CURRICULUM VITAE DAVID H. BARKER

The Bradley Hasbro Children's Research Center One Hoppin Street. CORO West Suite 204 Providence, RI 02903 (401) 793-8264 david_barker@brown.edu

EDUCATION

Bachelor of Science Brigham Young University, Provo, Utah

August 2003; Major: Psychology

Master of Science University of Miami, Coral Gables, Florida

May 2006; APA Accredited Program: Clinical Psychology

Specialization in Pediatric Health Psychology

University of Miami, Coral Gables, Florida **Doctor of Philosophy**

June 2010; APA Accredited Program: Clinical Psychology

Specialization in Pediatric Health Psychology

Dissertation Title: Measurement of disease specific social

support in adolescents with cystic fibrosis

POSTGRADUATE TRAINING

Clinical Psychology Internship Brown Clinical Psychology Training Consortium, Providence,

Rhode Island; July 2009 - June 2010; APA Accredited

Program: Clinical Psychology

Training included outpatient therapy and working with medical teams involved in care of patients with a variety of pediatric conditions including HIV, feeding disorders,

diabetes, and asthma.

Brown Clinical Psychology Training Consortium, Providence, Clinical Psychology Fellowship

Rhode Island; July 2010 - June 2012

Training included outpatient therapy and working with medical teams involved in care of patients with a variety of pediatric conditions including cystic fibrosis, HIV, oncology,

and disordered sleep.

POSTGRADUATE HONORS AND AWARDS

NIH Loan Repayment Award Program (2010-2017)

2022 Nan Tobler Award for Review of the Prevention Science Literature: The award is given for contributions to the summarization or articulation of the empirical evidence relevant to prevention science.

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Rhode Island clinical psychology license number: PS01286; issued 3/14/12

ACADEMIC APPOINTMENTS

10/01/12—06/01/2020 Assistant Professor (Research), Department of Psychiatry and

Human Behavior,

Alpert Medical School of Brown University

06/01/2020—present Associate Professor (Research), Department of Psychiatry and

Human Behavior,

Alpert Medical School of Brown University

HOSPITAL APPOINTMENTS

07/01/12– present Staff Psychologist, Dept. of Child and Family Psychiatry

Rhode Island Hospital

MEMBERSHIP IN SOCIETIES

American Psychological Association, Division 54 (Pediatric Psychology) American Psychological Association Society for Prevention Science Sleep Research Society

OTHER COMMITTEES

5/1/2016-4/31/2018 Chair, Pediatric Research/Innovative Statistical Methodologies Special Interest Group, Society of Pediatric Psychology.

5/1/2018-4/31/2020 Past-Chair, Pediatric Research/Innovative Statistical Methodologies Special Interest Group, Society of Pediatric Psychology.

5/1/2018-present Member, Research Synthesis Methods for Prevention Science of the Society for Prevention Science.

5/29/2018-05/01/2020 Data Analyst, Workforce Survey Working Group, Society of

Pediatric Psychology.

3/1/2020-present Associate Editor of Sleep Advances

PUBLICATIONS LIST

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- 1. Johnson, K.C., DesJardin, J.L., **Barker, D.H.**, Quittner, A.L., & Winter, M.E. (2007). Joint attention and symbolic play skills in children with additional disabilities who receive cochlear implants: Two case studies. Otology & Neurotology, 29, 246-250. PMID: 18223452
- 2. Quittner, A.L., **Barker, D.H.**, Snell, C., Cruz, I., McDonald, L., Grimley, M.E., Botteri, M., Marciel, K., & CDaCI Investigative Team (2007). Improvements in visual attention after cochlear implantation. Audiological Medicine, 5, 242-249.
- 3. Quittner, A.L., **Barker, D.H.**, Snell, C., Grimley, M.E., Marciel, K., & Cruz, I. (2008). Prevalence and impact of depression in cystic fibrosis. *Current Opinions in Pulmonary Medicine*, *14*, 582-588. PMID:18812836

- 4. Quittner, A.L., Barker, D.H., Blackwell, L.S., Romero, S.L., & Woo, M.S. (2010). The Importance of Measuring Health-Related Quality of Life. In Lung Transplantation for Cystic Fibrosis: A Roundtable Discussion from the International Perspectives on Lung Transplantation: Adult and Pediatric Outcomes for Cystic Fibrosis Conference, Lansdowne, VA, USA, June 25-26, 2008. Proceedings of the American Thoracic Society, 6, 624. PMID: 20008865, PMCID: PMC2797068
- Barker, D.H., Quittner, A.L., Fink, N., Eisenberg, L., Tobey, E., Niparko, J., & CDaCI Investigative Team (2009). Predicting behavior problems in deaf and hearing children: The influences of language and attention. Development and Psychopathology, 21, 373-392. PMID: 19338689, PMCID: PMC2730756
- 6. Quittner, A.L., **Barker, D.H.**, Snell, C., Grimley, M.E., Cruz, I., Botteri, M., & CDaCI Investigative Team (2010). Parenting stress in caregivers of hearing-impaired children: Relationships to language delay and behavior problems. Parenting: Science and Practice, *10*, 136-155. PMID: 20607098, PMCID: PMC2895932
- 7. **Barker, D.H.**, Llyod, T.Q., Stewart, P.K., &Wells, M.G. (2010). The development and psychometric validation of the preschool outcome questionnaire: A preschool treatment outcome instrument. Journal of Child and Family Studies, 19 (4), 504-515.
- 8. Driscoll, K.A., Johnson, SB, **Barker, D.H.**, Quittner, A.L., Deeb, L.C., Geller, D.E., Gondor, M, & Silverstein, J.H. (2010). Risk factors associated with depressive symptoms in caregivers of children with type 1 diabetes or cystic fibrosis. *Journal of Pediatric Psychology*, *35*(8), 814-822. PMID: 20097908, PMCID: PMC2950809
- 9. Swenson, R.R., Houck, C.D., **Barker, D.H.**, Zennah, P.D., & Brown, L.K. (2011). Prospective analysis of the transition to sexual experience and changes in sexual self-esteem among adolescents attending therapeutic schools. *Journal of Adolescence*, *35*(1), 77-85. PMID: 21726896 PMCID in process.
- Brown, L. K., Nugent, N. R., Houck, C. D., Lescano, C. M., Whiteley, L. B., Barker, D.H., Viau, L., et al. (2011). Safe Thinking and Affect Regulation (STAR): Human Immunodeficiency Virus Prevention in Alternative/Therapeutic Schools. *Journal of the American Academy of Child and Adolescent Psychiatry*, 50(10), 1065-1074. PMID: 21961780, PMCID: PMC3185294
- 11. **Barker, D.H.**, Driscoll, K.A., Modi, A.C., Light, M.J., & Quittner, A.L. (2012). Supporting cystic fibrosis disease management during adolescence: The role of family and friends. *Child: Care, Health and Development, 38(4)*, 497-504. PMID: 21771002, PMCID: PMC3479957.
- 12. **Barker, D.H.**, Swenson, R.R., Brown, L.K., Stanton, B.F., Vanable, P.A., Carey, M.P., Valois, R.F., DiClemente, R.J., Salazar, L.F., & Romer, D. (2012). Blocking the benefit of group-based HIV-prevention efforts in at-risk African-American adolescents: The problem of HIV-related stigma. *AIDS and Behavior*, *16*(*3*), 571-577. PMID: 22170381, PMCID: PMC3464939.
- 13. Quittner, A.L., Cruz, I., **Barker, D.H.**, Toby, E., Eisenberg, L., Niparko, J., & the CDaCI Investigative Team (2013). Effects of Maternal Sensitivity and Cognitive and Linguistic Stimulation on Cochlear Implant Users' Language Development over Four Years. *Journal of Pediatrics*, 162(2):343-348. PMID: 22985723, PMCID: PMC3638743.

- 14. Orzech, K.M., Acebo, C., Seifer, R., **Barker, D.H.**, Carskadon, M.A. (2013). Sleep patterns are associated with common illness in adolescents. *Journal of Sleep Research*, 23(2), 133-142. PMID: 24134661; NIHMS ID: NIHMS594313
- 15. Van Reen, E., Sharkey, K.M., Roane, B., **Barker, D.H.**, Seifer, R., Raffray, T., Bond, T., and Carskadon, M.A. (2013). Sex of college students moderates associations among bedtime, time in bed, and circadian phase angle. *Journal of Biological Rhythms*, 28 (6): 425-431. PMID: 24336420; NIHMS ID: NIHMS590763
- Hadley, W., Houck, C.D., Barker, D.H., Garcia, A.M., Spitalnick, J.S., Curtis, V., Roye, S., & Brown, L. K. (2013). Eliciting Affect via Immersive Virtual Reality: A Tool for Adolescent Risk Reduction. *Journal of Pediatric Psychology*, 39(3), 358-368. PMID: 24365699, PMCID: PMC3959265
- 17. **Barker, D.H.**, Rancourt, D., & Jelalian, E. (2014). Flexible models of change: Using structural equations to match statistical and theoretical models of multiple change processes. *Journal of Pediatric Psychology*, 39(2), 233-245. PMID: 24190912, PMCID: PMC3936260.
- 18. Hadley, W., **Barker, D.H.**, Lescano, C.M., Brown, L.K., Stewart, A., Affleck, K., Donenberg, G., DiClemente, R., & Project STYLE Study Group (2014). Associations between psychiatric impairment and sexual risk behavior among teens in mental health treatment. *Journal of HIV/AIDS & Social Services*, *13*, 198-213.
- 19. Houck, C.D., **Barker, D.H.**, Rizzo, C., Hancock, E., Norton, A., & Brown, L.K. (2014). Sexting and sexual behavior in at-risk adolescents. *Pediatrics*, 133 (2), e276-282, PMID: 24394678, PMCID: PMC3904272
- 20. Brown, L. K., Hadley, W., Donenberg, G. R., DiClemente, R. J., Lescano, C., Lang, D. M., Crosby, R., **Barker, D.H.**, Oster, D. (2014). Project STYLE: A multisite RCT for HIV prevention among youths in mental health treatment. *Psychiatric Services*, *65*(*3*), 338-344. PMID: 24382603, PMCID: in process.
- 21. Cejas, I., **Barker, D.H.**, Quittner, A.L, & Niparko, J. (2014). Development of Joint Engagement in Young Deaf and Hearing Children: Effects of Chronological Age and Language Skills. *Journal of Speech, Language, and Hearing Research*, 57, 1831-1841, PMID: 24845423, PMCID: PMC4410682
- 22. Rancourt, D., **Barker, D.H.**, Sato, A. F., Lloyd-Richardson, E. E., Hart, C. N., & Jelalian, E. (2014). Longitudinal associations among change in overweight status, fear of negative evaluation, and weigh-related teasing among obese adolescents. *Journal of Pediatric Psychology*, *39*(7), 697-707. PMID: 24893862; PMCID: PMC4107576
- 23. Quittner, A. L., Goldbeck, L., Abbott, J., Duff, A., Lambrecht, P., Solé, A., Tibosch, M.M., Brucefors, A.B., Yuskel, H., Ctastini, P., Blackwell, L., & **Barker, D.H.** (2014). Prevalence of depression and anxiety in patients with cystic fibrosis and parent caregivers: results of The International Depression Epidemiological Study across nine countries. *Thorax*, 69(12), 1090–1097. doi:10.1136/thoraxjnl-2014-205983, PMID: 25246663, PMCID: In Process.
- 24. Hadley, W., McCullough, M. B., Rancourt, D., Barker, D., & Jelalian, E. (2014). Shaking up the System: The Role of Change in Maternal-Adolescent Communication Quality and Adolescent Weight Loss. *Journal of Pediatric Psychology*, 401(1), 121-131. PMID: 25214645, PMCID: PMC4288305
- 25. Crowley, S. J., Van Reen, E., LeBourgeois, M. K., Acebo, C., Tarokh, L., Seifer, R., **Barker, D.H.,** Carskadon, M. A. (2014). A Longitudinal Assessment of Sleep Timing, Circadian

