Behavior Assessment:

- Oberleitner, RM, Ball, J EdD, Gillette, D EdM, Naseef, R PhD, Stamm, B.H. Journal of Aggression, Maltreatment and Trauma; Innovative Trends in Trauma Treatment Techniques. Technologies to Lessen the Distress of Autism, Binghamton: Haworth – April, 2005

  Abstract: This article explores aspects of autism that make it a potential traumatic stressor for family members, and may put them at risk for Posttraumatic Stress Disorder (PTSD) and/or its sub-syndromal variants. It also surveys current trends in autism, including the growing number of families affected by autism.

- Oberleitner, R, Laxminarayan S, Information Technology and Behavioral Medicine: Impact on Autism Treatment & Research, Medical and Care Compunetics, IOS Press, June, 2004

  Abstract: The rising incidence of autism with limited professional resources has led to more consideration for using information technology and related specialties to link families and professionals, and to implement strategies which implement information technology to improve the outcomes for individuals with autism and their families. These are reviewed in context of the unique health, education, and the research issues facing those dealing with autism.

- Oberleitner, R, Laxminarayan, S, Suri, J, Harrington, J, Bradstreet J, The Potential of a Store-and-forward Tele- Behavioral Platform for Effective Treatment and Research of Autism , IEEE – Engineering in Medicine and Biology Proceedings, Sept, 2004

  Abstract: This paper describes the justification and the design principles of a behavioral medicine store & forward telemedicine platform to facilitate the capturing and communication of spontaneous patient behaviors for the improved evaluation, diagnosis and ongoing treatment of people with autism.

- Demir, S., Oberleitner, Talking to the Autism Community, IEEE Engineering in Medicine and Biology Magazine, Jan/Feb 2005

  Excerpt: With an identifiable network now created, we are now focused on developing a telehealth service and data management platform to help families communicate health and behavioral issues remotely, while providing better health and educational data to accelerate research.

- Oberleitner, R, Elison-Bowers P, Harrington, J, Hendren, R, Kun, L, Reischl, U, Merging Video Technology with Personal Health Records to Facilitate Diagnosis and Treatment of Autism, JD2H2 Conference, IEEE, Washington DC, April, 2006

  Abstract: Improved imaging techniques and an increased demand for a personal health record platform indicates that a telehealth based system has an excellent potential for improving patient care, providing a high capacity for information storage and retrieval, and for reducing healthcare costs. A video-capture technology is presented that will allow parents, schoolteachers, and other caregivers to capture a child's behavior for subsequent evaluation by an appropriate specialist worldwide.

- Oberleitner, R, Abowd, G, The Importance of Record Keeping, Interactive Autism Community / Kennedy Krieger Online Newsletter, April, 2007

  Excerpt: Our professional experiences in commercial and research aspects of health technologies convince us that ‘record keeping’ is the next frontier that has the potential to help clinicians and researchers accelerate their success with our kids. We also believe that computer

and Internet technologies will make record keeping easier and therefore a more powerful tool for autism treatment and research.

- Reischl, U, Ball, J, Abowd, G, Oberleitner, R, Elison-bowers, P, Lockwood, S. Inter-rater Reliability Using a Behavior Imaging Web Platform, 6th Annual International Meeting for Autism Research (IMFAR) Seattle, WA, May 2007

  Abstract: Limited access to professionals capable of evaluating the functional performance of children with autism is impacting the educational progress of children with autism locally and regionally. Application of a new behavior image platform may facilitate remote evaluations and increase access to such services in the future

- Reischl, U., Oberleitner, R., Colby, C., Hamilton, A., Assessment of Behavior Imaging (B.I.) Technology in the Classroom, Association for Behavior Analysis International, Annual Conference, Phoenix, AZ. 2009

  Abstract: In a two-year National Institutes of Health-funded research study involving 11 sites in the U.S., researchers evaluated the acceptance of Behavior Imaging in autism classrooms for Functional Behavior Assessment (FBA) decision support, staff & parent training, and assessment. Adoption obstacles were also considered as Behavior Imaging materials were distributed and installation, video capturing, annotation, and sharing tasks were assessed.

- Reischl, U., Oberleitner, R., Development of a Telemedicine Platform for the Management of Children with Autism, Zeitschrift für Nachwuchswissenschaftler (German Journal for Young Researchers) 2009/1(1)

  Abstract: Development of a new video capture and personal electronic health record platform has been undertaken which will allow autism families to document their child's abnormal behavior and share this information confidentially with remotely located healthcare providers who can then provide each family with guidance regarding their child's behaviors and health condition.

