



Cohen Children's Medical Center
Northwell HealthSM

Gap Year Internship Programs

2024 - 2025

Cohen Children's Medical Center
New Hyde Park, New York



DONALD AND BARBARA
ZUCKER SCHOOL *of* MEDICINE
AT HOFSTRA/NORTHWELL

Cohen Children's Medical Center:

Steven and Alexandra Cohen Children's Medical Center of New York is dedicated to providing the highest levels of care in meeting the special needs of children, from premature babies to adolescents. The specialists in its national and international programs cover a range of specialties. Its 202-bed hospital opened in 1983 as the New York metropolitan area's only hospital designed exclusively for children. Today, it is the largest provider of pediatric health services in New York State. Cohen Children's Medical Center serves 1.8 million children in Brooklyn, Queens, Nassau, and Suffolk counties – providing state-of-the-art care for children's medical, surgical, psychiatric and dental needs in both inpatient and outpatient settings.

Northwell Health:

Northwell Health is a not-for-profit healthcare network that includes 23 hospitals, the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, the Feinstein Institute for Medical Research, as well as rehabilitation and skilled nursing facilities, a home care network, a hospice network and progressive care centers offering a range of outpatient services. Northwell Health has more than 12,000 member physicians, and Northwell Health's Physician Partners employs more than 3,800 physicians and is comprised of 23 hospitals and more than 830 outpatient facilities.

Gap Year Internships for 2024-2025

Pediatric Sub-specialty	# of Positions	Salary/ Stipend	Time Commitment	Application Deadline	Page #
Developmental & Behavioral Pediatrics	3	Yes	9 – 12 months	3/3/24	4
	Application: https://forms.gle/FyvqpiMHZPk3WaLM9				
Neonatology	1 Basic Science 1 Clinical	Yes	12 - 24 months	3/3/24	29
	Application: https://forms.gle/xwxnJpfGKEx1AEaw7				
General Pediatrics	1 – 3	Yes	12 - 24 months	3/3/24	35
	Application: https://forms.gle/YYxyicDtUtUym7gw6				
Pediatric Nephrology	1 (Clinical Research Assistant)	Yes	≥ 12 months	3/3/24	41
	Application: https://forms.gle/fkxUVpDqLRbEj1GV6				
	1 (Clinical Research Coordinator)	Yes	2 Years	3/3/24	41
	Application: https://forms.gle/fkxUVpDqLRbEj1GV6				
Pediatric Infectious Disease	1 – 2	No	10 – 12 months	3/3/24	50
	Application: https://forms.gle/tnYVK3WdFFV2TeHJ6				
Pediatric Neurology	1 – 2	No	12 - 18 months	3/3/24	53
	Application: https://forms.gle/UXfyeALfSYL531w97				

If you receive an error message regarding data loss prevention on the Google Form, please try accessing it through a non-school Gmail. If you encounter further problems, please email jgbarile5@gmail.com or skrishna1@northwell.edu.

Gap Year Research Internship

Division of Developmental Pediatrics

“Gap Year” Research Assistant Program in Developmental & Behavioral Pediatrics

Description: A 9-12 month paid internship program in clinical research related to child development and neurodevelopmental disorders is offered by Cohen Children’s Medical Center of New York – the flagship children’s hospital of Northwell Health.

This Clinical Research Internship offers 3 accomplished students the opportunity to work closely with faculty mentors on research projects related to normal or abnormal child development. Research Assistants (RA’s) will assist clinical faculty with ongoing research projects and/or work collaboratively with one or more mentors in designing new projects of mutual interest. The Division has internal funding for clinical research. RA’s are not expected to write grants, and their research endeavors and activities are not dependent on extramural grants. Although the internship is primarily focused on clinical research, there may also be an opportunity to co-author a review article for publication in a peer-reviewed pediatric journal (see details below).

This clinical research internship is open to students who excelled while pursuing their Bachelor’s degree from any U.S. college or university. Although the ideal candidate is a student who aspires to attend medical school in the near future, has a strong academic record and writing skills, research experience, knowledge of statistics, and a demonstrated interest in psychology, child development, and/or neuroscience, we welcome applications from any students who have excelled in any area of study.

Research Focus: The faculty have eclectic interests, as reflected in the diversity of topics addressed in our recent publications (listed below). The primary mentors are Dr. Andrew Adesman and Dr. Ruth Milanaik. Dr. Adesman is interested in secondary analyses of data made available by the CDC and other national organizations, though he has also initiated several studies that involve collection of original data nationally on important topics that have not been well studied (e.g., wandering by children with autism; grandparents raising their own grandchildren). Dr. Milanaik is primarily interested in projects that require collection of original data – either from retrospective chart reviews, prospective data collection coincident with out-patient visits, or in some cases, through mailings or on-line surveys.