- Phase, and Phase Angle of Entrainment across Human Adolescence. *PLoS ONE*, *9*(11), e112199. PMID: 25380248; PMCID: PMC4224451
- 26. Hadley, W., Houck, C.D., **Barker, D.H.**, & Senocak, N. (2015). Relationships of parental monitoring and emotion regulation with early adolescents' sexual behaviors. *Journal of Developmental and Behavioral Pediatrics: JDBP*, *36*(5), *381–388*. PMID: 25915779, PMCID: PMC4456297
- 27. Enimil, A., Nugent, N., Amoah, C., Norman, B., Antwi, S., Ocran, J., ... **Barker, D. H.** (2015). Quality of life among Ghanaian adolescents living with perinatally acquired HIV: a mixed methods study. *AIDS Care*, *28*(*4*), 460-4. PMID: 26643735, PMCID: PMC4764441
- 28. Hadley, W., **Barker, D.**, Brown, L. Almay, B., Donenberg, G., DiClemente, R. & the Project STYLE Study Group (2015). The moderating role of parental psychopathology on response to a family-based HIV prevention intervention among youth in psychiatric treatment. *Journal of Family Studies*, 21(2), 178-194.
- 29. Houck, C.D., Hadley, W., **Barker, D.**, Brown, L.K., Hancock, E., & Almy, B. (2016). An emotion regulation intervention to reduce risk behaviors among at-risk early adolescents. *Prevention Science*, *17*(1), 71-82. PMID: 26297499, PMCID: PMC4697876.
- 30. **Barker, D.H.**, Quittner, A.L. (2016). Adherence to pancreatic enzymes in children with cystic fibrosis: The role of parent depression. *Pediatrics*. 137(2):e20152296: PMID: 26738883, PMCID: PMC4732358
- 31. Van Reen, E., Roane, B., **Barker, D.**, McGeary, J.E., Borsari, B., and Carskadon, M.A. (2016). Current alcohol use is associated with sleep patterns in first-year college students. *Sleep 39*(6):1321-1326, PMID: 27070138. PMCID: PMC4863222.
- 32. Houck, C.D., **Barker, D.**, Hadley, W., Brown, L.K., Lansing, A., Almy, B., Hancock, E. (2016). The one-year impact of an emotion regulation intervention on early adolescent health risk behaviors. *Health Psychology*, *35*(*9*), 1036-45. PMID: 27175579. PMCID: PMC4993659.
- 33. Quittner, A. L., Cejas, I., Wang, N. Y., Niparko, J. K., & **Barker, D. H.** (2016). Symbolic play and novel noun learning in deaf and hearing children: Longitudinal effects of access to sound on early precursors of language. *PLoS ONE*, *11*(5), e0155964. PMID: 27228032. PMCID: PMC4882020
- 34. Hadley, W., Brown, L.K., Warren, J., **Barker, D.**, Fortune, T., Weddington, P., & Juzang, I., (2016). Work it Out Together: Preliminary efficacy of a parent and adolescent DVD and workbook intervention on adolescent sexual and substance use attitudes and parenting behaviors. *AIDS & Behavior*, 20(9), 1961-72. PMID: 27155880. PMCID: PMC5003055
- 35. Miller MB, Van Reen E, **Barker DH**, Roane BM, Borsari B, McGeary JE, Seifer R, Carskadon MA., (2017) The impact of sleep and psychiatric symptoms on alcohol consequences among young adults. *Addictive behaviors*, *66*, 138-144. PMID: 27940388; PMCID: PMC5189906.
- 36. Rizzo CJ, Joppa MC, **Barker DH**, Zlotnick C, Warren J, Cadely HSE, Brown, LK (2017). Individual relationship characteristics of adolescent girls with histories of physical dating violence. *Journal of Interpersonal Violence*. 0886260517696859. PMID: 29294672; PMCID: PMC6092250.

- 37. **Barker, DH**, Nugent, NR, Delgado, JR, Knopik, VS, Brown, LK, Lally, MA, & McGeary, JE (2017). A genetic marker of risk in HIV-infected individuals with a history of hazardous drinking. AIDS Care, 29(9), 1186-1191. PMID: 28278565; PMCID: PMC5766029
- 38. Kemp K, Thamotharan S, Poindexter B, **Barker D**, Tolou-Shams M, Houck CD. Emotion Regulation as a Predictor of Juvenile Arrest. Criminal Justice and Behavior. 2017 Jul 1;44(7):912–926.
- 39. Shochat T, **Barker DH**, Sharkey KM, Van Reen E, Roane BM, Carskadon MA. An approach to understanding sleep and depressed mood in adolescents: person-centred sleep classification. J Sleep Res. 2017 Dec;26(6):709–717. PMID: 28573658; PMCID: PMC5705436
- 40. Stack N, **Barker D**, Carskadon M, Diniz Behn C. A Model-Based Approach to Optimizing Ultradian Forced Desynchrony Protocols for Human Circadian Research. J Biol Rhythms. 2017 Oct 1;32(5):485–498. PMID: 28954576
- 41. Herz, RS, Van Reen, E, **Barker, D**, Hilditch, CJ, Bartz, A, Carskadon, MA. The Influence of Circadian Timing on Olfactory Sensitivity. *Chemical Senses*. 2017 Dec 15;43(1):45-51. PMID: 29045623; PMCID: PMC5863568
- 42. Hadley W, **Barker D**, Thamotharan S, Houck CD. Relationship Between Unsupervised Time and Participation in an Emotion Regulation Intervention and Risk Outcomes. J Dev Behav Pediatr. 2017 Nov/Dec;38(9):714-722. PMID: 28902065; PMCID: PMC5668172
- 43. Hadley W, Lansing A, **Barker DH**, Brown LK, Hunter H, Donenberg G, DiClemente RJ. The Longitudinal Impact of a Family-Based Communication Intervention on Observational and Self-Reports of Sexual Communication. J Child Fam Stud. 2018 Apr 1;27(4):1098–1109.
- 44. Rancourt D, **Barker DH**, Jelalian E. Sex as a Moderator of Adolescents' Weight Loss Treatment Outcomes. Journal of Adolescent Health. 2018 May 1;62(5):591–597. PMID: 29525290
- 45. Rizzo CJ, Joppa M, **Barker D**, Collibee C, Zlotnick C, Brown LK. Project Date SMART: A Dating Violence (DV) and Sexual Risk Prevention Program for Adolescent Girls with Prior DV Exposure. Prev Sci. 2018 May 1;19(4):416–426. PMID: 29352400, PMCID: PMC5899642
- 46. Houck CD, **Barker DH**, Hadley W, Menefee M, Brown LK. Sexual Risk Outcomes of an Emotion Regulation Intervention for At-Risk Early Adolescents. Pediatrics. 2018 May 10; e20172525. PMID: 29748192
- 47. Saez-Flores E, Tonarely NA, **Barker DH**, Quittner AL. Examining the Stability of the Hospital Anxiety and Depression Scale Factor Structure in Adolescents and Young Adults With Cystic Fibrosis: A Confirmatory Factor Analysis. J Pediatr Psychol. 2018 Jul 1;43(6):625–635.
- 48. Skriner LC, Chu BC, Kaplan M, Bodden DHM, Bögels SM, Kendall PC, Nauta MH, Silverman WK, Wood JJ, **Barker DH**, de la Torre J, Saavedra L, Xie M-G. Trajectories and predictors of response in youth anxiety CBT: Integrative data analysis. J Consult Clin Psychol. 2019 Feb;87(2):198–211. PMID: 30570308
- 49. Hadley W, Houck C, Brown LK, Spitalnick JS, Ferrer M, **Barker D.H**. Moving Beyond Role-Play: Evaluating the Use of Virtual Reality to Teach Emotion Regulation for the Prevention of Adolescent Risk Behavior Within a Randomized Pilot Trial. J Pediatr Psychol. 2019 May 1;44(4):425–435. PMCID: PMC6481385

- 50. **Barker D.H.**, Enimil A, Galárraga O, Bosomtwe D, Mensah N, Thamotharan S, Henebeng E, Brown L, Kwara A. In-Clinic Adolescent Peer Group Support for Engagement in Sub-Saharan Africa: A Feasibility and Acceptability Trial. J Int Assoc Provid AIDS Care. 2019 Dec;18:1-8. PMCID: PMC6527326
- 51. **Barker DH**, Hadley W, McGee H, Donenberg GR, DiClemente RJ, Brown LK. Evaluating the Role of Family Context Within a Randomized Adolescent HIV-Risk Prevention Trial. AIDS Behav. 2019 May;23(5):1195–1209. PMID: 30701390; PMCID: PMC6746402
- 52. **Barker DH**, Scott-Sheldon LAJ, Gittins Stone D, Brown LK. Using Composite Scores to Summarize Adolescent Sexual Risk Behavior: Current State of the Science and Recommendations. Arch Sex Behav. 2019 Nov;48(8):2305–2320. PMCID: PMC6759377
- 53. Carskadon MA, Chappell KR, **Barker DH**, Hart AC, Dwyer K, Gredvig-Ardito C, Starr C, McGeary JE. A pilot prospective study of sleep patterns and DNA methylation-characterized epigenetic aging in young adults. BMC Res Notes. 2019 Sep 16;12(1):583. PMCID: PMC6747743.
- 54. Koopman-Verhoeff ME, Gredvig-Ardito C, **Barker DH**, Saletin JM, Carskadon MA. Classifying Pubertal Development Using Child and Parent Report: Comparing the Pubertal Development Scales to Tanner Staging. Journal of Adolescent Health. 2020 Jan; S1054139X19308857.
- 55. Galárraga O, Enimil A, Bosomtwe D, Cao W, **Barker DH**. Group-based economic incentives to improve adherence to antiretroviral therapy among youth living with HIV: safety and preliminary efficacy from a pilot trial. Vulnerable Children and Youth Studies. 2019 Dec 27;1–12.
- 56. Carskadon, MA & **Barker**, **DH** Editorial Perspective: Adolescents' fragile sleep—shining light on a time of risk to mental health. *Journal of Child Psychology and Psychiatry*
- 57. **Barker, DH**, Shapiro, J, Lobato-Barrera, D, McQuaid, E & Leleiko, N. Challenges and Approaches to Assessing Medication Adherence in Pediatric Inflammatory Bowel Diseases. J. Pediatr. Gastroenterol. Nutr. 2020 70(6); 759-761
- 58. Lescano CM, Castillo HL, Calcano E, Mayor M, Porter M, Rivera-Torgerson Y, Dion C, Marhefka SL, **Barker DH**, Brown LK, Latino STYLE Research Group. Latino STYLE: Preliminary Findings From an HIV Prevention RCT Among Latino Youth. J Pediatr Psychol. 2020 May 1;45(4):411–422. PMCID: PMC71824041.
- 59. Kichler JC, Valenzuela J, **Barker DH**, Noser AE, Brosig CL, Hilliard ME, Christidis P, Stamm KE, Wysocki T, Jelalian E. Society of Pediatric Psychology Workforce Survey: Updated Factors Related to Compensation. Journal of Pediatric Psychology. 2020 May 1:45(4):434–444.
- 60. Hadley W, Houck C, **Barker DH**, Wickham B, Bogner J, Jelalian E. Preliminary Impact of an Adapted Emotion Regulation Intervention for Adolescents with Overweight and Obesity Attempting to Lose Weight. Journal of Developmental & Behavioral Pediatrics [Internet]. 2020 Aug 26 [cited 2020 Aug 29]; Publish Ahead of Print.
- 61. Kemp J, **Barker DH**, Benito K, Herren J, Freeman J. Moderators of Psychosocial Treatment for Pediatric Obsessive-Compulsive Disorder: Summary and Recommendations for Future Directions. Journal of Clinical Child & Adolescent Psychology. 2020 Jul 24;0(0):1–8. PMID: 32706265

