

BIOGRAPHICAL SKETCH

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NAME: CRAIG CANAPARI

eRA COMMONS USER NAME (credential, e.g., agency login): CANAPARI

POSITION TITLE: ASSOCIATE PROFESSOR IN PEDIATRICS

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Yale University	B.A.	1995	ENGLISH
University of Connecticut	M.D.	2001	MEDICINE
Massachusetts General Hospital, Harvard Medical School		2001-4	RESIDENCY, PEDIATRICS
Massachusetts General Hospital, Harvard Medical School		2004-7	FELLOWSHIP, PEDIATRIC PULMONOLOGY

A. Personal Statement

I am a pediatric pulmonologist and sleep physician and the Director of the Pediatric Sleep Center at Yale University and Yale New Haven Hospital. I am also the pulmonologist for the Muscular Dystrophy Association Clinic at YNH. I have research interests in several arenas: 1) The relationship between body fat distribution, lung disease, and sleep disorders in obese children and children with neuromuscular disorders; and 2) the use of new technologies to improve sleep quality in children.

In addition to sleep research, my expertise in pediatric sleep health has reached millions of families through multiple national interviews and multiple writings included the New York Times, Washington Post, among others. I recently published a book on sleep training for families of infants through 6 years of age, "It's Never Too Late to Sleep Train". I am also involved as an advisory board member for Start School Later, a national organization dedicated to adolescent health and well-being, and presented at the first national conference on this topic. Considering my expertise on pediatric sleep health and behavioral sleep interventions, I am well qualified to collaborate with Dr. Ordway on the measurement of pediatric sleep health and ongoing refinement of Sleep Well, Bee Well as needed.

B. Positions and Honors:**Positions and Employment**

1995-1997 Research Assistant, Northern Manhattan Stroke Study, Columbia University

2001-2004 Pediatric Resident, Massachusetts General Hospital

2004-2007 Pediatric Pulmonary Fellow, Massachusetts General Hospital

2007-2013 Attending Physician, Pediatric Pulmonology and Sleep Disorders, Massachusetts General Hospital

2009-2013 Medical Director, Pediatric Sleep Laboratory, Massachusetts Eye and Ear Institute

2013-current Director, Pediatric Sleep Center, Yale University/Yale New Haven Hospital

Honors:

1993	Curtis Award for Literary Excellence, Yale University
2001	Merck Book Award, University of Connecticut Medical School
2001-2002	Medical Student Teaching Award, Harvard Medical School
2003-2004	Medical Student Teaching Award, Harvard Medical School
2007	American Thoracic Society Travel Grant
2022	Fellow, American Academy of Sleep Medicine

Professional Society Memberships:

2001-2004	American Academy of Pediatrics (board certified in General Pediatrics as of 10/04; in Pediatric Pulmonology as of 11/07)
2004-2019	American Thoracic Society
2005-current	American Academy of Sleep Medicine

C. Contributions to Science

Understanding and addressing sleep disparities in children: I have collaborated with Dr. Ordway on several projects related to sleep in disadvantaged children including looking at the relationship between toxic stress and sleep patterns in children. We have studied the relationship between race/ethnicity and sleep in toddlers in the New Haven area, and recently completed a pilot program of an intervention designed to improve sleep in vulnerable patients.

1. Ordway, M.R., Sadler, L.S., **Canapari, C.A.**, Jeon, S., Redeker, N.S., 2017. Sleep, biological stress, and health among toddlers living in socioeconomically disadvantaged homes: A research protocol. *Res Nurs Health* 40, 489–500. <https://doi.org/10.1002/nur.21832>
2. Ordway, M.R., Sadler, L.S., Jeon, S., O'Connell, M., Banasiak, N., Fenick, A.M., Crowley, A.A., **Canapari, C.**, Redeker, N.S., 2020. Sleep health in young children living with socioeconomic adversity. *Res Nurs Health* 43, 329–340. <https://doi.org/10.1002/nur.22023>
3. Redeker, N.S., Ordway, M.R., Banasiak, N., Caldwell, B., **Canapari, C.**, Crowley, A., Fenick, A., Jeon, S., O'Connell, M., Sude, L., Sadler, L.S., 2018. Community partnership for healthy sleep: Research protocol. *Res Nurs Health* 41, 19–29. <https://doi.org/10.1002/nur.21840>
4. Sadler, L.S., Banasiak, N., **Canapari, C.**, Crowley, A.A., Fenick, A., O'Connell, M., Ordway, M.R., Sude, L., Trevino, S., Redeker, N.S., 2020. Perspectives on Sleep from Multiethnic Community Parents, Pediatric Providers, and Childcare Providers. *J Dev Behav Pediatr* 41, 540–549. <https://doi.org/10.1097/DBP.0000000000000799>

Understanding sleep problems in children with psychiatric and neurodevelopmental disorders:

Sleep problems are common in children with psychiatric and neurodevelopmental issues but there is little education or training on sleep issues or research for providers in the mental health domain. I have collaborated with colleagues at the Child Study Center at Yale to produce articles to address this issue.