Research Abstracts: RA’s will be co-investigators on multiple research abstracts submitted to national research meetings. A list of research abstracts accepted for presentation at national meetings in recent years through 2022 is attached.

Research Abstracts/Publications: With guidance from faculty mentors, RA’s will be responsible for drafting and revising research manuscripts for submission to peer reviewed pediatric journals. RA’s will generally be identified as either the first or second author of any paper submitted for publication.

Review Article: There may be an opportunity for RA’s to be first or second author on a review article for a peer-reviewed medical journal. This article would be clinically focused, relating to a specific developmental disorder or behavioral concern.

Program Dates: Start and completion dates for the Gap Year internship are somewhat flexible. Priority will be given to applicants prepared to make at least a full-time 9-month commitment or longer, though alternate schedule arrangements will be considered. With advance notice, research interns may take as many days off (without pay) as needed during their internship to visit medical schools for interviews.

Other Activities/ Expectations/Opportunities: The primary focus of the internship is clinical research and writing, and it is expected that this will comprise 75% of one's time. Approximately 25% of time will be spent providing support to the Division's clinical faculty, and this may include scribing, scoring of behavioral rating scales, and drafting brief summaries of outside psychoeducational testing. RA's will have the opportunity to attend clinical lectures about child development, developmental disorders, and other lectures of interest available through the Children's Hospital. There will also be opportunities for occasional shadowing of clinicians in our sub-specialty area and other pediatric sub-specialties as well. RA's may occasionally be asked to assist with other academic or administrative tasks.

Affiliation with Feinstein Institute for Medical Research: Gap Year interns will be brought on as Visiting Scholars through the [Feinstein Institute for Medical Research](#).

Stipend: As Visiting Scholars, Gap Year interns in the Division of Developmental & Behavioral Pediatrics' will be paid a total compensation of \$20 per hour for days worked.

To Apply: You must submit a completed application through the Google form [linked here](https://forms.gle/FyvqjMHZPk3WaLM9) (<https://forms.gle/FyvqjMHZPk3WaLM9>); the application will also ask you to attach a CV or résumé, an unofficial transcript, and a recent photograph.

Application Deadline: The submittal deadline is Sunday, March 3, 2024 at 11:59 (EST); completed applications must be received by that date. Applicants are strongly encouraged to submit their application as early as possible. The most promising candidates will be invited to interview via Zoom on a rolling basis, and notification of decisions will be made in mid-or late March.

Past Interns: The Gap Year Internship program was established in 2014. All of our Gap Year RA's have been accepted to multiple medical schools. Although these RA's are typically very strong applicants even prior to participating in our internship program, the Gap Year internship program typically adds multiple abstracts and publications to each RA's list of accomplishments. Moreover, RA's often find it very helpful to discuss one or more of their different Gap Year research projects when interviewed by medical schools.

For Further Information: The research internship is coordinated by Dr. Andrew Adesman, Chief of the Division of Developmental & Behavioral Pediatrics. Questions regarding the Gap Year internship or the application process may be directed to either of the program's current interns, Shruthi Krishna (skrishna1@northwell.edu) or Joe Barile (jgbarile5@gmail.com).

Additional Information:

- **Research Publications:** To give you a sense for the breadth, scope and volume of research topics that we have pursued in recent years, we have provided a list of recent publications by Drs. Andrew Adesman and Ruth Milanaik – the primary mentors for research interns on pages 7 - 12. To view a more comprehensive list of publications and some of our presentations at national meetings, you can search Google Scholar (www.Scholar.Google.com), or follow these links:
 - [Andrew Adesman, MD](#)
 - [Ruth Milanaik, MD](#)
- **Testimonials:** Each January, we ask our Gap Year research assistants and summer interns to provide us with feedback about their research experience. You can read the unedited comments from all of our Gap Year research assistants from 2014 – 2024 on pages 13 – 25.

Recent Publications by Andrew Adesman, MD
(all publications have one or more interns as a co-author)

Associations between bullying and condition severity among youth with chronic health conditions. Reisert, H, Duy P, Rapoport E, and Adesman A. *Journal of Adolescent Health*. 73: 279-287. 2023

Sports Team Participation and Vaping Among High School Students: 2015–2019. Rapoport, E., Zhu, M. O., Pham, D., Keim, S. A., & Adesman, A. *Pediatrics*, 151(1); 2023

Health care provider support and factors associated with breastfeeding beyond infancy: A cross-national study. Keim, S. A., Tchaconas, A., Ford, J. B., Nickel, N. C., Heffern, D., & Adesman, A. *Birth*. 49(2), 233-242; 2022

Pediatricians' knowledge, attitudes and practices surrounding menstruation and feminine products. Singer, M. R., Sood, N., Rapoport, E., Gim, H., Adesman, A., & Milanaik, R. *International Journal of Adolescent Medicine and Health*, 34(3); 2022.