- Oberleitner, R, Reischl, U, Lacy, T, Goodwin, M, Spitalnick, J, Emerging Use of Behavior Imaging for Autism, Commun Med Care Compunetics, Springer-Verlag Berlin Heidelberg, December 2010

  Abstract: Commercially available "behavior imaging" technology is effectively assisting the diagnosis and management of children with neurodevelopmental disorders, including autism. This technology offers a unique way of capturing behavior data in natural environments on video clips, and is complemented by a comprehensive information storage and retrieval platform.

- Oberleitner, R, - Report to US Air Force, OPERATIONAL ASSESSMENT OF STORE-AND-FORWARD TELE-CONSULTATION FOR SUPERVISION OF BEHAVIORAL THERAPY IN AUTISTIC SPECTRUM DISORDERS, Solicitation # F1ATD49141A002, October 11, 2010

  Abstract: This study assessed the ability of commercially-available Behavior Imaging® technology to assist clinicians in the supervision of remotely-delivered ABA (applied behavior analysis) services.

- Oberleitner, R, Reischl, U, Lacy, Treating Childhood Autism Through Remotely Supervised Behavior Therapy, Association for Behavior Analysis International, Annual Autism Conference, Washington DC, January, 2011

Abstract: Families [that had at least one child with autism] and tutors were provided a novel Behavior Imaging technology to use in their homes free of charge. Families, ABA tutors, and ABA therapy supervisors from 5 sites could use live (synchronous) web-conferencing and/or an asynchronous approach that allowed them to record, annotate, tag, and share video clips of sessions via Behavior Connect, a secure online consultation and collaboration platform.

- Whitney, T., Oberleitner, R., Treating Autism in Toddlers and Adolescents Through Behavior Imaging, 10th Annual International Meeting for Autism Research (IMFAR), San Diego, CA, May 2011

  Abstract: An assessment was conducted to determine the perceived effectiveness of using remote consultation in supervising clinical therapies at various clinical sites nationally. The goal was to evaluate strengths and weaknesses of Behavior Imaging technology in treating young children and teens with diagnosed ASD who are military dependents as well as to identify select use cases that are found to be helpful in the treatment of individuals with ASD.

- Angjellari-Dajci, F., Lawless, W. F., Agarwal, N., Oberleitner R., Coleman, B., Warsi, S., & Kavoossi, M. Telehealth-based systems for diagnosis, management and treatment of autism spectrum disorders: Challenges, opportunities and applications. In I. M. Miranda & M. M. Cruz-Cunha (Ed.), Handbook of Research on ICTs for Healthcare and Social Services: Developments and Applications. Hershey, PA: IGI Global. 2013

  Abstract: The prevailing system for diagnosis, treatment, and management of Autism Spectrum Disorders (ASDs) in the US-the in-person service delivery-has been unable to address the increase in the demand for services and societal costs for those served, and the unattained societal benefits for those not diagnosed early enough or not offered early and intensive behavioral interventions. The authors discuss new developments in telehealth for diagnostic evaluation and ASD treatment in the US.

- Oberleitner, R., Abowd, G., Suri, J.S. Behavior Imaging®'s Assessment Technology: A Mobile Infrastructure to Transform Autism Diagnosis and Treatment. In M.F. Casanova et al (eds.), Imaging the Brain in Autism. Springer Science+Business Media, New York, NY 2013

  Abstract: Behavior Imaging gives researchers and clinicians tools to collect rich, environmentally contextual data, enhancing diagnosis and treatment of individuals with autism spectrum disorder and related developmental disabilities. We will define Behavior Imaging and explain its development, its uses in treatment, and especially due to recent advances to include mobile devices, what the technology means for the future of autism diagnosis, treatment, and research.

- Nazneen, Matthews, N., Smith, CJ Agata Rozga, Gregory D. Abowd, Ron Oberleitner, Uwe Reischl, Rosa Arriaga. Use of a Novel Imaging Technology for Remote Diagnosis of Autism: A Reflection on Experience of Stakeholders. 6th International Conference on Applied Human Factors and Ergonomics (AHFE 2015), July 2015, Las Vegas, USA

  Abstract: To address the need of parents of children with autism to obtain on-time access to appropriate diagnostic services, an imaging technology, NODA® (Naturalistic Observation Diagnostic Assessment), has been successfully developed and field tested. This paper is a reflection on the firsthand experience of key stakeholders (parents and diagnosticians) using NODA® in the field.