- 62. Schechter, M. S., Ostrenga, J. S., Fink, A. K., **Barker, D. H.**, Sawicki, G. S., & Quittner, A. L. (2021). Decreased survival in cystic fibrosis patients with a positive screen for depression. Journal of Cystic Fibrosis, 20(1), 120–126. https://doi.org/10.1016/j.jcf.2020.07.020
- 63. Rizzo CJ, Houck C, **Barker DH**, Collibee C, Hood E, Bala K. Project STRONG: an Online, Parent–Son Intervention for the Prevention of Dating Violence among Early Adolescent Boys. Prev Sci [Internet]. 2020 Sep 17
- 64. **Barker, D.H.**, Dahabreh, I.J., Steingrimsson, J.A. et al. Causally Interpretable Meta-analysis: Application in Adolescent HIV Prevention. Prev Sci (2022) Apr; 23(3):403-414. PMID: 34241752; PMCID: PMC8742835. https://doi.org/10.1007/s11121-021-01270-3
- 65. Barnett, A.P., Houck, C.D., **Barker, D.H.**, Rizzo, C.J. (2021). Sexual minority status, bullying exposure, emotion regulation difficulties, and delinquency among court-involved adolescent girls. *Journal of Youth and Adolescence*. https://doi.org/10.1007/s10964-021-01542-9
- 66. Houck C, Modrowski CA, Hadley W, Barker D, Myers V, Bala K, Wickham B, Jerrod T. A Pilot Study of a Tablet-Based Emotion Regulation Intervention for Early Adolescents. *Journal of Developmental & Behavioral Pediatrics*. 2022 May 13; 10.1097/DBP.00000000001094.
- 67. Burke TA, Hamilton JL, Seigel D, Kautz M, Liu RT, Alloy LB, **Barker DH**. Sleep irregularity and nonsuicidal self-injurious urges and behaviors. Sleep. 2022 Jun 13;45(6):zsac084. PMCID: PMC9189944
- 68. Saletin JM, Koopman-Verhoeff ME, Han G, **Barker DH**, Carskadon MA, Anders TF, Sheinkopf SJ, the Rhode Island Consortium for Autism Research and Treatment (RI-CART). Sleep Problems and Autism Impairments in a Large Community Sample of Children and Adolescents. Child Psychiatry Hum Dev [Internet]. 2022 Dec 14 [cited 2023 Apr 4]; Available from: https://doi.org/10.1007/s10578-022-01470-0
- 69. Bogner J, Hadley W, Franz D, **Barker DH**, Houck CD. Sexting as a Predictor of First-Time Sexual Behavior Among At-Risk Early Adolescents. The Journal of Early Adolescence. 2022 Jul 8;02724316221113351.
- 70. Rizzo CJ, Collibee C, **Barker D**, Houck C, Kemp K, Tolou-Shams M, Zlotnick C, Brown LK. Dating Violence Prevention for Juvenile-Justice Involved Females: A Hybrid Trial. Pediatrics. 2023 Mar 9;151(4):e2021056010.
- 71. Steingrimsson JA, **Barker DH**, Bie R, Dahabreh IJ. Systematically missing data in causally interpretable meta-analysis. Biostatistics. 2023 Mar 28;kxad006.
- 72. Quittner AL, **Barker D**, Graziano S, Georgiopoulos AM, Muther E, Verkleij M, Schechter MS, Tillman L, Mueller A, Lomas P, Hempstead S, Smith BA. National integration of mental health screening and treatment into specialized care for cystic fibrosis: What predicts success? Pediatric Pulmonology. 2023;58(6):1768–1776.
- 73. Cushman GK, Koinis-Mitchell D, Alsina M, **Barker D**, Drew L, DeCesare C, Yeo AJ, Durkin K, Elwy AR, Jandasek B, Pearlman DN, Vivier P, McQuaid EL. Design of a community-based, Hybrid Type II effectiveness-implementation asthma intervention study: The Rhode Island Asthma Integrated Response (RI-AIR) program. Contemporary Clinical Trials. 2023 Jun 1;129:107204.
- 74. Gibson M, Subedi S, **Barker DH**, Masur S, Mallette MM, Lingannan A, Recinos Soto AA, Esharif D, Maxwell SH, Riaz MS, Herzlinger MI, Shalon LB, Cerezo CS, Kasper VL, Ross

- AM, Leleiko NS, Shapiro JM. Safety and Durability of Accelerated Infliximab Dosing Strategies in Pediatric IBD: A Single Center, Retrospective Study. Journal of Pediatric Gastroenterology and Nutrition. 2023 Aug;77(2):207.
- 75. Cejas I, **Barker DH**, Petruzzello E, Sarangoulis CM, Quittner AL. Cochlear Implantation and Educational and Quality-of-Life Outcomes in Adolescence. JAMA Otolaryngology—Head & Neck Surgery. 2023 Aug 1;149(8):708–715.
- 76. Buitron V, Maron M, Kudinova A, Thompson E, **Barker DH**, Wolff JC. Sleep disturbance and suicidality in psychiatrically hospitalized adolescents: The role of specific emotion regulation domains. Journal of Clinical Psychology [Internet]. [cited 2023 Sep 13]. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/jclp.23558
- 77. **Barker DH**, Bie R, Steingrimsson JA. Addressing Systematic Missing Data in the Context of Causally Interpretable Meta-analysis. Prev Sci. 2023 Nov;24(8):1648–1658. PMID: 37726579
- 78. Wong P, Meltzer LJ, **Barker DB**, Honaker SM, Owens JA, Saletin JM, Seixas A, Wahlstrom KL, Wolfson AR, Carskadon MA. The associations between instructional approach, sleep characteristics and adolescent mental health: Lessons from the COVID-19 pandemic. Sleep Health. 2024 Apr 1;10(2):221–228.
- 79. McCullar KS, **Barker DH**, McGeary JE, Saletin JM, Gredvig-Ardito C, Swift RM, Carskadon MA. Altered sleep architecture following consecutive nights of presleep alcohol. Sleep. 2024 Apr 1;47(4):zsae003.
- 80. Rojo-Wissar DM, Parade SH, **Barker DH**, Van Reen E, Sharkey KM, Gredvig-Ardito C, Carskadon MA. Does sleep link child maltreatment to depressive symptoms among incoming first-year college students? SLEEP Advances. 2024 Jan 1;5(1):zpae041.
- 81. Cejas I, **Barker DH**, Petruzzello E, Sarangoulis CM, Quittner AL. Costs of Severe to Profound Hearing Loss & Cost Savings of Cochlear Implants. The Laryngoscope [Internet]. [cited 2024 Jul 30];n/a(n/a). Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/lary.31497
- 82. Hadley W, McWhirter A, Franz D, Bogner J, **Barker DH**, Rizzo C, Houck CD. The Moderating Role of Poverty on Parenting, Family Climate, and Early Adolescent Emotion Regulation. The Journal of Early Adolescence. SAGE Publications Inc; 2024 Apr 23;02724316241249486.

OTHER NON-PEER REVIEWED PUBLICATIONS

- 1. Quittner, A.L., **Barker, D.H.**, Marciel, K., & Grimley, M.E. (2009) Cystic Fibrosis: A Model for Drug Discovery and Patient Care. In M.C. Roberts & R.G. Steele (eds.) Handbook of Pediatric Psychology: Fourth Edition. New York: Guilford Publications.
- 2. **Barker, D.H.** & Quittner, A.L. (2010). A biopsychosocial model of CF: Social and emotional functioning, adherence, and quality of life. In J. Allen, H. Panitch & R. Rubenstein (eds.) Lung Biology in Health and Disease Series: Cystic Fibrosis. New York: Informa Healthcare.

- 3. **Barker, D.H.**, Houck, C.D., Plante, W.A. (2011). Walking the line: Case analysis of an ethical dilemma that occurred in the context of clinical care. *Progress Notes: A Newsletter of APA Division 54*, 35(3), 4-5.
- 4. **Barker, D.H.** (2013) The Challenges and Opportunities of Therapeutic Outcome Assessment. *The Brown University Child and Adolescent Behavior Letter*, 29(10),2, 6-7.
- 5. Quittner, A.L., Cruz, I., **Barker, D.H.**, Hoffman, M.F. (2014). Effects of cochlear implants on young, deaf children's development: Longitudinal analyses of behavioral regulation, attention and parenting in a national sample. In S.H. Kirwin (ed.) *Cochlear Implants: Technological Advances, Psychological/Social Impacts and Long-Term Effectiveness*. New York: Nova Science Publishers.
- 6. Quittner, A. L., **Barker, D.H.,** Goldbeck, L., Duff, A., & Abbott, J. (2015). Letter to the editor: authors' response. *Thorax*, 70(5), 490-491. PMID: 25636317 PMCID: In Process
- 7. **Barker, D.H.** (2016). Islands of Decision in the sea of bigdata. *The Brown University Child and Adolescent Behavior Letter*.