Impact of Medication on Performance of Household Chores by Children with ADHD. Park, F., Rapoport, E., Soled, D., & Adesman, A. *Journal of Attention Disorders*, 26(1), 119-124; 2022.

The COVID-19 pandemic and its potential enduring impact on children. M Irwin, B Lazarevic, D Soled, A Adesman. *Current Opinion in Pediatrics* 34 (1), 107-115, 2022.

Impact of Medication on Performance of Household Chores by Children with ADHD. F Park, E Rapoport, D Soled, A Adesman. *Journal of Attention Disorders* 26 (1), 119-124; 2022

Health care provider support and factors associated with breastfeeding beyond infancy: A cross-national study. SA Keim, A Tchaconas, JB Ford, NC Nickel, D Heffern, A Adesman. *Birth*. 2021

Prevalence of Non-Heterosexual Identity and Same-Sex Sexual Contact Among High School Students in the US From 2015 to 2019. E Rapoport, CE Athanasian, A Adesman. *JAMA Pediatrics* 175 (9), 970-972, 2021.

School Readiness of Young Children Enrolled in Preschool in the United States. ER Kriegel, MR Singer, SA Keim, E Rapoport, A Adesman. *Journal of Developmental & Behavioral Pediatrics* 42 (7), 569-578, 2021.

Wandering behavior in children with autism spectrum disorder and other developmental disabilities. T Cassandra, H Reisert, A Adesman. *Current Opinion in Pediatrics* 33 (4), 464-470; 2021.

Impact of ADHD on Household Chores. SL Spaulding, K Fruitman, E Rapoport, D Soled, A Adesman. *Journal of Attention Disorders* 25 (10), 1374-1383; 2021.

Electronic Vapor Product Use and Sexual Risk Behaviors in US Adolescents. DC Rigsby, SA Keim, R Milanaik, A Adesman. *Pediatrics* 147 (6), 2021.

Reporting of child maltreatment during the SARS-CoV-2 pandemic in New York City from March to May 2020. E Rapoport, H Reisert, E Schoeman, A Adesman. *Child Abuse & Neglect*; 116, 2021.

Breastfeeding Is Associated with a Reduced Risk of Attention-Deficit/Hyperactivity Disorder Among Preschool Children; D Soled, SA Keim, E Rapoport, L Rosen, A Adesman; *Journal of Developmental & Behavioral Pediatrics* 42 (1), 9-15; 2021

Sex Differences in Gender-Diverse Expressions and Identities among Youth with Autism Spectrum Disorder; L Brunissen, E Rapoport, K Chawarska, A Adesman; *Autism Research*; 2020.

Impact of Medication on Performance of Household Chores by Children with ADHD; F Park, E Rapoport, D Soled, A Adesman. *Journal of Attention Disorders*, 1087054720969980; 2020

Reporting of child maltreatment during the SARS-CoV-2 pandemic in New York City from March to May 2020; E Rapoport, H Reisert, E Schoeman, A Adesman; *Child Abuse & Neglect*, 2020

Clinical correlates of laterality among school-age children in the United States; N Lu, DC Rigsby, SA Keim, E Rapoport, A Adesman; *Laterality* 25 (5), 620-639; 2020

Parenting challenges of grandparents raising grandchildren: Discipline, child education, technology use, and outdated health beliefs; L Brunissen, E Rapoport, K Fruitman, A Adesman *GrandFamilies: The Contemporary Journal of Research, Practice and Policy*; 2020

Family Well-being in Grandparent-Versus Parent-Headed Households; E Rapoport, N Muthiah, SA Keim, A Adesman. *Pediatrics* 146 (3); 2020

Wandering by Children with Autism Spectrum Disorders: Impact of Electronic Tracking Devices on Elopement Behavior and Quality of Life; L McLaughlin, E Rapoport, SA Keim, A Adesman *Journal of Developmental & Behavioral Pediatrics* 41 (7), 513-521; 2020

Patterns and Outcomes of Diagnosis Disclosure to Youth with Autism Spectrum Disorder; B Kiely, A Adesman, E Rapoport, A Gutman. *Journal of Developmental & Behavioral Pediatrics* 41 (6), 443-451; 2020

Pediatricians' knowledge, attitudes and practices surrounding menstruation and feminine products; MR Singer, N Sood, E Rapoport, H Gim, A Adesman, R Milanaik; *International journal of adolescent medicine and health*. 2020

Impact of ADHD on Household Chores; SL Spaulding, K Fruitman, E Rapoport, D Soled, A Adesman; *Journal of attention disorders*, 1087054720903359; 2020

Physician perceptions of ADHD stimulant diversion and misuse; NM Colaneri, SA Keim, A Adesman; *Journal of attention disorders* 24 (2), 290-300; 2020

Common parenting misconceptions regarding infant care: setting the record straight for parents (and some pediatricians); T Kahan, A Adesman; *Current opinion in pediatrics* 31 (6), 874-880; 2019

Availability of naloxone in pharmacies and knowledge of pharmacy staff regarding dispensing naloxone to younger adolescents; DE Jimenez, MR Singer, A Adesman. *Journal of Adolescent Health* 65 (5), 698-701; 2019.

