***If I have seen further it is by standing on the shoulders of Giants. ― Isaac Newton***

In honor of the outgoing *JAACAP* editorial team, we have selected articles that appeared in the *Journal* in 2017 that, in our view, are notable for their scientific and clinical significance and are also representative of the outstanding work that our colleagues Andrés Martin, Jim Hudziak, Steve Faraone, Ellen Leibenluft, John Piacentini, Laura Prager, and John Walkup have done as Action Editors over the last decade. Action Editing, which involves an initial appraisal of a submission, selecting and inviting peer reviewers, re-appraising the article in light of these reviews, and supporting authors in responding to these reviews, is the central function of a senior editorial team. Good action editing ensures that papers receive a fair and thorough assessment and are strengthened by this review process. Authors often consider the quality of a journal’s peer review process when they are deciding where to submit manuscripts, and we know that the work of Drs. Martin, Hudziak, Faraone, Leibenluft, Piacentini, Prager, and Walkup helped fill the pages of *JAACAP* with outstanding papers such as the ones we highlight here.

**Strengthening Clinical Care: A Tribute to John Piacentini and John Walkup**

Critical evaluation and dissemination of research designed to improve the nature and quality of clinical care available to children and families is a core mission of the *Journal*. The best of this work builds on developmental science and rigorously tests both pharmacological and psychotherapeutic interventions as well as implementation strategies and delivery systems in a continuous effort to provide care that is more effective. Access to care is a growing challenge within pediatric mental health—as a field, we need to both hone our intervention strategies to assure efficacy and also test delivery of care models to increase access to effective care by the many youth and families in need. John Piacentini and John Walkup have worked tirelessly for the *Journal* over the last decade to support the publication of outstanding clinical intervention research. They have helped to bring articles to publication that represent excellence in design while testing innovative strategies of care delivery, including internet and single-session interventions, and addressing thorny issues such as management of unwanted side effects and persistence of treatment response.

***Comparison of Stepped Care Delivery against a Single, Empirically Validated Cognitive-Behavioral Therapy Program for Anxious Youth: A Randomized Clinical Trial.***1 As noted by the authors, stepped care is widely seen as the ideal service delivery model. However, few studies have actually tested the efficacy of a stepped approach in contrast to an intervention with proven efficacy, such as cognitive-behavioral therapy (CBT) for anxiety. While effective, CBT for anxiety typically requires a highly trained care provider and 12 or more treatment sessions. Rapee et al. (2017) argue the importance of “empirically validating more flexible and comprehensive models of management that will better meet the broad and resource-limited needs of public mental health systems.” To this end, they compared the efficacy of Cool Kids, an established evidence-based intervention for youth with anxiety, with a three-step intervention approach. Using variations of the established CBT approach, the investigators modified the delivery format (educational material and phone coaching vs. therapist-led care), the intensity of treatment (number of sessions), and the therapist’s level of training and experience. The findings suggest that offering an initial self-help approach followed by a standard CBT package for those still in need offers a more time- (and potentially cost-) efficient service delivery model. Given the thoughtful attention to design, this study represents an important contribution to the field and embodies the type of research the *Journal* strives to foster.

***A Randomized, Placebo-Controlled Trial of Metformin for the Treatment of Overweight Induced by Antipsychotic Medication in Young People With Autism Spectrum Disorder: Open-Label Extension.***2 Weight gain is a well-known possible adverse event of antipsychotics, currently widely used to manage irritability and aggressiveness in children with autism spectrum disorder (ASD). In a 16-week extension following an initial 16-week placebo-controlled randomized controlled trial (RCT), Handen et al. found that children (n=30) with ASD prescribed antipsychotics who were switched from placebo (in the initial phase of the RCT) to metformin (in the open-label extension) showed statistically significant decreases in weight. Furthermore, those (n=22) initially assigned to metformin during the RCT continued to maintain weight loss during the extension phase with metformin, albeit with no additional decreases in weight. Metformin was generally well tolerated. Of note, in the initial RCT as well as in the extension phase, metformin effects started after 4 weeks of treatment, a key finding that prescribers should discuss with patients and their families. Pending further replication, the study provides clinically relevant evidence to support the use of metformin as an effective and overall safe agent to manage weight gain following antipsychotic treatment in youth.

