



# University of Maryland, Baltimore County

## Applied Behavior Analysis M.A. Track

In Collaboration with the Kennedy Krieger Institute and The Johns Hopkins University School of Medicine



Kennedy Krieger Institute

### Program Description

#### The UMBC-KKI Partnership

The UMBC Department of Psychology, together with the Kennedy Krieger Institute's Department of Behavioral Psychology, are uniquely suited to prepare students as professionals in the practice of behavior analysis. Our track is accredited by ABAI.

#### Applications

The application deadline for the program is **January 1**. We do not offer rolling admission.

#### Representative 2-year Program of Study

**Year 1 Fall:** Learning, ABA Methods, Practicum I

**Year 1 Spring:** Measurement, Ethics, Practicum II

**Year 2 Fall:** BA in the Schools, ABA and IDD, Capstone I

**Year 2 Spring:** Advanced Topics in BA, Verbal Behavior, Capstone II

#### Capstone Projects

The Capstone Project is designed by the student and supervised by a faculty member. Several Capstone Projects have been published in peer-reviewed journals. A sample of recent published Capstone Projects appear below. Student authors are bolded.

**Bonner, A. C.**, & Borrero, J. C. (2018). Differential reinforcement of low rate Schedules reduce severe problem behavior. *Behavior Modification*, 42, 747-764.

Borrero, J. C., **Rosenblum, A. K.**, Castillo, M. I., **Spann, M. W.**, & Borrero, C. S. W. (in press). Do children who exhibit food selectivity prefer to save the best (bite) for last? *Behavioral Interventions*.

**Iannaccone, J. A.**, Hagopian, L. P., Javed, N., Borrero, J. C., & Zarcone, J. R. (2020). Rules and statements of reinforcer loss in differential reinforcement of other behavior. *Behavior Analysis in Practice*, 13, 81-89.

**Lozy, E.**, & Sy, J. R. (2019). Evaluating different values of effort and reinforcement parameters under concurrent-and single-operant arrangements. *Journal of Applied Behavior Analysis*, 52, 516-533.

**Pincus, S. M.**, Hausman, N. L., Borrero, J. C., & Kahng, S. W. (2019). Context influences preference for and level of physical activity of adolescents with intellectual and developmental disabilities. *Journal of Applied Behavior Analysis*, 52, 788-795.

**Piper, A.**, Borrero, J. C., & Becraft, J. L. (2020). Differential reinforcement of low rate procedures: A systematic replication with students with autism spectrum disorder. *Journal of Applied Behavior Analysis*, 53, 1058-1070.

**Porter, A.**, & Sy, J. R (2020). Assessment and treatment of self-control with aversive events. *Journal of Applied Behavior Analysis*, 53, 508-521.

**Ulloa, G.**, Borrero, C. S. W., & Borrero, J. C. (2019). Behavioral interventions for pediatric food refusal maintain effectiveness despite integrity degradation: A preliminary demonstration. *Behavior Modification*.

**Weyman, J.**, & Sy, J. R. (2018). Effects of neutral- and high-quality praise on the rate of skill acquisition among individuals with autism and intellectual disabilities. *Journal of Applied Behavior Analysis*, 51, 335-344.

### Experiential Learning Sites

**The Practicum gives students hands-on experience with applied behavior analysis. The majority of students in the UMBC ABA program gain their practical, supervised experience as employees in one of three clinics at the Kennedy Krieger Institute.**

**UMBC students working in these clinics generally serve as Clinical Specialists (primary therapists) and Behavior Data Specialists working under the supervision of faculty level BCBAs and/or Clinical Psychologists. In addition, we are pleased to have added the Shafer Center as a practicum placement.**

**Kennedy Krieger Neurobehavioral Inpatient Unit (NBU)** – A 16-bed inpatient unit dedicated to the assessment and treatment of severe problem behavior displayed by individuals with intellectual and developmental disabilities.

**Kennedy Krieger Neurobehavioral Outpatient Clinic** – An outpatient clinic that provides consultation, day treatment, intensive behavioral day treatment, and community follow-up services for children with severe behavior disorders.

**Kennedy Krieger Pediatric Feeding Disorders Clinic** – A clinic that treats children and adolescents with feeding disorders including failure to consume enough nutrients to promote growth, abnormal suck and swallow patterns due to genetic or metabolic defects, abnormal eating problems, disruptive mealtime behavior, and tube feeding management.