Electronic vapor product usage and substance use risk behaviors among US high school students DC Rigsby, SA Keim, A Adesman. *Journal of child and adolescent psychopharmacology* 29 (7), 545-553; 2019

Disparities in Prevalence and Treatment of Mental Health Disorders in Children; R Gao, A Adesman; *JAMA pediatrics* 173 (8), 799-800; 2019.

Increased aggressive behavior among youth in the United States who have experienced multiple forms of victimization; TB Pham, N Muthiah, A Adesman. *International journal of adolescent medicine and health*; 2019

Adequacy of Ultraviolet Protection of Children's Sunglasses; T Kahan, S Sidhu, A Adesman *Medical Research Archives* 7 (3); 2019.

Correlates of genetic attributions among parents of children in the USA with developmental disabilities; B Kiely, S Vettam, A Adesman. *The application of clinical genetics* 12, 55; 2019

Physician training and qualification to educate patients on attention-deficit/hyperactivity disorder stimulant diversion and misuse; N Colaneri, SA Keim, A Adesman. *Journal of child and adolescent psychopharmacology* 28 (8), 554-561; 2018.

Wandering by children with autism spectrum disorder: key clinical factors and the role of schools and pediatricians. L McLaughlin, SA Keim, A Adesman. *Journal of Developmental & Behavioral Pediatrics* 39 (7), 538-546; 2018.

Adolescent consumption of sports drinks; K Cordrey, SA Keim, R Milanaik, A Adesman *Pediatrics* 141 (6); 2018.

Pharmacological cognitive enhancement in pediatrics. N Colaneri, M Sheldon, A Adesman *Current opinion in pediatrics* 30 (3), 430-437; 2018

Recent Publications by Ruth Milanaik, DO

(all publications have one or more recent interns as a co-author)

Dubrosa, F., Sangiuolo, K., Franco Jr, J., & Milanaik, R. L. (2023). Quick Nic: Novel Smokeless Nicotine Products and Pediatric Trends. *Current Opinion in Pediatrics*, 10-1097.

Pham, D., Lin, A., Rosenthal, H., & Milanaik, R. (2023). ADHD Diagnosis in Children of Non-US-Born Parents: A Cross-Sectional Analysis. *Journal of Attention Disorders*.

Terala, A., Sangiuolo, K., & Milanaik, R. L. (2023). Access to Marijuana by Minors Via Online Dispensaries. *JAMA Pediatrics*.

Kriegel, E. R., Lazarevic, B., Feifer, D. S., Athanasian, C. E., Chow, N., Sklar, J. P., ... & Milanaik, R. L. (2023). Youth and Augmented Reality. In *Springer Handbook of Augmented Reality* (pp. 709-741). Cham: Springer International Publishing.

Sidhu, S. K., McLaughlin, L. J., Pham, T. B., Lazarevic, B., Kriegel, E. R., Rosenthal, H. E., ... & Milanaik, R. L. (2023). Paediatric cardiologist adherence to American Heart Association neurodevelopmental recommendations for CHD patients. *Cardiology in the Young*, 33(4), 590-596.

Edible marijuana products and potential risks for pediatric populations. *Current opinion in pediatrics*, Lin, A., O'Connor, M., Behnam, R., Hatf, C., & Milanaik, R. 34(3), 279-287; 2022

Puff bars: a dangerous trend in adolescent disposable e-cigarette use. Rosenthal, H., Chow, N., Mehta, S., Pham, D., & Milanaik, R. *Current Opinion in Pediatrics*, 34(3), 288-294; 2022

The gut microbiome: an overview of current trends and risks for paediatric populations. Sangiuolo, K., Cheng, E., Terala, A., Dubrosa, F., & Milanaik, R. L. *Current Opinion in Pediatrics*, 34(6), 634-642; 2022.

Pediatric strength training: benefits, concerns, and current trends. *Current Opinion in Pediatrics*, Wang, X., Dubrosa, F., O'Connor, M., Sangiuolo, K., & Milanaik, R. L. 34(6), 625-633; 2022.

Youth and Augmented Reality. In *Springer Handbook of Augmented Reality* (pp. 709-741). Kriegel, E. R., Lazarevic, B., Feifer, D. S., Athanasian, C. E., Chow, N., Sklar, J. P., ... & Milanaik, R. L. Cham: Springer International Publishing; 2023

Birth Order and Up-to-Date Vaccination Status. Lin, A., Pham, D., Rosenthal, H., & Milanaik, R. *Pediatrics*, 150(4); 2022.