Selecting high-quality evidence base to inform daily clinical practice in child and adolescent mental health is central to the mission of the *Journal.* Double-blindrandomized controlled trials (DB-RCTs) are suited to rigorously test the efficacy and/or tolerability of potential treatment strategies. However, the short duration of many DB-RCTs challenges the translation of their findings into routine clinical care. As such, open-label extensions of DB-RCTs have the potential to provide additonal relevant information. This paper is an outstanding example of just such a study.

**- Samuele Cortese and Elizabeth McCauley**

**The Anatomy of Neuroimaging Article: A Tribute to Ellen Leibenluft**

Over the past decade, Ellen Leibenluft has fielded the exponentially increasing number of neuroimaging submissions to the *Journal* (the increase has been so remarkable two of us now are responsible for what Ellen managed on her own). To honor Ellen’s contribution of her work over the past decade, and with the goal to pick up and carry the torch of hosting strong neuroimaging studies in the *Journal*, we perform a careful dissection of one of the articles that Ellen saw through to publication.

***Cortical Morphology Characteristics of Young Offspring of Patients With Schizophrenia or Bipolar Disorder*.3** Sugranyes et al. performed a longitudinal structural magnetic resonance imaging (MRI) study of the offspring of patients with either schizophrenia or bipolar disorder (BPAD). The sample size was respectable, given the difficulty in recruiting such a unique at-genetic-risk population. Compared to offspring of BPAD, the authors found lower parietal and occipital lobe surface area in the offspring of individuals with schizophrenia. While there are certainly limitations to this study, as is true for all studies, there are several specific strengths that are noteworthy. First, recruiting offspring of patients with schizophrenia and BPAD offers the opportunity to study baseline neurobiological characteristics of individuals prior to the development of psychopathology, although it is unclear who will go on to develop an illness. Second, recruiting offspring of schizophrenia and BPAD allows for the study of the specificity of emerging psychopathology, including overlapping and non-overlapping features. Finally, longitudinal designs provide the opportunity to study developmental trajectories, measuring change over time. The authors found that longitudinal changes in the offspring of patients with schizophrenia were different dependent on developmental age. Longitudinal studies, especially in high-risk populations, are challenging due to difficulties with recruitment and with attrition and the use of different analysis strategies. However, they can be extremely valuable, especially considering the non-linear brain changes that take place throughout development.

* **Jean Frazier and Tonya White**

**Worms, Fishes, and Autoimmunity: A Tribute to Jim Hudziak and Steve Faraone**

The past ten years have witnessed an explosion in the quantity and quality of the molecular biology, genetics, and neuroscience in the *Journal.* With careful shepherding, Drs. Hudziak and Faraone have guided these papers through the editorial process, deftly choosing the papers with the highest impact and the most cutting-edge methods. These are two of those papers that reflect both their own research careers and their thoughtfulness as they strive to stretch the knowledge of the *JAACAP* readership, ensuring that the best science informs our research and clinical practice for the next decades.

***Associations Between Autoimmune Diseases and Attention-Deficit/Hyperactivity Disorder: A Nationwide Study.***4 Recent advances in data collection, data sharing, and “big data science” now enable massive epidemiological studies with sufficient statistical power to discern relations across disorders, and to some extent, across generations. In this context, Nielsen et al. examined a sample of over 980,000 children and their parents to explore the association between self and/or parental autoimmune disorders and child ADHD. The authors based this hypothesis on an increasing body of evidence that suggests subsets of ADHD are linked with neuro-inflammation, a biological process that will likely dramatically influence the next decade of research in developmental psychopathology. This work was made possible by linking the Danish Civil Registration System, the Danish National Hospital Register, and the Danish Psychiatric Central Research Register. In this substantial synthetic cohort, researchers were able to identify more than 23,000 children with ADHD and found that a personal history of autoimmunity was associated with ADHD diagnosis. Thinking across generations, as child psychiatry often does for clinical purposes, and recognizing the high heritability of both autoimmune disorders and ADHD, they also found that maternal type 1 diabetes, autoimmune hepatitis, psoriasis, and ankylosing spondylitis were significantly associated with an increased risk of ADHD in their offspring. This work demonstrates the associations with previously unrecognized medical partners, autoimmunity and ADHD, provides both additional support for increased integration with pediatrics, particularly pediatric subspecialties, but also provides a novel translational glimpse into neurobiological mechanisms.