**The Shafer Center** – A private, non-profit school where a multi-disciplinary team of dedicated professionals provides a whole-child approach to addressing the special needs of each child served, and the unique needs of each family.

**\*Additional practicum sites are being explored.**



UMBC Campus

### Core Faculty



**John C. Borrero** joined the faculty at UMBC in the Fall of 2007, where he supervises master's students and doctoral students in Applied Developmental Psychology. He is Director of the M.A. program. A primary focus of his work is translational, in that the topics he studies are not identical reflections of events in application, but may suggest methods of improving behavior analysis in practice. Recent work has focused on differential reinforcement schedules, behavior in transition, and tummy time for infants. Dr. Borrero is a former Associate Editor and will be the next Editor-in-Chief for the *Journal of Applied Behavior Analysis*, was a former member of the ABAI Science Board, and is a Co-Director of the Maryland Association for Behavior Analysis.



**Carrie S. W. Borrero** joined the faculty of the Pediatric Feeding Disorders Program at the Kennedy Krieger Institute in 2007. She has been an adjunct faculty member at UMBC since 2012. She is also an Assistant Professor in the Department of Psychiatry and Behavioral Sciences at the Johns Hopkins University School of Medicine. Dr. Borrero's research interests include the assessment and treatment of inappropriate mealtime behavior exhibited by children. She is on the Board of Editors of the *Journal of Applied Behavior Analysis* and is a Co-Director of the Maryland Association for Behavior Analysis.



**Mirela Cengher** joined the faculty at UMBC in the Fall of 2019, and supervises masters students and doctoral students in Applied Developmental Psychology. The overarching theme of Dr. Cengher's research is the development of effective procedures for individuals with developmental disabilities. Her main research interests include verbal behavior, stimulus control (e.g., concept formation), as well as functional assessment and treatment of problem behavior. Dr. Cengher is on the editorial board of the *Journal of Applied Behavior Analysis*, *The Analysis of Verbal Behavior*, and the *Journal of Behavioral Education*.



**Michelle Frank-Crawford** joined the faculty of the Inpatient Neurobehavioral Unit at the Kennedy Krieger Institute in 2020. Dr. Frank-Crawford is also an Assistant Professor in the Department of Psychiatry and Behavioral Sciences at the Johns Hopkins University School of Medicine. She joined the MA program in 2021 as the Kennedy Krieger Institute liaison to UMBC. Dr. Frank-Crawford has participated in multiple NIH-funded grants that have attempted to further our understanding of the causes of severe problem behavior and methods to reduce it using both translational and applied approaches. Dr. Frank-Crawford's current research continues to focus broadly on the assessment and treatment of problem behavior; she is particularly interested in refinements to the functional assessment process and to the methods used to identify and arrange of effective reinforcers.



**Adithyan Rajaraman** joined the faculty at UMBC in the Fall of 2019, where he supervises master's and doctoral students in Applied Developmental Psychology. He has been working to increase the scope of behavior-analytic course offerings for undergraduate Psychology majors. Dr. Rajaraman's research and practice interests include the analysis, treatment, and prevention of dangerous problem behavior, with an emphasis on investigating trauma-informed approaches to behavioral assessment and intervention. This research aim is intimately connected to the goal of being able to provide safe and dignifying, yet highly effective behavior-analytic services to underrepresented individuals in underserved communities.



**A. Charles Catania** has the status of an Emeritus faculty member at UMBC . Dr. Catania was an undergraduate at Columbia College and received his Ph.D. from Harvard University in 1961. He has served as Editor of the *Journal of the Experimental Analysis of Behavior* and currently represents the experimental analysis of behavior on the Board of Editors of the journal Behavioral and Brain Sciences. His recent work includes the analysis of attention-deficit/hyperactivity disorder in terms of anomalies of delay-of-reinforcement gradients and the interpretation of verbal behavior and its evolution in terms of selection at the levels of phylogeny, ontogeny, and culture.