ABSTRACTS

- 1. White, J., **Barker, D.H.**, Stewart, P.K., & Wells, M.G. (2002, November). Plenk Preschool Outcome Questionnaire: Instrument development and characteristics of referred and non-referred preschool children. Poster presented at the Kansas Conference in Clinical Child and Adolescent Psychology, Lawrence, Kansas.
- 2. Stewart, P.K., **Barker, D.H.**, White, J., & Wells, M.G. (2002, November). Plenk Preschool Outcome Questionnaire: Reliability and criterion validity characteristics. Poster presented at the Kansas Conference in Clinical Child and Adolescent Psychology, Lawrence, Kansas.
- 3. **Barker, D.H.**, Jacobson, P.S., & Wells, M.G. (2003, April). Item characteristics of the Plenk Preschool Outcome Questionnaire. Poster presented at the Rocky Mountain Psychological Association Annual Conference, Denver, Colorado.
- 4. Jacobsen, P.S., **Barker, D.H.**, Spencer, R.W., Bailey, J.D., Stewart, P.K., & Wells, M.G. (2003, June). Current response to calls for methodological improvement in child outcome literature. Poster session presented at the Stanford Undergraduate Research Conference, Stanford, California.
- 5. Chambers, A. H., **Barker**, **D.H.**, Spencer, R. W., & Wells, M. G. (2004, April). The development of a preschool child treatment outcome questionnaire: Plenk Preschool Outcome Questionnaire. Paper presented at the Rocky Mountain Psychological Association Annual Conference, Reno, Nevada.
- 6. Hopkins, R.O., Suchyta, M.R., White, J., **Barker, D.H.**, Jephson, A., & Morris A.H. (2004, May). Can a telephone questionnaire screen ARDS survivors for neurocognitive function? Paper presented at the American Thoracic Society 100th International Conference, Orlando, Florida.
- 7. Quittner, A.L., Malvarez, L.M., Leibach, P., Barker D.H., Cruz I., Eisenberg, L.S., Fink, N., Tobey, E.A., Niparko, J.K., Wang, N.E., & CDaCI Investigative Team (2005, March). Joint attention and symbolic play in deaf and hearing toddlers at baseline and 1 year after cochlear

- implantation: The utility of videotaped interactions. Paper presented at the 10th Symposium on Cochlear Implants in Children, Dallas, Texas.
- 8. Quittner, A.L., Malvarez, L.M., Leibach, P., **Barker, D.H.**, & Cruz I. (2005, April). Comparisons of joint attention in deaf and hearing toddlers. Poster presented at the Society for Research in Child Development 2005 Biennial Meeting, Atlanta, Georgia.
- 9. **Barker, D.H.**, Botteri, M., Geller, D., Gondor, M., & Quittner, A.L. (2006). Effects of an adherence intervention on pulmonary functioning and health-related quality of life [Abstract]. Pediatric Pulmonology, S29, 398.
- 10. **Barker, D.H.**, Quittner, A.L., Malvarez, L.M., Leibach, P., Cruz I., Eisenberg, L.S., Tobey, E.A., Wang, N., Fink, N.E., Niparko, J.K., & CDaCI Investigative Team (2005, March). Parenting stress and child behavior problems in deaf and hearing toddlers at baseline. Paper presented at the 10th Symposium on Cochlear Implants in Children, Dallas, Texas.
- 11. **Barker, D.H.**, Botteri, M., Cruz, I., Carlsen, R., Smith, L.B., Quittner, A.L., Eisenberg, L.S., Tobey, E.A., Wang, N., Fink, N.E., Niparko, J.K., & CDaCI Investigative Team. (2007, April). Comparisons of novel noun learning and language development in deaf and hearing toddlers. Poster presented at the 2007 SRCD Biennial Meeting, Boston, MA.
- 12. Quittner, A.L., McDonald, L., **Barker, D.H.**, Cruz, I., & CDaCI Investigative Team. (2007, April). Parenting stress in deaf and hearing toddlers at 6 and 12 months postimplantation. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.
- 13. Quittner, A.L., Cruz, I., **Barker, D.H.**, Botteri, M., Eisenberg, L., Tobey, E., Fink, N., Niparko, J., & CDaCI Investigative Team. (2007, April). Maternal sensitivity as a predictor of growth in language in deaf and hearing preschoolers. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.
- 14. **Barker, D.H.**, McDonald, L., Quittner, A.L., & CDaCI Investigative Team (2007, April). Comparisons of joint attention and language development in deaf and hearing toddlers. Poster presented at the 2007 SRCD Biennial Meeting, Boston, MA.
- 15. McDonald, L., Barker, D.H., Cruz, I., Quittner, A.L., & CDaCI Investigative Team. (2007, April). Child behavior problems in deaf and hearing toddlers at 6 and 12 months post-implantation. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.
- 16. Grimley, M.E., **Barker, D.H.**, Cruz, I., Botteri, M., Quittner, A.L., & CDaCI Investigative Team. (2007, April). Language abilities of hearing & deaf children: a comparison of the NICHD and CDaCI cohorts. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.
- 17. Grimley, M.E., **Barker, D.H.**, DeHart, A. Head, A., Wofsey, J., Greenberg, A., Quittner, A.L., & CDaCI Investigative Team. (2007, April). Selective attention in deaf and hearing children. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.

- 18. McDonald, L. **Barker, D.H.**, Bobb, C., Carlsen, R., Quittner, A.L. & CDaCI Investigative Team (2007, April). Joint-attention: training methods and reliability. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.
- 19. Johnson, K.C., **Barker, D.H.**, Quittner, A.L., DesJardin, J.L., Winter, M.E., & Eisenberg, L.S. (2007, April). Assessment of joint attention and symbolic play skills in implanted children with additional disabilities: Two case studies. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.
- 20. **Barker, D.H.**, Cruz, I., Carlsen, R., Botteri, M., Quittner, A.L., Eisenberg, L., Tobey, E.A., Wang, N., Fink, N.E., & Niparko, J. (April 2007). Novel noun learning in deaf and hearing children at baseline and 6 and 12 months post implantation. Poster presented at The 11th International Conference on Cochlear Implants in Children, Charlotte, NC.
- 21. **Barker, D.H.**, McDonald. L., Quittner, A.L., Geller, D.E., Gondor, M., Nwkirk, M., & Butt, S. (2007, October). Perceived social support for caregivers of children with cystic fibrosis. Paper presented at the 21st Annual North American Cystic Fibrosis Conference, Anaheim, California.
- 22. Cruz, I., Snell, C., **Barker, D.H.**, Quittner, A.L., & Drotar, D. (2007, October). Effects of behavioral-family systems therapy on family conflict and communication in adolescents with CF and their parents. Paper presented at the 21st Annual North American Cystic Fibrosis Conference, Anaheim, California.
- 23. Quittner, A.L., **Barker, D.H.**, Geller, D.E., & Gondor, M (2007, October). Effects of caregiver depression on self-reported and electronically monitored enzyme adherence and short-term changes in weight for children with CF. Paper presented at the 21st Annual North American Cystic Fibrosis Conference, Anaheim, California.
- 24. Driscoll, K., **Barker, D.H.**, Quittner, A.L., & Modi, A.C. (2007, October). Thank you for caring, but don't tell me what to do: Adolescent perspectives on social support from peers, family, and healthcare teams. Paper presented at the 21st Annual North American Cystic Fibrosis Conference, Anaheim, California.
- 25. Glasscoe, C., Southern, K.W., Smith, J.A., Lancaster, G.A., Hill., J., Burrows, E.F., Cottrell, J.J., Heaf, L., Hope, H.F., **Barker, D.H.**, & Quittner, A.L. (2007, October). Challenges of living with cystic fibrosis (CLCF): Psychometric evaluation of a new measure. Paper presented at the 21st Annual North American Cystic Fibrosis Conference, Anaheim, California.
- 26. Kinnamon, C., Quittner, A.L., **Barker, D.H.**, Botteri, M., McDonald, L., Geller, D., Butt, S., & Gondor, M. (2007). Predicting change in depression for parents of children with CF: Health and demographic factors. Journal of Cystic Fibrosis, 6, Supplement 1, S74.
- 27. Quittner, A.L., **Barker, D.H.**, Geller, D., Butt, S. & Gondor, M. (2007). Effects of maternal depression on electronically monitored enzyme adherence and changes in weight for children with CF. [Abstract]. Journal of Cystic Fibrosis, 6, Supplement 1, S77.
- 28. Cruz, I., Quittner, A.L., McDonald, L., Botteri, M., **Barker, D.H.**, Geller, D., Butt, S., & Gondor, M. (2007). Effects of a clinic-based intervention on knowledge and treatment skills for parents and young children with CF. [abstract]. Journal of Cystic Fibrosis, 6, Supplement 1, S70.

- 29. McDonald, L., Quittner, Al., Grimley, M.E., Botteri, M., & **Barker, D.H.** (2007). Effects of a clinic-based intervention on caregiving stress for parents of children with CF [Abstract]. Journal of Cystic Fibrosis, 6, Supplement 1, S75.
- 30. Grimley, M.E., **Barker, D.H.**, Botteri, M., & Quittner, A.L. (2007). Validation of the CFQ-R in adolescents: longitudinal relationships between HRQOL, pulmonary, and weight scores [Abstract]. Pediatric Pulmonology, S30, 408.
- 31. Cruz, I., Grimley, M.E., **Barker, D.H.**, Guevara, H., & Quittner, A.L. (2008, April). Relationships among parenting stress, language delays, and behavior problems in hearing impaired and normal hearing toddlers. Poster presented at the 2008 National Conference on Child Health Psychology, Miami, Florida.
- 32. Cruz, I., Grimley, M.E., **Barker, D.H.**, & Quittner, A.L. (2008, April). Predictors of maternal sensitivity in deaf and hearing toddlers. Poster presented at the 2008 National Conference on Child Health Psychology, Miami, Florida.
- 33. **Barker, D.H.**, Monaco, B., & Quittner, A.L. (2008, April). Challenges in measuring adherence: Relationships between self-report, diary and electronic measures in adolescents with cystic fibrosis. Poster presented at the 2008 National Conference on Child Health Psychology, Miami, Florida.
- 34. **Barker, D.H.**, Cruz, I., Snell, C., Botteri, M., Quittner, A.L., & CDaCI Investigative Team (2008, June). Parent-Child Interactions in the Context of Childhood Deafness. Poster presented at the Third Annual IES Research Conference, Washington, D.C.
- 35. **Barker, D.H.**, Grimley, M.E., Cruz, I., McDonald, L., Quittner, A.L., & CDaCI Investigative Team (2008, August). Predicting joint engagement in deaf and normal hearing children. Poster presented at the APA 116th Annual Convention, Boston, Massachusetts.
- 36. Quittner, A. L., **Barker, D.H.**, Butt, S., Cruz, I., & Marciel, K. (2008, August). Dissecting the complex problem of adherence to medical regimens: Families' perspectives on barriers and possible solutions. Paper presented at The 10th International Congress of Behavioral Medicine, Tokyo, Japan.
- 37. Grimley, M.E., **Barker**, **D.H.**, McDonald, L., Quittner, A.L., & CDaCI Investigative Team (2008, August). Joint Engagement in Deaf and Normal Hearing Children. Paper presented at the APA 116th Annual Convention. Boston, Massachusetts.
- 38. Marciel, K. K., Cruz, I., **Barker, D.H.**, McDonald, L, & Quittner, A. L. (2008). Effectiveness of a pill swallowing program for young children with cystic fibrosis [Abstract]. Pediatric Pulmonology, S31, 458.
- 39. Quittner, A.L., **Barker, D.H.**, Fukushima, L.K., & Woo, M.S. (2008). A prospective study of health-related quality of life after lung transplant for CF [Abstract]. Pediatric Pulmonology, S31, 397.
- 40. Snell, C., **Barker, D.H.**, Marciel, K.K. Botteri, M., & Quittner, A.L. (2008). Paradoxical relationships between parental depression and pulmonary functioning in cystic fibrosis: The role of treatment burden and daily mood [Abstract]. Pediatric Pulmonology, S31, 454.