Paediatric cardiologist adherence to American Heart Association neurodevelopmental recommendations for CHD patients. Sidhu, S. K., McLaughlin, L. J., Pham, T. B., Lazarevic, B., Kriegel, E. R., Rosenthal, H. E., ... & Milanaik, R. L. *Cardiology in the Young*, 1-7; 2022.

Pediatricians' knowledge, attitudes and practices surrounding menstruation and feminine products. Singer, M. R., Sood, N., Rapoport, E., Gim, H., Adesman, A., & Milanaik, R. *International Journal of Adolescent Medicine and Health*, 34(3); 2022.

The Lack of Helmets in Olympic Skateboarding—Skating into Dangerous Territory. M O'Connor, S Mehta, R Milanaik. *JAMA Pediatrics*. 2021

Electronic Vapor Product Use and Sexual Risk Behaviors in US Adolescents. DC Rigsby, SA Keim, R Milanaik, A Adesman. *Pediatrics* 147 (6). 2021

Alternative diets among adolescents: facts or fads? CE Athanasian, B Lazarevic, ER Kriegel, RL Milanaik. *Current Opinion in Pediatrics* 33 (2), 252-259

TikTok, Tide Pods and Tiger King: health implications of trends taking over pediatric populations; ER Kriegel, B Lazarevic, CE Athanasian, RL Milanaik. *Current Opinion in Pediatrics* 33 (1), 170-177; 2021

Pediatricians' knowledge, attitudes and practices surrounding menstruation and feminine products; MR Singer, N Sood, E Rapoport, H Gim, A Adesman, R Milanaik. *International Journal of Adolescent Medicine and Health*. 2020

Prevalence and longevity of PTSD symptoms among parents of NICU infants analyzed across gestational age categories; R Schechter, T Pham, A Hua, R Spinazzola, J Sonnenklar, D Li, ... *Clinical Pediatrics* 59 (2), 163-169; 2020.

The cannabidiol conundrum: potential benefits and risks of cannabidiol products for children L Singer, H Tokish, F Park, C Campisi, RL Milanaik; *Current Opinion in Pediatrics* 32 (1), 198-205; 2020.

Digital sextortion: Internet predators and pediatric interventions; S Hong, N Lu, D Wu, DE Jimenez, RL Milanaik. *Current Opinion in Pediatrics* 32 (1), 192-197. 2020.

Augmented Reality in Medical Education and Training: From Physicians to Patients. CA Campisi, EH Li, DE Jimenez, RL Milanaik; *Augmented Reality in Education*, 111-138; 2020.

The Internet's Effect on Parental Trust in Pediatrician Diagnosis of Autism and Likelihood of Seeking a Second Opinion; T Pham, A Kuznetsova, H Gim, K Cordrey, R Milanaik. *Journal of Autism and Developmental Disorders*, 49 (10), 4355-4362; 2019.

Are Baby Walker Warnings Coming Too Late?: Recommendations and Rationale for Anticipatory Guidance at Earlier Well-Child Visits; R Schechter, P Das, R Milanaik. *Global Pediatric Health*, 2019.

Examining US pediatric residents' oral health care knowledge, training, practices and perceptions. P Das, MR Singer, H Gim, N Awadalla, R Milanaik. *Medical Research Archives* 7 (8), 2019.
Paging Dr. Google: The effect of online health information on trust in pediatricians' diagnoses. N Sood, DE Jimenez, TB Pham, K Cordrey, N Awadalla, R Milanaik; *Clinical Pediatrics* 58 (8), 889-896; 2019.

New age technology and social media: adolescent psychosocial implications and the need for protective measures. J Shah, P Das, N Muthiah, R Milanaik. *Current Opinion in pediatrics* 31 (1), 148-156; 2019

Dangers of machine translation: The need for professionally translated anticipatory guidance resources for limited English proficiency caregivers. P Das, A Kuznetsova, M Zhu, R Milanaik *Clinical Pediatrics* 58 (2), 247-249; 2019.

Food Consumption in Popular Children's TV Shows and Food Choice Awareness of Pediatric Viewers. R Milanaik, P Das, J Shah, K Fruitman, J Goldman, N Sood. *Clinics in Pediatrics* 2 (1) 2019.

Health implications of augmented reality games on children and adolescents. DE Jimenez, J Shah, P Das, RL Milanaik. *Augmented Reality Games I*, 149-176; 2019.

Age restriction warning label efficacy and high school student consumption of highly caffeinated products. J Goldman, TB Pham, R Milanaik. *Preventive Medicine Reports* 11, 262-266; 2018.