### Supporting Faculty

#### Christine Accardo, Ph.D.

The Shafer Center

#### Lynn Bowman, M. A.

Kennedy Krieger Institute and Johns Hopkins University School of Medicine

#### Michael Cataldo, Ph.D.

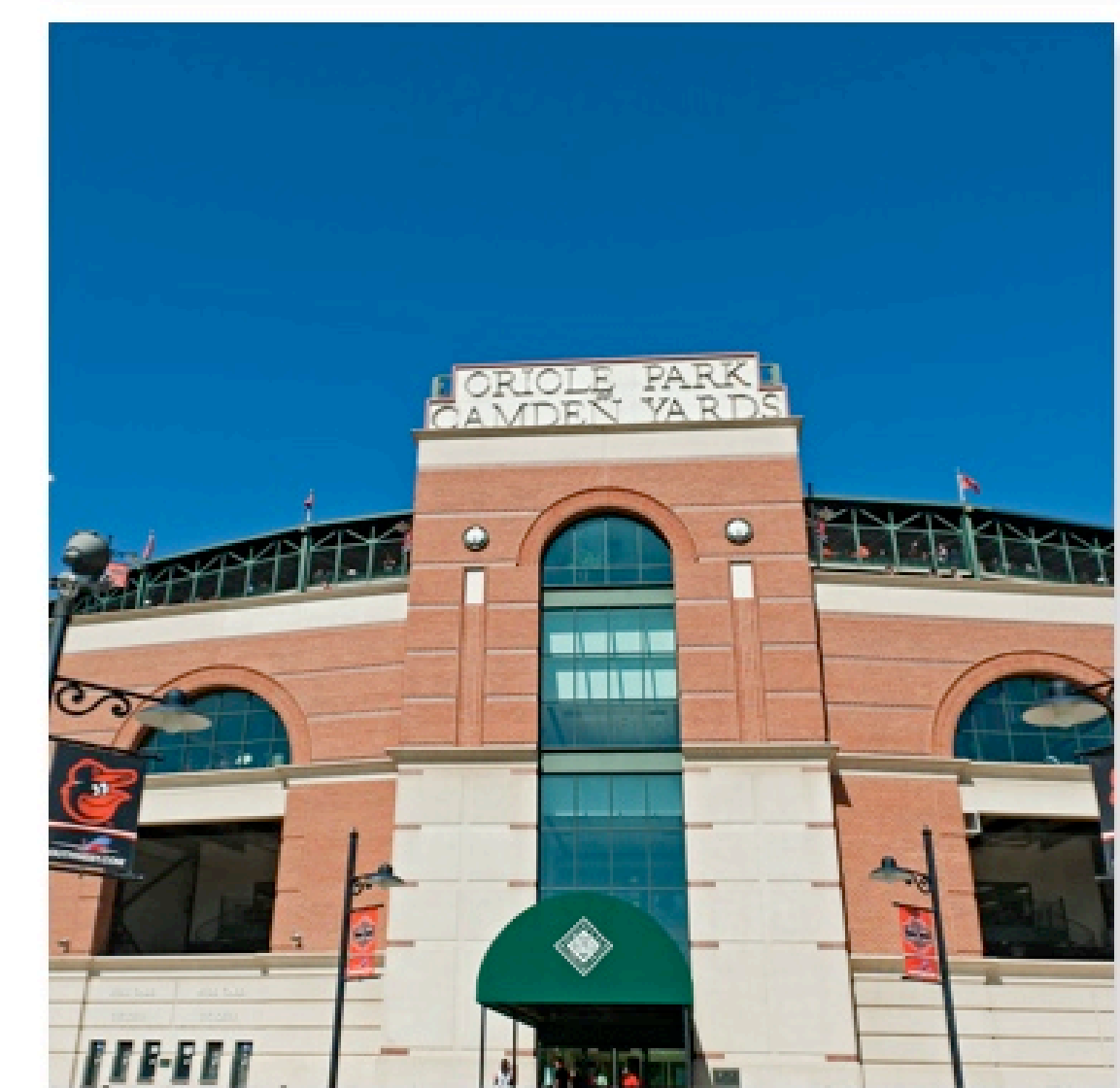
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#### Patricia Kurtz, Ph.D.

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#### Keith Slifer, Ph.D.

Kennedy Krieger Institute and Johns Hopkins University School of Medicine



**Top left, True Grit, the UMBC mascot, top right, students gathered outside of the Performing Arts building at UMBC, bottom left, Camden Yards, bottom right, Baltimore's Inner Harbor.**