- 41. Grimley, M.E., **Barker, D.H.**, Marciel, K.K. & Quittner, A.L. (2008). Social support received from family & friends during medical and non-medical activities [Abstract]. Pediatric Pulmonology, S31, 454.
- 42. **Barker, D.H.**, Cohen, L., Driscoll, K., Modi, A., & Quittner, A.L. (2008). It takes a village: What family, friends, and teachers do to facilitate disease management in adolescents with cystic fibrosis [Abstract]. Pediatric Pulmonology, S31, 452.
- 43. **Barker, D.H.**, Grimley, M.E., Botteri, M., Quittner, A.L., & the CDaCI Investigative Team (2009, April). Predicting Joint Engagement in Young Deaf Children after Cochlear Implantation. Joint Attention Abilities in Atypical Infants and Children (M. Kaiser & P.C. Mundy) Paper. Symposium conducted at the SRCD 2009 Biennial Meeting in Denver, Colorado.
- 44. Romero, S.L., **Barker, D.H.**, Quittner, A.L., & CDaCI Investigative Team (2009, June). Measurement invariance for behavior problems in deaf children before and after cochlear implantation. Poster presented at the Fourth Annual IES Research Conference, Washington, D.C.
- 45. **Barker, D.H.**, Romero, S.L., Blackwell, L., Cohen, L., Quittner, A.L., & CDaCI Investigative Team (2009, June). Measuring visual attention in young hearing and cochlear implant children. Poster presented at the Fourth Annual IES Research Conference, Washington, D.C.
- 46. Quittner, A.L., Cruz, I., Marciel, K.K., **Barker, D.H.**, Ilowite, J., Gotfried, M.H., & Barker, A. (2009). Comparison of 1-week versus 24-hour recall intervals on the Quality of Life Questionnaire-Bronchiectasis (QOL-B) Respiratory Scale [Abstract]. American Journal of Respiratory and Critical Care Medicine, 179, A4311.
- 47. Blackwell, L.S., Romero, S.L., **Barker, D.H.**, Grimley, M.E., & Quittner, A.L. (2009). Psychosocial functioning pre- and post-transplantation in children and adolescents with cystic fibrosis [Abstract]. Pediatric Pulmonology, S32, 453.
- 48. Romero, S.L., Blackwell, L.S., **Barker, D.H.**, Grimley, M.E., Faro, A., Woo, M., & Quittner, A.L. (2009). Patient and parent-reported perceptions of treatment burden before and after pediatric lung transplant [Abstract]. Pediatric Pulmonology, S32, 454.
- 49. **Barker, D.H.**, Romero, S.L., Rosenfeld, M., Kraynack, N, Kirihara, J., Montgomery, B., Quittner, A.L. (2009). Modeling pulmonary exacerbations using item response theory and patient-reported outcomes [Abstract]. Pediatric Pulmonology, S32, 412.
- 50. **Barker, D.H.**, Quittner, A.L., Riekert, K.A., & Zhang, J. (2010). Supporting adolescent disease management: The role of family and friends [Abstract]. *Pediatric Pulmonology*, *S33*, 443.
- 51. **Barker, D.H.**, Swenson, R.R., Brown, L.K., Stanton, B.F., Vanable, P.A., Carey, M.P., Valois, R.F., DiClemente, R.J., Salazar, L.F., & Romer, D. (2011, April). Blocking the benefit of group-based HIV-prevention efforts in at-risk African-American Adolescents: The problem of HIV-related stigma. Poster presented at the National Conference in Pediatric Psychology, San Antonio, Texas.

- 52. Quittner, A.L., Cruz, I., **Barker, D.H.**, & CDaCI investigator team. (2011, April). Maternal sensitivity: A predictor of language growth in deaf children using cochlear implants. Poster presented at the National Conference in Pediatric Psychology, San Antonio, Texas.
- 53. Orzech, K.M., Acebo, C., **Barker, D.H.**, Seifer, R., and Carskadon, M.A. Fall sleep patterns are associated with winter/spring acute illness and school absences in adolescents. Sleep 34(Suppl.): A49, 2011.
- 54. **Barker D.H.**, Quittner, A.L., Cruz, I., Niparko, J., & CDaCI Investigative Team (2012, May). Predicting Oral Language Growth over 4-years in Deaf Children Using Cochlear Implants and Hearing Controls. Paper presented at the 2012 Modern Modeling Methods Conference, Storrs, Connecticut.
- 55. **Barker D.H.**, Quittner, A.L., Cruz, I., Niparko, J., & CDaCI Investigative Team (2012, May). Using Latent Difference Scores to Examine the Relationship between Visual Attention and Oral Language Development in Young Deaf Children following Cochlear Implantation. Paper presented at the 2012 Modern Modeling Methods Conference, Storrs, Connecticut.
- 56. Barker D.H., Quittner, A.L., Cruz, I., Niparko, J., & CDaCI Investigative Team (2012, May). Post-Implantation Intelligence Profiles of Children Enrolled in the CDaCI Study. Poster presented at the 12th International Conference on Cochlear Implants and Other Implantable Auditory Technologies, Baltimore, Maryland.
- 57. Quittner, A.L., Cruz, I., **Barker D.H.**, Eisenberg, L., Niparko, J., & CDaCI Investigative Team (2012, May). Changes in Maternal Sensitivity over Three Years Post-Implantation. Paper presented at the 12th International Conference on Cochlear Implants and Other Implantable Auditory Technologies, Baltimore, Maryland.
- 58. **Barker D.H.**, Quittner, A.L., Riekert, K.A. (2013). Relating patterns of social support from friends and family to health-related quality of life [Abstract]. *Pediatric Pulmonology*, *S36*, 433.
- 59. Houck, C.D., **Barker, D.H.**, Rizzo, C.J., Hancock, E., Norton, A., Brown, L.K. (April, 2013). When a picture is worth more than a thousand words: The relationship between sexting and sexual behaviors among at-risk adolescents. Poster presented at the National Conference on Child Health Psychology, New Orleans, LA.
- 60. Houck, C.D., Hadley, W., Peters, A., Affleck, K., **Barker, D.H.**, Brown, L.K. (2013, May). Intervention to enhance affect regulation among at-risk early adolescents: Impact on measures of emotional competence. Paper presented at the biannual meeting of the Society for Prevention Research, San Francisco, CA.
- 61. Almy, B., Hancock, E., **Barker, D.H.** & Houck, C.D. (2013, May). Familial relationships and adolescent sexting: iSext? Poster presented at Brown University Medical School Department of Psychiatry and Human Behavior Research Symposium, Providence, RI.
- 62. Rancourt, D., **Barker, D. H.**, Sato, A. F., Lloyd-Richardson, E., Hart, C. N., & Jelalian, E. (November, 2013). Longitudinal associations between change in overweight status, fear of negative evaluation, and weight-related teasing among obese adolescents. Poster presented at The Obesity Society annual meeting, Atlanta, GA.

- 63. Carskadon, M.A., Sharkey, K.M., **Barker, D.H.**, Roane, B.M., Van Reen, E., Knopik, V., and McGeary, J.E. (2014). PER3 VNTR: Sleep patterns and depressed mood in college students. Sleep 37(Suppl.): A48.
- 64. Sharkey, K.M., Knopik, V.S., McGeary, J.E., **Barker, D.H.**, Van Reen, E., Roane, B.M., Gredvig-Ardito, C., Raffray, T., and Carskadon, M.A. (2014). Glycogen synthase kinase 3-beta genotype is associated with sleep duration in college students. Sleep 37(Suppl.): A53.
- 65. Crowley, S.J., Van Reen, E., Tarokh, L., **Barker, D.H.**, LeBourgeois, M.K., Acebo, C., and Carskadon, M.A. (2014). Sleep behavior, circadian phase, and phase angle of entrainment across adolescence: A longitudinal study. Sleep 37(Suppl.): A40.
- 66. Houck, C.D., **Barker, D.H.**, Almy, B., Hancock, E., Hadley, W., & Brown, L.K. (2014, March). Impact on risk behaviors of an emotion regulation focused intervention for at-risk early adolescents. Poster presented at the biannual meeting of the Society for Research on Adolescence, Austin, TX.
- 67. Hadley, W., **Barker, D.**, Warren, J. Brown, L.K., Diclemente, R, Donenberg, G. & Project STYLE Study group (April, 2014). SPP National Conference on Child Health Psychology, Philadelphia, PA.
- 68. Madan, A.S., **Barker, D.H.**, Cejas, I., & Quittner, A.L. (2014, December). Longitudinal analyses of caregiver stress: Parents of children with cochlear Implants versus normal hearing. Poster presented at the 14th Symposium on Cochlear Implants in Children, Nashville, Tennessee.
- 69. Cejas, I., **Barker, D.H.**, & Quittner, A.L. (2014, December). Development of Joint Engagement in Pediatric Patients Over Two Years Post-Implantation. Paper presented at the 14th Symposium on Cochlear Implants in Children, Nashville, Tennessee.
- 70. Carskadon, M.A., Barker, D.H., Sharkey, K.M., Roane, B.M., and Van Reen, E. (2015). Drinking alcohol in the first semester: Does sleep timing play a role? *Sleep 38(Suppl.)*: A79.
- 71. Shochat, T., Saletin, J.M., **Barker, D.**, Van Reen, E., Sharkey, K.M., Roane, B.M., Gredvig-Ardito, C., and Carskadon, M.A. (2015). Does sex moderate the association of habitual sleep duration and timing with depressive mood symptoms in college-bound high school seniors? *Sleep 38(Suppl.)*: A22-A23.
- 72. Karazsia, B., Rancourt, D., **Barker, D.H.**, Grimm, K., Berlin, K. (2015). Best-practices in modeling longitudinal data: Making complex theory accessible. Skill building session presented at APA Annual Convention in Toronto, Ontario.
- 73. **Barker, D.H.**, Houck C.D., Nieves, A., Hancock, E.D. (2015). Sexting: The influence of improving emotion regulation in young, at-risk adolescents. Poster presented at the Society for Prevention Research Annual Conference in Washington DC.
- 74. Bernstein, R. Nicolais, C., **Barker, D.**, Faro, A., Quittner, A.L. (2015) Can Pre-Transplant CFQ-R Scores Predict Post-Transplant Survival in Adolescents with Cystic Fibrosis? [Abstract]. *Pediatric Pulmonology, Supp 41*, 461.