Variation in neonate swaddling techniques. L Fletcher, T Pham, S Bar, D Li, R Spinazzola, H Papaioannou, ...; *Advances in Neonatal Care* 18 (4), 302-306

Fidget spinners: Purported benefits, adverse effects and accepted alternatives. RA Schechter, J Shah, K Fruitman, RL Milanaik. *Current Opinion in Pediatrics* 29 (5), 616-618; 2017

Household diversion of prescription stimulants: medication misuse by parents of children with attention-deficit/hyperactivity disorder. T Pham, R Milanaik, A Kaplan, H Papaioannou, A Adesman. *Journal of Child and Adolescent Psychopharmacology* 27 (8), 741-746; 2017.

Parental perception of risk associated with their premature infant. L Fletcher, T Pham, H Papaioannou, R Spinazzola, R Milanaik, S Thibeau. *Advances in Neonatal Care* 17 (4), 306-312; 2017.

Augmented reality video games: new possibilities and implications for children and adolescents. P Das, M Zhu, L McLaughlin, Z Bilgrami, RL Milanaik. *Multimodal Technologies and Interaction* 1 (2), 8; 2017.

Health implications of new-age technologies: a systematic review. Z Bilgrami, L Mclaughlin, R Milanaik, A Adesman. *Minerva Pediatrica* 69 (4), 348-367; 2017.

Dietary supplements and young teens: misinformation and access provided by retailers. M Herriman, L Fletcher, A Tchaconas, A Adesman, R Milanaik. *Pediatrics* 139 (2); 2017.

Comments from 2023 - 2024 “Gap Year” Research Interns:
(solicited, but unedited)

“The Developmental & Behavioral Pediatrics gap year at the Cohen Children’s Medical Center is a productive, rewarding, and wholly distinctive research experience. For those applying/planning to apply to medical school, as many current and former research interns have, this position offers an unparalleled opportunity to produce independent research. Interns past and present have published as first-author in an array of high-impact pediatric journals, often within months of having joined the program. This has been especially important to me, as I applied to medical school in the June of arriving at the internship and was able to supply schools with update letters containing two first-author publications by November. The position takes place in a DBP office and interns are guided by two excellent physicians and mentors (Dr. Ruth Milanaik and Dr. Andrew Adesman), though we are often encouraged to explore any aspect of clinical research that intersects with pediatrics. As such, projects have ranged from testing the capacity for artificial intelligence chatbots to correctly diagnose pediatrics conditions, to opinion letters on the importance of supportive policies for preterm infants, to social media studies on the newest trends on TikTok. Dr. Milanaik and Dr. Adesman truly encourage exploration of any topic related to pediatrics.

Research output aside, the gap-year position also offers an incredible network of individuals to interns. Former interns, many of whom have gone onto medical or some other graduate school, often are available for consultation on projects. Dr. Milanaik and Dr. Adesman are supportive and understanding of interns going through the stressful medical school application process. Residents, fellows, and other physicians in our DBP office are happy to assist with research projects when medical expertise is needed. And most importantly, the other interns — both for the summer and gap-year — are selected because they are team-oriented, passionate, and intellectual curious. We consistently assist and support each other with projects and have wonderful experiences at various pediatric conference through the year. If you are someone looking for a one-year, flexible, productive, rewarding, and enjoyable research position, look no further than this internship.”

-- J.B., Swarthmore College

“Accepting this research assistant position was the best decision I could have made for my gap year. The intellectual freedom given to interns, without sacrificing research output, is what sets this internship apart. This freedom is balanced by the extraordinary mentorship of Dr. Milanaik and Dr. Adesman. These two are extremely invested in your success and are very supportive of research projects that cater to your interests. For instance, one of my gap year goals was to strengthen my R data analysis skills. As such, I learned how to perform secondary analyses with the program's support. I am now presenting this exciting work as a platform at an upcoming conference. This goes to show that although the internship is for one year, it’s highly productive. In addition to presenting at various conferences, I had a first-author publication within my first 3 months. This internship has undoubtedly bolstered my medical school application. Overall, I highly recommend this unique and rewarding internship to anyone seeking a research experience for their gap year before medical school.”

-- SK, University of Illinois, Chicago (Combined BS/MD program)

Comments from 2021 - 2022 “Gap Year” Research Interns:
(solicited, but unedited)

The gap year research position in the Division of Developmental & Behavioral Pediatrics here at Cohen Children's Medical Center is an extremely unique, worthwhile opportunity for new graduates who are planning on applying to medical school. Although the position falls under the category of “clinical research”, the independence afforded to us and the breadth of projects we have pursued vastly differs from the experiences of most other clinical research assistants. I and my fellow gap years have been allowed to propose ideas, lead projects, and publish as first authors from the very beginning. In the first 6 months, we have already had multiple abstracts, publications, and pending manuscripts that would not have been possible in any other gap year position, making this Visiting Scholarship/internship an incredibly rewarding and productive experience.

