: Rules and Statements of Reinforcer Loss in
Differential Reinforcement of Other Behavior

### 12:00 Lunch on your own

### 1:30 Invited Address \*BACB\*APA\*

Mark H. Lewis, Ph.D., University of Florida Introduced by: Denise Pichardo, UMBC Title: Repetitive Behavior in Neurodevelopmental Disorders: Etiology, Brain Mechanisms, and Treatments

Abstract: Restricted repetitive behaviors (e.g., stereotypies, compulsions, rituals) are diagnostic for autism and commonly observed in related neurodevelopmental disorders. Despite this, relatively little is known about the etiology or neurobiological mechanisms that mediate the development and expression of these repetitive behaviors. This lack of knowledge precludes effective early intervention and prevention strategies. Clinical studies have provided only very limited findings based on a small number of neuroimaging and genetic studies. Moreover, there is little evidence for the efficacy of pharmacotherapy for repetitive behaviors in individuals with neurodevelopmental disorders. Valid animal models can aid substantially in identifying pathophysiological factors mediating repetitive behavior and aid in treatment

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development. We will review our findings from animal models of repetitive behavior, highlighting environmental factors and the role of altered cortical-basal ganglia circuitry in the development and expression of these behaviors. We will also review our studies that have identified pharmacological and experiential interventions that markedly reduce repetitive behavior in animals including work that has identified novel potential therapeutic targets for clinical drug development.

Dr. Lewis completed his undergraduate education at Bowdoin College after which he worked in the area of developmental disabilities, and completed a Master's degree from Western Michigan University. His interest in developmental disabilities continued during his Ph.D. studies at the Kennedy Center at Vanderbilt University, where he focused on repetitive behavior in individuals with intellectual disability. Interest in the neurobiological basis of these behaviors led him to pursue post-doctoral training at the University of North Carolina at Chapel Hill. Dr. Lewis has held faculty positions at the University of Medicine and Dentistry of New Jersey, the University of North Carolina at Chapel Hill and the University of Florida, where he is currently Professor, Co-Vice Chair for Research, and Executive Director, Center for Autism and Related Disabilities. His research has involved both clinical studies and animal models projects to understand the phenomenology, etiology, pathophysiology and treatment of repetitive behaviors. His work with animal models has helped elucidate the neural circuitry involved in the development and expression of these behaviors and has pointed to potential novel treatments.

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### POSTER SESSION 4:30-6:30 Peale

# 14. Corrective Feedback as the Aversive Factor During Demands.

Julia A. Iannaccone, Samantha L. Hardesty, Monica A. Urich, & Lynn G. Bowman (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

# 15. The Repetitive Behavior Interference Scale-Revised as a Measure of Interference in Academic and Leisure Contexts.

Noor Javed, Erica Lozy, Andrew Bonner, Marissa Daley, Jennifer Zarcone, & Griffin Rooker (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

# 16. The Effects of Response Cost on Members of a Response Class.

Kristi Jeffery, John C. Borrero, & Amber Mendres-Smith (UMBC)

# 17. An Evaluation of High and Low Preferred Tokens During a Time-Based Schedule.

Monica Lugo, Samantha Hardesty, Monica Urich, and Lynn G. Bowman (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

# 18. A Comparison of Two Structured Criteria Methods to Identify the Function of Behavior.

**Chloe J. McKay**, Nabil Mezhoudi, Griffin W. Rooker, Jennifer R. Zarcone, & Louis P. Hagopian (Kennedy Krieger Institute & Johns Hopkins University School of Medicine, UMBC)

# 19. Functional Analysis of Self-Injurious Behavior Across Psychotropic Medication Changes.

**Meara H. McMahon**, Lisa Beard, Elizabeth Schieber, Annette Haas, Maria Valdovinos. (Kennedy Krieger Institute, Drake University, University of Florida, University of Wisconsin)

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### POSTER SESSION 4:30-6:30 Peale

- 8. Intensity of Pharmacological Intervention Across Individuals who Engage in Self-Injury.
  Christopher M. Dillon, Jennifer R. Zarcone, Alyssa B. Fisher, Andrew C. Bonner, & Chloe J. McKay (Kennedy Krieger Institute & UMBC)
- 9. Treatment of Saliva Expulsion and Food Refusal in an Adolescent with Autism Spectrum Disorder.

  Neisha Dobson, Meara McMahon, Thomas Mulderink, & Melissa Gonzalez (Kennedy Krieger Institute & Johns Hopkins School of Medicine)
- 10. Combined Functional Analysis and Treatment of Problem Behavior Maintained by Attention in Identical Twins.

