Adolescent and Transition Medicine

Division Details

RESEARCH AND TRAINING DETAILS

<table>
<thead>
<tr>
<th>Faculty</th>
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<tr>
<td>Joint Appointment Faculty</td>
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<tr>
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<tr>
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<tr>
<td>Total Publications</td>
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CLINICAL ACTIVITIES AND TRAINING

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<th>Clinical Fellows</th>
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<td>Inpatient Encounters</td>
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<tr>
<td>Outpatient Encounters</td>
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Research Highlights

Frank Biro, MD

Dr. Biro, MD, is the director of research in the Division of Adolescent and Transition Medicine. His research focuses on pubertal maturation; how the timing of puberty is impacted by the physical, chemical and social environment; and how changes associated with puberty impact adolescent and adult morbidity and mortality. Publications this year have examined how thyroid antagonists affect childhood growth among American girls. He was also part of a collaborative report examining the relation between brominated flame retardants, other organohalogenated compounds, and the timing of puberty. Dr. Gordon, MD, MSc, has joined his collaborative team to understand how environment chemical exposure during adolescence may impact insulin-like growth factor I secretion and implications for breast cancer risk. Dr. Biro’s research repeatedly draws attention from the national media.

Catherine Gordon, MD, MsC

Since her arrival in 2015, Dr. Gordon, MD, MSc, has launched a new clinical program at Cincinnati Children's Hospital Medical Center, The Center for Primary Ovarian Insufficiency (POI), from which have stemmed new clinical research studies. One project enrolls young adolescents with POI (also termed, "early menopause") to understand the relationship between hormone replacement therapy and bone health, among other medical and psychological outcomes. Dr. Gordon has also launched a study to investigate yoga as a therapy to decrease anxiety and counter bone loss in adolescent girls with restrictive eating disorders. Dr. Gordon’s scientific articles this year highlight work carried out in adolescents and young adults with anorexia nervosa, cystic fibrosis, and congenital heart disease. She also co-authored an international committee report that proposes a life-course approach to nutrition and bone health, and another report on factors that influence peak bone mass. The latter report stimulated the organization of a conference on the determinants of peak bone mass at the National Institutes of Health in November 2015, for which Dr. Gordon served on the planning committee.

Ellen Lipstein, MD
Dr. Lipstein, MD, MPH, conducts research focusing on improving the care and health of both children and adolescents with chronic disease by improving the treatment decision-making process. Findings from a recent study in the *Journal of Pediatrics* found that physicians have an interest in sharing decisions with parents and adolescents. Most providers indicated that parent and adolescent trust and emotional readiness facilitated shared decision making and that, other than insurance limitations, there were few barriers to sharing decisions. Interestingly, these findings were in contrast to prior observational work, suggesting that even physicians interested in engaging in shared decision making may not always have the skills and resources needed to fully implement it. Another report examined the process of decision making around treatment for pediatric chronic disease, and differences noted with respect to the patient vs. parents. Many of Dr. Lipstein’s studies were carried out with Dr. Maria Britto, MD, MPH, director, Center for Innovation in Chronic Disease Care at Cincinnati Children's. Dr. Lipstein is one of the 2015 Charlotte R. Schmidlapp Scholars, a prestigious funding program that recognizes outstanding women scientists at Cincinnati Children's.

**Jessica Kahn, MD, MPH**

Dr. Kahn conducts interdisciplinary research on the prevention of disease related to human papillomavirus (HPV) in young men and women. This year, she published results from a study examining the epidemiology of oral HPV in HIV-infected youth. Another report examined adolescents’ intention and self-efficacy to follow Pap testing recommendations after receiving the HPV vaccine. Other ongoing studies are examining the epidemiology and risk factors for genital HPV infection among adolescents and predictors of HPV vaccine recommendations by clinics and update by both parents and adolescents. Her work is funded by an R01 from the NIAID, and a U01 from the NICHD which supports the Adolescent Medicine Trials Network for HIV/AIDS Interventions, for which Dr. Kahn has served as a member of the Therapeutic Leadership Group.