The second facet that makes this position unique - and one of the most important - is the support given to gap year students during the medical school application cycle. Through this long and grueling process, the extremely flexible work schedule made completing secondaries and attending interviews much less stressful. This was an absolutely essential factor that I did not fully appreciate until going through applications. Having mentored scores of other successful medical school applicants, Dr. Adesman and Dr. Milanaik fully understand the process and are the first to provide encouragement and assistance when needed. My fellow gap years and I can say with certainty that this flexible work environment has been a massive contributor to our medical school acceptances.

Lastly, the work environment, mentors, and colleagues in this internship have been one of the most meaningful parts of this gap year. Dr. Milanaik and Dr. Adesman embody what it means to be a caring, involved mentor. They have gotten to know us on both a professional and a personal level, and they are truly available for as much or as little guidance as we need because they trust us as researchers. Additionally, it has been an absolute privilege to work with my fellow gap years. We have been completely in tune as a team, play to our strengths, and work collaboratively in every aspect of our projects. I am so happy to have met people who, in addition to being brilliant researchers and medical professionals, will be lifelong friends.

Ultimately, I chose this position over other offers at large academic medical centers because of its 1 year term (quite rare), flexible work schedule, incredible research output, and work environment. I can most definitely say that this was the right decision, and I highly recommend this internship to anyone considering applying.

-- A.L., Yale University

My gap year internship experience in the Division of Developmental and Behavioral Pediatrics has been incredibly rewarding. Dr. Milanaik and Dr. Adesman are excellent mentors, and I have learned so much in the past months. I chose this internship because I loved the idea of working with other young students/recent graduates who had similar interests in pediatrics. I am so grateful to have had the opportunity to work with kind, intelligent, and passionate people who I know will remain as lifelong connections in medicine and friends even after the internship concludes. Since the beginning of the internship, Dr. Adesman and Dr. Milanaik have treated us as professionals and provided us with supportive yet realistic feedback on our work. In my own projects and ideas, they gave me the freedom to explore my own interests, while giving useful

feedback on how to make the projects better. I have advanced my skills in study design, data analysis, and manuscript writing. I have also had the opportunity to present my research at national pediatric conferences.

I loved the variety of this internship, as it was in a hybrid format this year. Having the ability to work at home when I needed to, or coming into the office to meet in person has been a great mix of experiences. We also had the opportunity to scribe and shadow other developmental and behavioral pediatricians. This has been an amazing learning experience for me, as I have observed a large diversity of developmental conditions, learned about medications, and seen first-hand how developmental pediatricians make a difference in their patients' lives. Even though I am not sure what specialty I wish to go into, this provides great insight into what I am looking for in my future medical career.

As I and the other gap year interns navigated the medical school application process, Dr. Adesman and Dr. Milanaik have been there for us, providing encouragement and kindness every step of the way. I appreciate the flexibility this internship allowed me to have when cramming to finish secondaries and preparing for interviews. I do not have many friends that are applying to medical school, so I also really value the support system I have found in my fellow gap year interns as we went through the application and interview process together. We are a strong, non-competitive team, and Dr. Milanaik and Dr. Adesman are mindful of selecting personalities that work well together. Choosing this internship has been one of the greatest decisions I have made in my pre-medical career, and I cannot recommend it enough.

--H.R., Cornell University

My gap year experience in the Division of Developmental and Behavioral Pediatrics at Cohen Children's Medical Center has been one of the most rewarding and meaningful experiences I have had thus far in my pre-medical journey. Firstly, Drs. Adesman and Milanaik are truly wonderful mentors. They have taken the time to get to know me as an individual and learn about my interests and abilities as a researcher. Unlike many other gap year research experiences, Drs. Adesman and Milanaik trusted me with the freedom and flexibility to pursue any project that I am passionate for while offering thoughtful advice and diligent feedback on my own work. Under their guidance and mentorship, I have grown leaps and bounds in my own research abilities and my understanding of what it means to conduct important and impactful research. Beyond my research responsibilities, they have also helped me gain further experiences in shadowing, scribing, and getting acquainted with a professional care-giving environment.

More importantly, I cannot express enough of my own gratitude towards Drs. Adesman and Milanaik's care and support for me, particularly during the medical school application process. The immense flexibility and accommodation that they have provided during secondaries and interviews have been extremely helpful. They completely understand the demanding and grueling nature of this process and truly want to help you succeed. Lastly, my work experiences in this position have been filled with a deep sense of collaboration and community. Drs. Adesman and Milanaik pay unique attention to building a cohort that works well together. Thus, I have been extremely fortunate to be able to develop wonderful relationships with the other interns, both as colleagues and as friends. The productivity that we have had so far this year is a direct result of our mesh of personalities, our collective desire to support one another in our individual professional and personal pursuits, and a tangible sense of camaraderie. I am confident that the

connections and relationships that I have built this year with Dr. Adesman, Dr. Milanaik, and my peers will last a long time in my medical career and my personal life.