***Zebrafish: A Translational Model System for Studying Neuropsychiatric Disorders***.5 What if you could see through all the skin and bones of a developing organism and watch and track each individual neuron as it grows and develops? What if the fate of each neuron, from its first appearance to its adult function and location, had been mapped out and could even be manipulated, knocking out single genes throughout the organism or targeting certain pathways to disrupt? And what if you could do this simultaneously in thousands of organisms at once, all the while testing the effects of pharmacological agents, toxins, stressors, and subsequently tracking not only the fate of each individual neuron but the subsequent behavior and molecular signature of single neurons? Sound like a ridiculous science fiction movie? For researchers working with model systems like C. elegans or zebrafish, this is just another day at the office. Sundas-Ijaz and Hoffman walked the readership through the zebrafish system, which, since the completion of the sequencing of the entire zebrafish genome, now provides critical insight into diseases. Using this model system, researchers have been able to examine the impact of changing the excitatory–inhibitory balance in the developing zebrafish brain, an innovative model system in which to explore one of the core hypothesized pathways leading to autism. This model system identified the functional consequence of a gene associated with autism risk, including deficits in inhibitory neuronal development. Beyond the ability to manipulate the genomes of zebrafish, it is also possible to directly test both the behavioral impacts of novel, and existing, psychotropics as well as the developmental consequences of early exposures. While there are steps between zebrafish research and direct human translation, as the molecular genomic technologies advance, they offer unparalleled insight into the neurobiological and genetic mechanisms underlying child psychopathology.

* ***Robert Althoff and Stacy Drury***

**Clinical Content and the *JAACAP* Universe: A Tribute to Andrés Martin and Laura Prager**

***Ten Things Transgender and Gender Nonconforming Youth Want Their Doctors to Know.***6 Clinical content and clinical relevance are at the heart of the academic mission of the *Journal*. What we do as a field matters because of how we help children and families through suffering, illness, and the many psychological and social obstacles to healthy and happy development. This mission underlies every part of the *Journal*, from original research to editorials and book reviews. It is in Clinical Perspectives, however, where we get to encounter the stories and the lives of the children and families we treat, and to learn how we can make that encounter richer, more effective, more thoughtful. Over the past five years, Laura Prager brought to Clinical Perspectives the same imagination and integrity that she brought to the Book Forum, which she had previously helmed. In the spirit of the openness and originality, as well as immediate clinical urgency that Laura brought to Clinical Perspectives, we have selected this article as our exemplar of her leadership in this section of the *Journal*: it is relevant, it is challenging, it speaks with expertise but captures the voice of a population too often unheard.

***A Two-Week Psychosocial Intervention Reduces Future Aggression and Incarceration in Clinically Aggressive Juvenile Offenders.***7 “Advancing the science of pediatric mental health and promoting the care of youth and families.”8 The *Journal*’s mission statement was coined by Andrés Martin and his colleagues at the start of their editorial tenure, and succinctly captures the incredible breadth of the more than 700 new research articles that the *Journal* published under Dr. Martin’s editorship. While no single paper can possibly capture this breadth, we have selected Kendall et al.’s article regarding their work with incarcerated youth for two key reasons. First, it reminds us that a call to address the needs of children with behavior problems and juvenile justice involvement was central to the development of children’s mental health services in the United States. And second, that 100 years after the establishment of the Juvenile Psychopathic Institute, the application of cutting-edge psychotherapeutic approaches and a sophisticated research design demonstrates how far we have come.

* ***Schuyler Henderson and Douglas Novins***

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