**Tanya Mullins MD**

Dr. Mullins’ research focuses on the outcomes of human papillomavirus (HPV) vaccination in adolescents and use of new biomedical HIV prevention methods among adolescents, such as pre-exposure prophylaxis (PrEP). Dr. Mullins was the lead author on a report in Vaccine that examined risk perceptions, sexual attitudes, and sexual behavior after HPV vaccination in young adolescent girls. Dr. Mullins was an invited participant for the UNICEF-sponsored conference, “Consultation on Clinical and Operational Considerations for the Implementation of PrEP in Sexually Active Older Adolescents.”

**Eleanor Widdice, MD**

Dr. Widdice conducts research focusing on optimal testing for sexually transmitted infections (STI) in adolescents and young adults. She collaborates with community organizations to demonstrate acceptability and feasibility of providing STI screening and treatment in the community. She is especially interested in rapid tests that may contribute to national efforts to avoid the overuse of antibiotics for STIs, a practice that has contributed to the emerging increase in antibiotic-resistant gonorrhea. This year, she was a co-author on a report with Drs. Eric Mullins and Jessica Kahn examining risk perception, and sexual attitudes and behaviors after receipt of the HPV vaccination.

**Significant Publications**


The annual meeting of the Pediatric Academic Societies chose this article as one of the “Top 10 articles for 2015”. Trabecular bone score (TBS) is a bone assessment tool that offers information beyond that afforded by standard dual-energy x-ray absorptiometry (DXA) bone mineral density (BMD) measurements. TBS showed evidence of degraded microarchitecture in over 40% of this sample of 57 adolescent girls with anorexia nervosa, and strongly correlated with anthropometric data and measures of BMD and skeletal strength. TBS is a novel tool that captures another dimension of bone health in these patients.

This Position Statement was a collaborative effort by several committees of the American Academy of Pediatrics. In addition to outlining the recommended clinical care for youth in foster and kinship care who commonly have unmet health needs, there was emphasis on the importance of pediatricians providing a medical home, educating the youth themselves on their medical needs, and addressing coordination of care. Recommendations were also given about the role of pediatricians in advocacy efforts at the larger community and state level to ensure comprehensive health care for these youth.


Findings from this study reveal that physicians want to share decisions with both parents and adolescents. Most physicians indicated that parent and adolescent trust and emotional readiness facilitated shared decision making and that, other than insurance limitations, there were few barriers to sharing decisions. These results contrast with our prior observational work, suggesting that even physicians who want to engage in shared decision making may not always have the skills and resources needed to fully implement it.


Human papillomavirus (HPV), Epstein-Barr virus (EBV), and Kaposi sarcoma-associated herpes virus (KSHV) may promote oral cancers, especially among immunosuppressed individuals. The incidence rates of HPV-associated oropharyngeal cancers are rising. In this study, HIV-infected youth tested for oral HPV, EBV, and KSHV infection and viral load. The study identified common risks for infection, which included substance use and HIV-related factors. Understanding oral tumor virus co-infections in HIV-infected individuals is important, as effective interventions will help to prevent viral-associated oral cancers in this population.

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**Division Publications**


5. Biro F, Chan Y. *Puberty.* Watham MA: UptoDate; 2016 [updated April 1, 2016].


12. Council On Foster Care, Adoption and Kinship Care, Committee on Adolescence, Council On Early Childhood, Braverman PK. **Health Care Issues for Children and Adolescents in Foster Care and Kinship Care.** *Pediatrics.* 2015; 136:e1131-40.


27. Joffe A, Boyer CB, Britto MT. **Call for Papers on Adolescent and Young Adult Health.** *JAMA Pediatr.* 2015; 169:714.


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**Grants, Contracts, and Industry Agreements**

**Annual Grant Award Dollars**

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<th>Investigator</th>
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<td>Continued Studies of Environmental Impact on Puberty</td>
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<td>Paula K Braverman, MD</td>
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<td>Ellen A Lipstein, MD</td>
<td>Shared Decision Making in Pediatric Chronic Conditions: Bilogics in IBD &amp; JIA</td>
<td>National Institutes of Health K23</td>
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<td>Tanya Lilliane Kowalczyk Mullins, MD-MS</td>
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Total Annual Grant Award Dollars: $1,985,020