**Maria Early**, Hayley Ford, R. Justin Boyd, & D'Andre Bruce (*Kennedy Krieger Institute*)

11. A Translational and Exploratory Analysis of Incentive Shift Across Mealtime Observations.

Jamie S. Fink, Whitney E. Luffman, John C. Borrero, & Carrie S. W. Borrero (Kennedy Krieger Institute & Johns Hopkins University School of Medicine, UMBC)

- 12. Assessing the Correlation between Sensory Impairment and Repetitive Behavior.
- Alyssa B. Fisher, Griffin W. Rooker, & Jennifer R. Zarcone (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)
- 13. Expanding the Treatment Approach for Problem Behaviors Maintained by Escape from Social Attention. Haley Ford, Maria Earley, R. Justin Boyd, Elizabeth Mansdorf, Craig Strohmeier, David Cernikovsky, & Jesse Logue (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

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# SCHEDULE OF EVENTS Holiday 1, 2, 3 (Hilton)

### 2:30 Invited Address \*BACB\*APA\*

Michael Perone, Ph.D., West Virginia University Introduced by: Jennifer Weyman, UMBC Title: Like Sands Through the Hourglass, So Are the Causes of Our Behavior

Abstract: Behavior and its and antecedents and consequences occur over time. Behavior analysts have studied how behavior is distributed over time (e.g., measuring response rates, interresponse times, latencies, and pauses), how the time between an instance of behavior and a consequence affect the future probability of the behavior (e.g., in studies of delayed reinforcement and delay discounting), and how control by a stimulus changes over time (e.g., in remembering and forgetting). This presentation will consider several lines of research thematically linked to the role of time in behavioral processes. In some cases time really matters; in other cases, not so much. I will try to put these findings into theoretical perspective and explore their practical and clinical implications.

**Dr. Perone** earned his Ph.D. in 1981 at the University of Wisconsin-Milwaukee. He was an assistant professor at the University of North Carolina at Wilmington before joining the faculty at West Virginia University in 1984, where he is a professor of psychology and an associate dean. His research is concerned with developing laboratory models of behavioral processes involved in problem behavior such as failures of self-control.

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# SCHEDULE OF EVENTS Holiday 1, 2, 3 (Hilton) 3:30 Invited Address \*BACB\*APA\*

Timothy R. Vollmer, Ph.D., BCBA-D,

University of Florida

Introduced by: Gabriella Ulloa, UMBC

Title: Detrimental Effects of Behavioral Rigidity in Autism

Abstract: Autism Spectrum Disorders are defined in part by behavioral rigidity. The presenter will show data from several studies that demonstrate rigidity in this population. In some cases, rigidity leads to problem behavior and potentially to health-related problems. For example, one study showed that rigid interests led to aggression when rigid engagement was blocked. In another study, subjects would only eat unhealthy food and would do so in a highly stereotyped fashion. Shaping and differential reinforcement are useful interventions for problematic behavioral rigidity. Results of intervention studies will be presented as a demonstration.

**Dr. Vollmer** received his Ph.D. from the University of Florida in 1992. From 1992 until 1996 he was on the psychology faculty at Louisiana State University. From 1996 to 1998 he was on the faculty at the University of Pennsylvania Medical School. He returned to the University of Florida in 1998 and is now a Professor of Psychology. His primary area of research is applied behavior analysis, with emphases in developmental disabilities, reinforcement schedules, and parenting. He has published over 100 articles and book chapters related to behavior analysis. He was the recipient of the 1996 B.F. Skinner New Researcher award from the American Psychological Association (APA). He received another APA award in August 2004, for significant contributions to applied behavior analysis. He is also currently the Editor-in-Chief of the Journal of Applied Behavior Analysis.

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### POSTER SESSION 4:30-6:30 Peale

1. Using Desensitization and Noncontingent Reinforcement to Increase Toothbrushing Tolerance.

Julia A. Iannaccone, **Sadye Alvarez**, Mary K. Bednar, & Nicole L. Hausman (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)

- 2. Slow Down: Further Comparison of Differential-Reinforcement-of-Low-Rate Procedures.
- **Jessica L. Becraft,** John C. Borrero, Barbara Davis, Amber Mendres-Smith, Mariana Castillo, & Joshua Jessel *(UMBC)*
- 3. Measuring the Complexity of Treatment for Challenging Behavior Using the Treatment Intensity Rating Form.

  Andrew Bonner, Jennifer Zarcone, Jennifer Ninci, Chloe McKay, Christopher Dillon, & Nicole Hausman. (Kennedy Krieger Institute & Johns Hopkins University School of Medicine)
- 4. The Effects of Peer-Mediated Training on Social Skill Deficits in Children with Autism Spectrum Disorders. Kelly J. Campbell, Lauren Siville, Michael Hitchcock, Tisha Simms, Gloria Muniz, & Benjamin Witts (Piece by Piece Behavioral Solutions, St. Cloud State University)
- 5. Number of Trials in Acquisition Research is Subject to Sampling Error.

Mariana Castillo, Shuyan Sun, & John C. Borrero (UMBC)

- **6.** Teaching to Wait for Complete Instruction Delivery. Anthony Concepcion, Noor Javed, Melissa C. Theodore, Cara L. Phillips. (Kennedy Krieger Institute)
- 7. Treatment of Problem Behavior Maintained by Access to Specific Verbal Responses from Peers.

  Sara Deinlein, Amanda Goetzel, Jonathan Schmidt, Craig

Strohmeier, Jennifer Zarcone, Noor Javed, Phillip Orchowitz, & Rebecca Getachew (Kennedy Krieger Institute)