- 75. Houck, C.D., **Barker, D.,** Hadley, W., Brown, L.K. (2015, October). Sexting and sexual debut in at-risk early adolescents. Paper presented at the annual meeting of the American Academy of Child and Adolescent Psychiatry, San Antonio, TX.
- 76. Carskadon, M.A., **Barker, D.**, Raynor, H.A., Hart, C.N., Gredvig-Ardito, C., and Bartz, A (2016). Timing of daily energy intake distribution differs with time awake in obese adolescents: Preliminary results from forced desynchrony. *Sleep 39(Suppl.)*: A42.
- 77. Van Reen, E., **Barker, D.H.**, and Carskadon, M.A. (2016) Reported sleep patterns preceding episodes of heavy episodic drinking in first year college students. *Sleep 39*(*Suppl.*): A76-77.
- 78. Miller, M. B., Van Reen, E., **Barker, D.**, Roane, B. M., Borsari, B., McGeary, J. E., & Carskadon, M. A. (2016). Association of sleep quality, psychiatric diagnostic symptoms, and alcohol consequences in college students. *Sleep 39(Suppl.)*: A304.
- 79. Hadley, W., Houck, C. D., **Barker, D.**, Henenbeng, E., & Thamotharan, S. (April, 2016) The role of unsupervised time on substance use among youth participating in an emotion regulation intervention. Society for Research on Adolescents, Baltimore, MD.
- 80. Anthony Enimil, A., **Barker, D.H.**, Galárraga, O., Bosomtwe, D., Mensah, N., Brown, L.K., Kwara, A. (2016). Building Retention-in-Care with in-Clinic HIV Peer-Groups: Feasibility, Acceptability, Clinic Attendance and Viral Load. Poster Presented at Center for AIDS Research: Sub-Saharan Africa Preconference. International AIDS Conference, in Durban South Africa.
- 81. Rachel Wasserman, R., Armstrong, B., **Barker, D.H.**, Kristoffer Berlin, K., PhD, Grayson N. Holmbeck, G.N., PhD, Karazsia, B., & Lai, B. (2017). Advances in Statistical Modeling: Practical Strategies for Addressing Complex Research Questions, Preconference workshop presented at Society of Pediatric Psychology Annual Conference in Portland, OR.
- 82. **Barker, D.H.**, Enimil, A., Galárraga, O., Brown, L., Kwara, A. (2017). In-clinic adolescent peer-group support for engagement in sub-Saharan Africa: A feasibility and acceptability trial. Poster presented at Society of Pediatric Psychology Annual Conference in Portland, OR.
- 83. Saez-Flores, E Tonarely, N., Barker, D.H. & Quittner, A.L. (2017). Evaluation of the factor structure of the Hospital Anxiety and Depression Scale in adolescents and young adults with cystic fibrosis. Poster presented at Society of Pediatric Psychology Annual Conference in Portland, OR.
- 84. Wendy Hadley, W., Barker, D.H., Hughes, A., Brown, L.K., Donenberg, G., Diclemente, R. & Tutu, E. (2017). The longitudinal impact of a family-based risk intervention on observational and self-reports of sexual communication. Poster presented at Society of Pediatric Psychology Annual Conference in Portland, OR.
- 85. **Barker, D.H.**, Phillips, A.J., Carskadon, M.A. (2017). Evaluation of the Sleep Regularity Index (SRI) Among first year college students: associations with alcohol use, caffeine consumption, academic load, and negative mood. *Sleep*, 40(S1), A22.
- 86. Schechter, MS., Ostrenga, J., Fink, A., **Barker, D**, Quittner, AL. (2017). Five year survival is decreased in CF patients who screen positive for depression. *Pediatric Pulmonology*, 52(S1), S404-S405

- 87. Stack, N., Carskadon, M., **Barker, D.H.**, Diniz Behn, C. (2017). Optimizing ultradian forced desynchrony protocols to assess intrinsic circadian period. *Sleep*, 40(S1), A265.
- 88. **Barker, D.H.**, McGee, H., Martirossian, N., Houck, C.D., Donenberg, G., Brown, L.K. (2017). Understanding the effectiveness of emotion regulation interventions for sexual risk among adolescent mental health populations. Poster presented at Society for Prevention Research Annual Conference in Washington, DC.
- 89. **Barker, D.H**, McGee, H., Gittins-Stone, D.I., Brown, L.K. (2018). Using Individual-Participant-Data Meta-Analysis and Predictive Causal Modeling to Identify Treatment Responders. Poster presented at Society of Pediatric Psychology Annual Conference in Orlando, FL.
- 90. Berlin, K., Lai, B., **Barker, D.H.**, Cushing, C.C., Armstrong, B. (2018). Introduction to Latent Variable Modeling. Short course given at Society of Pediatric Psychology annual conference in Orlando, FL.
- 91. Herz, R.S., Van Reen, E., **Barker, D.H.**, Bartz A., Carskadon, M.A. (2018). Olfactory sensitivity declines with number of hours awake. *Chemical Senses*, *43*(*4*), E110.
- 92. **Barker, D.H.**, McGee, H., Gittins-Stone, D. (2018). Individual participant data metaanalysis with a causal interpretation: Application in adolescent HIV prevention. Paper presented at Modern Modeling Methods Conference in Stores, CT.
- 93. **Barker, D.H**, McGee, H., Gittins-Stone, D.I., Brown, L.K. (2018). Using Individual-Participant-Data Meta-Analysis and Predictive Causal Modeling to Identify Treatment Responders. Poster presented at Society of Prevention Science annual conference in Washington DC.
- 94. Wolfson, AR, Futterman, A, Gredvig, C., **Barker DH**, Carskadon, MA (2018). Large magnitude delay in sleep across the transition to college explained in part by high school sleep "struggles". *Sleep*, *41*(*S1*), A101.
- 95. Carskadon, MA, **Barker, DH**, Hart CN, Raynor, HA, Gredvig-Ardito, C, Mason, IC, Scheer, FA (2019) Circadian and Homeostatic Influences on Caloric Intake: Forced Desynchrony in Healthy Weight, Overweight, and Obese Adolescents. *Sleep*, 42(S1), A63-A64.
- 96. Carskadon, MA, Chappell, KR, **Barker DH**, Hart, AC, Dwyer, K, Gredvig-Ardito, C, Mcgeary JE (2019). Prospective Assessment of Sleep and Epigenetic Aging: Preliminary Findings. *Sleep 42*(S1), A9-A9.
- 97. Carskadon M, **Barker D**, Hart C, Raynor H, Mason I, Scheer F. (2009) Caloric intake in normal weight, overweight, and obese adolescents: circadian and homeostatic influences measured from 28-hour forced desynchrony (FD). *Sleep Medicine* 64:S55-S56.
- 98. **Barker, DH**, Compton, S, Freeman, J, Benito, K (2019). Research and Professional Development 5 The Power and Promise Individual Participant Data: Developing A Clinical Trial Repository for Pediatric OCD. Symposium given at the 53rd Annual ABCT conference, Atlanta, Georgia.
- 99. Saletin JM, Koopman-Verhoeff M, Han G, **Barker DH**, Carskadon MA, Anders TF, Sheinkopf SJ. 1002 Endorsement Of Sleep Problems Indexes Autism Severity In Children

- And Adolescents: Evidence From A Large Community Sample. *Sleep. 2020*; 43(Supplement_1):A380–A381.
- 100. Wong PM, **Barker DH**, Raynor HA, Hart C, Carskadon MA. 0257 Preliminary Findings: Attentional Bias for Food Cues Unrelated to Time Awake or Circadian Phase During Forced Desynchrony in Adolescents. *Sleep.* 2020; 43(Supplement_1):A98–A98.
- 101. Rizzo, C.J., Collibee, C., **Barker, D.** & Kemp, K. (2021, Nov 18-21). Date SMART: An Efficacious Dating Violence Intervention for Justice Involved Girls [Paper presentation accepted]. Association of Behavioral and Cognitive Therapies (ABCT) Annual Conference, New Orleans, LA.
- 102. Franz, D., Hadley, W., Bogner, J., **Barker, D.**, Rizzo, C., Houck, C. A comparison of emotion regulation strategy use across two adolescent samples and risk interventions. Poster presented at the Society for Prevention Research Conference, Virtual Program, June 4, 2021.
- 103. Eliza Grover, Patricia Wong, **David Barker**, Caroline Gredvig-Ardito, Mary Carskadon, 096 The Association Between Sleep Regularity Index and Self-Reported Behavioral and Emotional Symptoms in Adolescents, Sleep, Volume 44, Issue Supplement_2, May 2021, Page A40
- 104. Patricia Wong, **David Barker**, Caroline Gredvig-Ardito, Mary Carskadon, 312 Associations Between Sleep Regularity and Body Mass Index: Findings from a Prospective Study of First-Year College Students, Sleep, Volume 44, Issue Supplement_2, May 2021, Pages A124—A125.
- 105. **Barker, DH**, Bie, R, & Steingrimsson, JA. Addressing Systematic Missing data in the Context of Causally Interpretable Meta-Analysis. Abstract Presented to the Society for Prevention Science 2022 Annual Meeting, May 31-June 3, 2022 in Seattle Washington.
- 106. Chandra, S. Brown, J., & **Barker, DH**. Causal Random Forest: A tool for Exploring Treatment Heterogeneity. Poster presented at the Society for Prevention Science 2022 Annual Meeting, May 31-June 3, 2022 in Seattle Washington.
- 107. Rojo-Wissar, D.M., Parade, S.H., **Barker, D.H.**, Roane, B.M., Van Reen, E., Sharkey, K.M., and Carskadon, M.A. Child maltreatment and multidimensional sleep health among incoming first-year college students. Sleep 45: A62, 2022.
- 108. McCullar, K.S., **Barker, D.H.,** McGeary, J.E., Saletin, J., Gredvig-Ardito, C., and Carskadon, M.A. Pre-sleep breath alcohol concentrations (psBrAC) and sleep polysomnography (PSG). Sleep 45: under review.
- 109. Goodhines, P.A., **Barker, D.H.**, Gredvig-Ardito, C., Crowley, S.J., Van Reen, E., LeBourgeois, M.K., and Carskadon, M.A. Characterizing sleep regularity from actigraphy among younger and older adolescents. Sleep 45: A83-84, 2022.
- 110. **Barker, D.H**, Carskadon, M.A., Hart, C.N., Raynor, H.A., Gredvig-Ardito, C., and Scheer, F.A Circadian influence on food intake among adolescents with overweight and healthy weight. Sleep 45: A102, 2022.
- 111. Quittner A, Georgiopoulos A, **Barker D**, Muther E, Tillman L, Schechter M, Graziano S, Verkleij M, Mueller A, Lomas P, Hempstead S, Smith B. 324 National implementation of

- depression and anxiety screening and treatment at U.S. CF centers: What predicts success? Journal of Cystic Fibrosis. 2022 Oct 1;21:S193–S194.
- 112. **Barker, DH**, Bie, R, & Steingrimsson, JA. Addressing Systematic Missing data in the Context of Causally Interpretable Meta-Analysis. Abstract presented to the Society for Research in Child Development 2023 Annual Meeting, March 23-25, 2023 in Salt Lake City.
- 113. **Barker, DH.,** Brown, J., Chandra, S., Steingrimsson, J. Comparing Approaches to Causally Interpretable Meta-Analysis using Trial-Level Cross-Validation. Poster presented at the Society for Prevention Science 2023 Annual Meeting, May 30-June 2, 2023 in Washington DC.
- 114. Chandra, S., Brown, J., Chandra, S., **Barker, DH**. Variable Selection for Transportability Analysis using Conditional Random Forest. Poster presented at the Society for Prevention Science 2023 Annual Meeting, May 30-June 2, 2023 in Washington DC.
- 115. Carskadon M, Gredvig-Ardito C, **Barker DH**, Coston C, McGeary J. 0166 Effects of Evening Pre-Sleep Alcohol on Next-Day Psychomotor Vigilance (PVT) Performance. Sleep. 2023 May 1;46(Supplement 1):A74.
- 116. Markowitz A, **Barker DH**, Saletin J, Gredvig-Ardito C, McGeary J, Carskadon M. 0262 Comparing Wrist Actigraphy to a Novel Wearable (Actignatch): Nonparametric Activity Estimation. Sleep. 2023 May 1;46(Supplement_1):A117.
- 117. Rojo-Wissar D, Parade S, **Barker D**, Van Reen E, Sharkey K, Carskadon M. 0147 Does Sleep Regularity Link Child Maltreatment to Depressive Symptoms among Incoming First-Year College Students? Sleep. 2023 May 1;46(Supplement_1):A66.
- 118. Mason G, Christiansen T, Dionisos V, **Barker D**, Dickstein D, Carskadon M, Saletin J. 0227 Impact of 5-night sleep restriction on actigraphy-estimated sleep in young adolescents: preliminary associations with ADHD traits. Sleep. 2023 May 1;46(Supplement_1):A100.
- 119. Cushman, G.K., **Barker, D.**, Jandasek, B.N., Kopel, S.J., Esteban, C.A., Mepyans, C., & McQuaid, E.L. Patterns of anxiety and communication among children with food allergy and their parents. Accepted for presentation at the American Academy of Allergy, Asthma, and Immunology's 2024 Annual Conference. Washington, D.C.
- 120. Carskadon M, Gredvig-Ardito C, **Barker D**, McGeary J. Moderate pre-sleep alcohol has a negative impact on next-day PVT performance. Sleep Medicine. 2024 Feb 1;115:255–256.
- 121. Cushman G, **Barker D**, Jandasek B, Kopel S, Esteban C, Mepyans C, McQuaid E. Patterns of Anxiety and Communication among Children with Food Allergy and their Parents. Journal of Allergy and Clinical Immunology. 2024 Feb 1;153:AB50.
- 122. Dionisos V, Moyles S, Mason G, Christiansen T, **Barker D**, Dickstein D, Carskadon M, Saletin J. 0176 fMRI Neural Activation During Working Memory After 5-Nights of Sleep Restriction in Adolescents with ADHD Traits. Sleep. 2024 May 1;47(Supplement_1):A76.