1. Han GT, Trevisan DA, Abel EA, Cummings EM, Carlos C, Bagdasarov A, Kala S, Parker T, Canapari C, McPartland JC. [Associations between sleep problems and domains relevant to daytime functioning and clinical symptomatology in autism: A meta-analysis.](#) *Autism Res.* 2022 Jul;15(7):1249-1260. doi: 10.1002/aur.2758. Epub 2022 May 30. PubMed PMID: 35635067.
2. Baddam, S.K.R., Canapari, C.A., Van de Grift, J., McGirr, C., Nasser, A.Y., Crowley, M.J., 2021. Screening and Evaluation of Sleep Disturbances and Sleep Disorders in Children and Adolescents. *Child Adolesc Psychiatr Clin N Am* 30, 65–84. <https://doi.org/10.1016/j.chc.2020.09.005>
3. Baddam, S.K.R., Canapari, C.A., van Noordt, S.J.R., Crowley, M.J., 2018. Sleep Disturbances in Child and Adolescent Mental Health Disorders: A Review of the Variability of Objective Sleep Markers. *Med Sci (Basel)* 6. <https://doi.org/10.3390/medsci6020046>

4. Baddam, S.K.R., Olvera, R.L., Canapari, C.A., Crowley, M.J., Williamson, D.E., 2019. Childhood Trauma and Stressful Life Events Are Independently Associated with Sleep Disturbances in Adolescents. *Behav Sci (Basel)* 9. <https://doi.org/10.3390/bs9100108>

Determining the relationship between adipose tissue and respiratory disease: I have performed research assessing the relationship between body fat distribution and respiratory disease, both in patients with neuromuscular disorder and obese children. To summarize these findings, visceral adiposity was associated with a) a higher likelihood of obstructive sleep apnea in obese children b) lower vital capacity in boys and young men with Duchenne.

1. **Canapari, C. A.**, Barrowman, N., Hoey, L., Walker, S. W., Townsend, E., Tseng, B. S., & Katz, S. L. (2014). Truncal fat distribution correlates with decreased vital capacity in Duchenne muscular dystrophy. *Pediatric Pulmonology*. doi:10.1002/ppul.23004
2. **C.A Canapari**. A.G. Hoppin. T.B. Kinane. B.J. Thomas. M. Torriani. E.S. Katz, MD. Relationship between Sleep Apnea, Fat Distribution, and Insulin Resistance in Obese Children. *J Clin Sleep Med* 2011; 7: 268–273.
3. **C.A. Canapari**, L.B. Bliss, B.S. Tseng. Truncal fat mass correlates with decreased vital capacity in children with Duchenne muscular dystrophy. *Am. J. Respir. Crit. Care Med.*, May 2011; 183: A1888. American Thoracic Society Conference. Denver 2011.

Pursing quality goals in sleep medicine: I have worked extensively with the American Academy of Sleep Medicine on educational content working towards the goal of standardization and quality in Sleep Medicine.

1. Lastra AC, Ingram D, Park J, James E, Matthews C, Canapari C, Mansukhani M, Stahl SM. Moving towards standardization: physician reporting of sleep studies. *J Clin Sleep Med*. 2023 Mar1; 19(3): 595-603. doi: 10.5664/jcsm.10442.PMID: 36546360

D. Research Support:

Agency: National Institute of Nursing Research, NIH

ID: R34NR019283

Title: "Sleep Well, Bee Well: Sleep Health Promotion Intervention in Early Head Start"

PI: Monica Ordway, APRN, PhD

Percent Effort: 2% each year

Direct Costs: \$251,250

Dates 4/1/21-3/31/23

Past Research Support:

Agency: National Institute of Nursing Research, NIH

ID: 1K23NR016277-01A1

Title: "Sleep, Biological Stress, and Health Among Toddlers Living in Socioeconomically Disadvantaged Homes"

PI: Monica Ordway, APRN, PhD

Percent Effort: 1%

Role: Mentor

Project Period: 2016-19

Agency: American Sleep Medicine Foundation (\$20K)

ID#: #147-FP-16

Title: "Testing and development of a sleep training mobile health application to address sleep problems in the first two years of life"

PI: Craig Canapari, MD

Percent effort: 10%

Direct costs: \$18,300

Total costs for project period: \$19,764

Project Period: 10/16-10/18

Jazz Pharmaceuticals : Canapari (PI) 2/1/15-11/1/17

Site director for a drug trial examining the safety and efficacy of sodium oxybate in children with narcolepsy and cataplexy.

Dillon Foundation Grant: Canapari (PI) 7/1/12-7/1/14

Examination of the relationship between visceral adiposity and lung function in dystrophinopathy

The goal of this study is to assess the relationship between intraabdominal vs. subcutaneous adiposity in lung function in subjects with dystrophinopathy.

Role: PI

Private Foundation Funds: Canapari (PI) 11/9/09-7/1/13

(Foundations are Jett Foundation, JB's Keys to DMD):

Investigation of disease progression in individuals with muscular dystrophy.

This is our ongoing neuromuscular clinic registry. Current ongoing research includes an examination of the relationship between truncal adiposity and lung function in muscular dystrophy; and the relationship between neuromuscular disease and sleep quality.

Role: Co-investigator 11/9/09-7/1/12

PI 7/1/12- current

Departmental Funds: Canapari (Co-investigator 7/1/05-1/1/11)

Metabolic correlates of obstructive sleep apnea in children.

The goal of this protocol was to examine the relationship between body fat partitioning, obstructive sleep apnea, and metabolic factors in obese children.

Karmelsonix Ltd. Industry trial Canapari (PI) 9/27/10-3/13/12

Wheezometer Exploratory Field Trial

The goal of this multicenter trial was to examine the accuracy of a diagnostic device in assessing bronchospasm in children and adults with asthma.

Role: Site PI

CANAPA04B0 Canapari (PI) 7/1/04-7/1/06

Cystic Fibrosis Foundation Second Year Clinical Fellowship Grant

Massachusetts General Hospital and Harvard Medical School

Role: Fellow in training

Complete list of published work:

<https://www.ncbi.nlm.nih.gov/myncbi/craig.canapari.1/bibliography/public/>