- 123. Esteban C, Cushman G, Chandra S, Scarpaci M, Zheng T, **Barker D**, McQuaid E. Social Context Factors and Disparities in Emergency Department Use in Pediatric Food Allergy. Journal of Allergy and Clinical Immunology. 2024 Feb 1;153:AB44.
- 124. Grigsby-Toussaint D, Yang J, Acevedo AR, Evans G, Johnson A, Katz A, Kemball-Cook W, Nwanaji-Enwerem U, Romero-Ramos Y, Story D, Ury B, Cheol-Shin J, **Barker D**, McGeary J, Dunsiger S. 0821 GPS-derived Green Space Exposure and Sleep Among Elementary School Children. Sleep. 2024 May 1;47(Supplement_1):A352.
- 125. Grigsby-Toussaint D, Yang J, Acevedo AR, Evans G, Johnson A, Katz A, Kemball-Cook W, Nwanaji-Enwerem U, Romero-Ramos Y, Story D, Ury B, Cheol-Shin J, **Barker D**, McGeary J, Dunsiger S. 0822 The 3-30-300 Rule for Green Space Exposure and Sleep in Elementary School Children. Sleep. 2024 May 1;47(Supplement_1):A352–A353.
- 126. McCullar K, **Barker D**, McGeary J, Gredvig-Ardito C, Saletin J, Carskadon M. 0048 Investigating the Effects of Consecutive Nights of Pre-sleep Alcohol Use on Sleep Spindle Density and Distribution. SLEEP. 2024 Apr 20;47:A22–A22.
- 127. Moyles S, Dionisos V, Mason G, Christiansen T, **Barker D**, Dickstein D, Carskadon M, Saletin J. 0175 5-nights of Sleep Restriction and Impulsivity-related fMRI Brain Activity in Adolescents with ADHD Traits. Sleep. 2024 May 1;47(Supplement_1):A75–A76.
- 128. Narcisse MR, **Barker D**, Wolff J, Carskadon M. 0813 Sleep Duration Moderates the Association Between Bullying and Suicide Attempts Among U.S. Adolescents. SLEEP. 2024 Apr 20;47:A348–A349.
- 129. Narcisse MR, Sharkey K, Mason G, **Barker D**. 0823 Associations Between Parental Anxiety, Psychological Distress, and Infant Sleep Difficulties. SLEEP. 2024 Apr 20;47:A353–A353.
- 130. Romero-Ramos Y, Acevedo A, Katz A, Evans G, Johnson A, Kemball-Cook W, Maxwell Z, Nwanaji-Enwerem U, Story D, Ury B, Yang J, Shin JC, **Barker D**, McGeary J, Dunsiger S, Grigsby-Toussaint D. 0827 Sleep-related Impairment and Cognitive Function Among Hispanic and Non-Hispanic Children in Rhode Island. SLEEP. 2024 Apr 20;47:A354–A355.
- 131. Saksham, C, **Barker, DH**, Variable Selection for Causally Interpretable Meta-analysis: A Comparison of Methods. Poster presented at the Society for Prevention Science 2023 Annual Meeting, May 28-31, 2024 in Washington DC.

INVITED PRESENTATIONS

- 1. Quittner, A. L., **Barker, D.H.**, Marciel, K., Cruz, I., Snell, C., & Grimley, M. E. *Does the patient know best? Utilizing patient-reported outcomes. Invited presentation, Endpoints for clinical trials in cystic fibrosis: Patients know best?* Prague, Czech Republic, June 12, 2008.
- 2. Quittner, A. L., Cruz, I., **Barker, D.H.**, Marciel, K. K., Blackwell, L., Botteri, M., & Romero, S. *Preliminary results of a clinic-based adherence intervention for children with cystic fibrosis & their parents*. Invited presentation, 117th Annual Convention of the American Psychological Association, Toronto, Canada, August, 2009.
- 3. **Barker, D. H.** *Measuring disease-specific social support in adolescents with cystic fibrosis.* Invited Presentation, 24th Annual North American Cystic Fibrosis Conference, Baltimore Maryland, October 2010.

- 4. **Barker, D.H.** *The Role of Social Support Systems in Cystic Fibrosis*. Invited Presentation, Eighth Annual CF Nutrition and Social Work Consortium in Charleston, South Carolina March 4-6, 2014
- 5. **Barker, D.H.**, Enimil, A., Galárraga, O, Brown, L.K. *Building Retention-in-Care with in-Clinic HIV Peer-Groups*. Boston/Providence CFAR Research Forum, Alpert Medical School of Brown University, May 19th, 2017.

GRANTS

CURRENT

Cystic Fibrosis Foundation (Smith) 07/01/2024 – 06/30/2028

CFF

Total award amount \$373,240

TIDES 2.0: Prevalence and Longitudinal Course of Depression, Anxiety, and Behavior Problems in Children with Cystic Fibrosis Under 12 Years of Age: Nationally representative estimate of prevalence for depression, anxiety, and behavior problems among children with cystic fibrosis.

R01 MH135861 (Benito) 04/01/2024 – 03/31/2028

NIMH

Total award amount \$2,328,144

Automated Coding of Exposure Therapy Quality using Natural Language Processing: This study will refine and test automated quality coding of exposure therapy, a highly effective treatment for anxiety across the lifespan, using data from 6 existing clinical trials for youth and adults, across both research and community settings. Specific aims are designed to validate automated coding with Natural Language Processing (NLP; a type of artificial intelligence) against human coders, test predictive utility, and incorporate stakeholder feedback to facilitate near-term usability of findings.

R01 MH126681 (Whiteley) 09/01/2022 – 08/31/2027

NIMH

Total award amount \$4,087,324

A Multisite Randomized Trial of Viral Combat: A Mobile Gaming App to Improve Adherence to PrEP: The major goal of this grant is to test the efficacy of an iPhone game to improve PrEP treatment adherence while examining implementation facilitators and barriers to intervention delivery.

R61 DA059785 (Houck) Title: 03/01/2024-02/28/2029

NIDA Total award amount \$3,970,994

Internet-based TRAC (iTRAC): Emotion Regulation Intervention to Prevent Substance Use Among Youth in the Child Welfare System: This project will develop substance use content for the iTRAC program and examine the effectiveness of this content in preventing substance use among adolescents involved in the child welfare system through a randomized trial.

R42 HD110333 (Houck) 09/01/2022-08/31/2025

NICHD

Total award amount \$2,027,808

Internet-based TRAC (iTRAC): Interactive emotion regulation skills training to improve adolescent sexual health: This project will complete the adaptation of a face-to-face emotion regulation skills program targeting sexual risk into an interactive media intervention optimized

for tablet (iTRAC) using successful methods from the previous pilot study, including input from youth in the target age range and school professionals (e.g., health education teachers, school nurses).

R01 HL159701 (Koinis-Mitchell, McQuaid, & Canino) 07/01/2022-06/30/2027

NHLBI

Total award amount \$3,916,587

Puerto Rico Asthma Integrated Response Program: PR-AIR: To implement and evaluate the Puerto Rico-Asthma Integrated Response Program (PR-AIR) to address pediatric asthma disparities in San Juan, PR.

R01 MD016241 (Grigsby-Toussaint) 09/24/2021-06/30/2026

NIMHD

Total award amount \$2,725,752

Green Space, Mental Health and Sleep: Understand the relationships among greenspace, mental health, and sleep.

R01 HD103665 (Saletin) 08/09/2021-05/31/2026

NICHD

Total award amount \$2,725,752

Brain-behavior vulnerability to sleep loss in children: a dimensional study of attention and impulsivity: Understand the brain-behavior mechanisms underpinning attention and impulsivity in the context of sleep loss.

R01 DA050603 (Houck & Hadley) 09/01/2021-06/30/2026

NIDA

Total award amount \$3,762,718

Respiratory Sinus Arrhythmia as a Predictor of Substance Use among Early Adolescents: This project will examine recovery RSA as a predictor of risk behavior among early adolescents relative to other measurement of emotion regulation (baseline RSA, challenge RSA, self-report, parent-report, behavioral task)

R01 MH128595 (Barker & Benito) 07/01/2022 - 06/30/2025

NIMH

Total award amount \$1,172,619

What works for whom in pediatric OCD. This project aims to identify "what works, for whom" in pediatric OCD by 1) collaborating with a comprehensive group of clinical trial researchers to harmonize individual participant data from past clinical trials, and 2) apply a novel statistical approach (IPD meta-analysis with transportability analyses) to identify which treatment options are most effective for specific subgroups of youth with OCD.

U01 HL138677 (McQuaid/Koinis-Mitchell) 8/15/17-6/30/23

NHLBI

Annual direct cost \$550,728

Rhode Island Asthma Integrated Response Program (RI-AIR): The goal of this U01 cooperative agreement application is to establish a coordinated screening and response system, which will enable the delivery of home and school-based asthma management interventions to address pediatric asthma disparities.

R01 MH117960 (Brown) 08/01/18-07/31/23

NIMH \$495,688 this is first year direct

A Multisite Randomized Trial of BattleViro: A Mobile Gaming App to Improve ART Adherence for Youth. The major goal of this grant is to test the efficacy of an iPhone game to improve antiretroviral treatment adherence for youth living with HIV

HRSA-18-122 (Berger) 09/30/18-09/29/23

HRSA \$103,832

Pediatric Mental Health Care Access Program: This project is focused on providing an on-call psychiatric consultation service for pediatricians to discuss psychiatric needs of the patients.

R01 HD097126 (Houck) 07/01/19-06/30/24 NICHD Total cost \$4.239.088

Project Strong: A web-based dating violence prevention program for parents and middle school boys. The major goal of this grant is to test the efficacy of a web-based dating violence prevention program for young adolescent boys and their parents.

R01 DK12551 (Hadley & Jelalian)

10/01/20-11/39/25

NIDDK

Total cost \$3,455,544

Enhancing Emotion Regulation to Support Weight Control Efforts in Adolescents with Overweight and Obesity. Evaluate an emotion regulation intervention for adolescents with overweight and obesity.

PCORI Methods Development 14806 (Barker & Steingrimsson) 01/01/21-01/01/23

PCORI Total cost \$750,000

Missing Data When Transporting Treatment Effects from

Missing Data When Transporting Treatment Effects from Clinical Trials to a Target Population. The major goal of this grant is to develop statistical estimators that can be used to transport treatment effects from a clinical trial to a target population in the presence of systematic missing data between trial samples and the target population.

P20 GM139743-01 (PI :Carskadon)

12/01/2021-11/30/2026

NIGMS

COBRE Center for Sleep and Circadian Rhythms in Child and Adolescent Mental Health The goal of this grant is to develop a center of excellence at the confluence of child and adolescent mental health and sleep and circadian science.

COMPLETED

R01 DC004797 (NIDCD) Research Fellow: **D.H. Barker** 7/1/2004-6/30/2007

Under the direction of Co-PI A.L. Quittner

PI: J.K. Niparko

Childhood Development after Cochlear Implantation Study.

This grant prospectively followed young deaf children prior to and following cochlear implantation to better understand the predictors of successful hearing and language development

DED-R305C050052 Trainee: **D.H. Barker** 6/1/2007 - 6/1/2009

Sponsor: D. Greenfield

Institute of Education Sciences

Interdisciplinary Training in Education Research and Advanced Statistical Methods.

The goal of this training grant was to develop researchers equipped with the statistical and methodological tools necessary for work in education and child development.

BARKER09AO Trainee: **D.H.** Barker 4/15/2009 – 4/15/2010

Sponsor: A.L. Quittner

Cystic Fibrosis Foundation Therapeutics, inc.

Social Support from Family, Friends and Healthcare Teams in Adolescents with Cystic Fibrosis. The goal of this award was to support the development of a social support measure for adolescents with cystic fibrosis. The process included qualitative coding of semi-structured interviews, measurement development, cognitive interviewing, and pilot testing.

T32078788 (NIMH) Trainee: **D.H. Barker** 7/1/2010 – 6/30/2012

Sponsor: L.K. Brown

T32 NIMH Post-Doctoral Research Fellow.

Training in Child/Adolescent Biobehavioral HIV Research

The aim of this training grant is to develop the methodological skills required for research in pediatric HIV prevention.

R01 MH63008 (NIMH) COI: **D.H. Barker** 7/1/2011 – 5/14/2014

PI: L.K. Brown

HIV Prevention for Youth with Severe Mental Illness

This randomized control trial tests the efficacy of a family-based intervention on increasing HIV preventative behaviors in youth with severe mental illness.

R01 MH63008-S1 (NIMH) COI: **D.H. Barker** 7/1/2012 – 5/14/2014

PI: L.K. Brown

HIV Prevention for Youth with Severe Mental Illness-supplement

The goal of this supplement was to code video-taped adolescent-parent discussions and assess changes in communication skills across the intervention arms of the parent randomized controlled trial.

R01 NR011906 (NINR) COI: **D.H. Barker** 7/1/2012 – 5/14/2014

PI: C.D. Houck

Annual direct cost \$329,827

Preventing HIV through Affect Management for High-Risk Early Adolescents

This school-based trial tests the efficacy of an affect management intervention on increasing HIV preventative behaviors in middle school youth with mental health concerns.

R01 MH087520 (NIMH) COI: **D.H. Barker** 7/1/2012 – 5/14/2014

PI: L.K. Brown

Annual direct cost \$396,292

Integrated Mental Health Treatment & HIV Prevention for Court-Involved Youth
This randomized control trial tests the efficacy of integrating CBT based therapy into existing court services for sexually active court involved youth.

Clinical Research Grant (CFF)

Statistical Consultant: D.H. Barker

3/1/2012 - 02/28/2013

Prevalence and Impact of Depression and Anxiety on CF Patients and Caregivers
My role on this grant is to perform the statistical analyses to determine the international prevalence of depression and anxiety in CF patients and caregivers.

R01 HD074846 (NICHD) COI: **D.H. Barker** (2.4 person months) 4/1/2013 – 5/14/2014

PI: L.K. Brown

Annual direct cost \$335.991

A Pilot Gaming Adherence Program for Youth Living with HIV

This study is designed to develop and test a novel, technology based intervention to improve treatment adherence among youth living with HIV who are taking antiretroviral medication. My role is to perform statistical analyses for the primary aims of the project.

L40 TR001089 (NCATS) PI: **D.H. Barker** 7/1/2013 – 6/30/2015

Youth in Mental Health Treatment: Secondary Data Analysis of Risk Behaviors
The project associated with this loan repayment award focuses on applying an HIV-risk score derived from unprotected sexual acts, number of partners, and substance use prior to sexual risk to a recent trial of two HIV prevention approaches in youth in mental health treatment.

R01 DK101046 (Carskadon) 01/01/14-12/31/2019

NIDDK \$500,955

Food Choices in Overweight & Normal Weight Adolescents—Sleep & Circadian Rhythm The major goal of this grant is to examine the influence of sleep and circadian processes on caloric intake among healthy and overweight adolescents

Lifespan/Tufts/Brown Center for AIDS Research ("CFAR") Initial AIDS Research Award

PI: **D.H. Barker** (In Kind)

5/7/2014 - 5/7/2015

Mentor: L.K. Brown

Annual direct costs \$40,000

Improving Adolescent HIV treatment adherence through the use of peer-led adherence teams. This international CFAR Developmental Award is a pilot program to evaluate the utility of assigning HIV-infected youth to treatment adherence teams. Teams will be assigned the same schedule for follow-up appointments, and they will be provided with HIV education and team building exercises while they wait for their appointment. The project will be run through the Komfo Anokye Teaching Hospital (KATH) in Kumasi, Ghana. The international PI is Anthony Enimil, DPDM, director of the Adolescent HIV Clinic at KATH.

K23MH102131 (Barker) 5/14/2014 – 3/31/19

NIMH Annual direct cost \$157,487

Comparative Efficacy of HIV-Prevention among Youth with Mental Health Needs
This 5-year training award combines information from five trials of HIV-prevention programs designed for youth with mental health concerns. Modern analytic modeling techniques will be used to identify and describe youth who respond or do not respond to current programs. Results will help policymakers better match prevention programs to the needs of specific subpopulations of vulnerable youth.

R01 HD080780 (Rizzo) 04/15/15-03/31/20

NICHD Annual direct cost \$546,110

Dating Violence Prevention for Juvenile Justice Girls. The goal of this study is to evaluate the efficacy of a promising, skills-based intervention (Date SMART) in reducing dating violence, delinquency and sexual risk outcomes for a broad range of court involved, non-incarcerated girls.

L40 TR001089 (NCATS) PI: **D.H. Barker** 7/1/2015 – 6/30/2017

Youth in Mental Health Treatment: Secondary Data Analysis of Risk Behaviors

The project associated with this loan repayment award focuses on applying an HIV-risk score derived from unprotected sexual acts, number of partners, and substance use prior to sexual risk to a recent trial of two HIV prevention approaches in youth in mental health treatment.

1G1CMS331405 (Rosenberg)

04/01/16-06/30/19

CMS

Total cost \$720,000

Rhode Island State Innovation Model (SIM) Test Grant: Pediatric Psychiatry Resource Network (PediPRN).

This project is focused on providing an on-call psychiatric consultation service for pediatricians to discuss psychiatric needs of the patients.

R21 DK108164 (NIDDK) PI: Hadley

08/15/16-07/31/19

CO-I: D.H. Barker .24 CM (inclusive with effort on K)

Annual direct cost \$150,000

Enhancing Emotion Regulation among Overweight and Obese Adolescents Attempting to Lose Weight

The goal of this study will determine feasibility and acceptability of an adapted intervention (HEALTH TRAC) to enhance weight management for overweight adolescents.

Adolescent Family Planning Manuscript (AIR) PI: **Barker** 07/01/18-02/01/19

Total Budget \$25,000

Emotional context as an influence on sexual decision making among adolescents with mental health symptoms. The goal of this project is to produce a manuscript detailing self-reported emotions prior to sexual decisions among 797 adolescents who participated in two clinical trials.

RRCS-IPDMA-2019-001 (Barker & Freeman) 10/01/19-09/30/20

PCORI Total cost \$38,052

Designing a Clinical Trial Repository for Pediatric Obsessive-Compulsive Disorder. Planning grant for an individual-participant-data meta-analysis in pediatric OCD to determine what works for whom.

Children's Miracle Network Grant (Subedi)

5/1/2020-4/30/2021

Department of Pediatrics, Alpert Medical School Total Cost \$25,000

Assessing Durable Treatment Response and Safety of Infliximab in Children with Inflammatory Bowel Disease (IBD): A Follow Up Study and Justification for the Development of a Prospective Pediatric IBD REDCap Database

RF1 MH120830 (Liu) 08/01/19-06/30/23 NIMH Total cost \$2,211,126

Temporal dynamics of stress, sleep, and arousal in short-term risk for adolescent suicidal behavior. The major goal of this grant is to understand the relationships among sleep, daily stress and emotional arousal in predicting adolescent suicidal behavior.

IHS-2017C1-6400 (Freeman) 07/01/18-04/01/23 PCORI Total Cost \$3,150,910

Comparison of Patient-Centered versus Provider-Centered Delivery of Cognitive Behavioral Treatment (CBT) for Pediatric Anxiety and Obsessive Compulsive Disorder (OCD). Evaluate the effectiveness of patient-centered (home-based) treatment.

UNIVERSITY TEACHING, ADVICING and MENOTRING ROLES

Graduate Mentees Elizabeth Tampke

Grace Cushman
Saksham Chandra
Katie McCullar
Gina Mason
Diana Rancourt
Mary-Beth Miller
Patricia Wong
Meredith Joppa

Dissertation Committee Ruofan Bie (Brown University)

Member Jaclyn Bogner (University of Oregon)

Short Course Instructor Society for Pediatric Psychology

2016-2017 Helped design and teach data science related short courses for

the annual conference

Adjunct Professor Connecticut College, New London, Connecticut.

2013 (Fall) Taught graduate level statistics course

Guest Lecturer Decision Sciences Institute, Providence, Rhode Island.

2012 Presented on using the statistical software Mplus to run item

 $response\ theory\ measurement\ models.$

Graduate Mentor University of Miami, Miami, Florida.

2005 - 2008 Mentored one student per summer who was participating in

Psychology Research Initiatives Mentored Experience (PRIME). The PRIME program is designed to prepare

minority students for graduate studies.

Graduate Instructor University of Miami, Miami, Florida.

2007 (Summer) Invited to present a 2-hour short course on growth curve

modeling.

Graduate Instructor University of Miami, Miami, Florida.

2007 (Spring) Taught Introduction to Biobehavioral Statistics (4 credit

hours) to a class of 32 undergraduate students.

Graduate Instructor 2003 - 2004

Brigham Young University, Provo, Utah. Taught two labs of thirty students about Psychological Testing (4 credit hours).