Overall, I truly encourage everyone to consider this gap year position in the Division of Developmental and Behavioral Pediatrics. It is a unique and wonderful program that will prove to be a great benefit to every student considering a career in medicine.

-- D.P., Washington University in St. Louis

Comments from 2020 - 2021 “Gap Year” Research Interns:

(solicited, but unedited)

As a gap year intern in the oddest of all gap years (COVID-19), I can say that this gap year internship has been an extremely efficient investment of my time. Very few gap year positions give as much flexibility as the internship position with Dr. Adesman and Dr. Milanaik. The program is unique as it is a one-year program that also gives interns the opportunity to take initiatives and to lead on projects from day one. For context, most similar gap year positions require a two-year commitment and do not offer many opportunities to take an initiative, lead, or publish. Dr. Adesman and Dr. Milanaik have put me in positions to be successful, and have resulted in the publication of a few manuscripts and will likely result in a few more in the coming months.

Dr. Adesman and Dr. Milanaik have truly demonstrated how excellent research is done and have included me on every step of the process. This position is not simply about entering data, like many other gap year positions, but it is about developing you as a researcher and giving you that base to conduct your own important research in the future. I can truly say that there are very few, if any gap year internship positions that will be a better investment of your time. This internship has never been and never will be about what you can do for Dr. Adesman and Dr. Milanaik. They approach it as what they can do to help you. I am extremely grateful and lucky to have had the opportunity to work with Dr. Adesman and Dr. Milanaik, and you will be too.

-- C.A., Harvard University

I am extremely grateful for the opportunities I've had as a gap year intern in the Division of Developmental and Behavioral Pediatrics at Cohen Children's Medical Center. It is very difficult to find a one-year research position, let alone one that encourages and allows you to pursue your own intellectual interests. Drs. Milanaik and Adesman have worked diligently with me and my co-workers over the past year through a virtual platform on several projects related to pediatric development. Through their support and mentorship, I have intimately learned about every step of the research process, from brainstorming a research question to writing a manuscript and engaging in the peer review process. While this position taught me the skills to become an independent researcher, both Drs. Milanaik and Adesman made time in their busy schedules to meet with me whenever I needed help and always made sure I never felt lost or alone while working on projects remotely. Because of their guidance, I have coauthored three published works, and feel very prepared to participate in research during medical school and beyond in my future career as a physician.

One of my favorite parts of this internship was having the opportunity to work with amazing fellow interns. Especially during a time when most people stayed home and had limited interaction with others, it was always great to get on a video call to chat with my co-workers while we worked on our projects. They brought fresh perspectives to each assignment and made tackling large projects much more manageable. Having support during the medical school application cycle was also very comforting. I truly appreciated the collaborative environment of this gap year position, and feel lucky to have had the opportunity to work with incredibly bright and kind individuals. I highly recommend this gap year position in the Division of Developmental and Behavioral

Pediatrics as it is rewarding, flexible, and will prepare you for a future in research and academic medicine.

-- B.L., Princeton

My gap year intern position at Cohen Children's Medical Center in the Division of Developmental and Behavioral Pediatrics has provided me with the opportunity to expand my research abilities, gain the valuable guidance of dedicated mentors, and meet talented peers. This experience has helped me develop skills for medical research that will be useful throughout my entire career. I have designed research protocol, written multiple manuscripts, abstracts and textbook chapters, and have been involved in the peer-review process. This was all done even in the virtual internship setting necessitated during the pandemic. I have been given independence when working on these projects to explore my ideas, while still getting constructive feedback from my mentors that has inevitably made me a more successful researcher. As a result, I have already had four accepted publications in the first eight months of this internship. Additionally, I have submitted multiple abstracts to a conference. Without the limitations imposed from the pandemic, future gap year interns will have the opportunity to attend these conferences in person as well as conduct research with patients in the office.

I am very grateful for the environment created by Dr. Adesman and Dr. Milanaik during this internship. They have provided mentorship throughout the medical school application cycle and flexibility in my work schedule to accommodate the demands of applying. Another highlight of the experience that the doctors encouraged was a collaborative spirit among gap year interns. As a result, I have met impressive peers that I have had the honor to work with. Working together has allowed us to compare and build off each other's ideas, take advantage of our unique abilities, and improve our research skills.

Overall, this experience has helped me make the most of my gap year and I am incredibly grateful to have had this opportunity.

-- E.K., Cornell University

Comments from 2019 - 2020 “Gap Year” Research Interns:

(solicited, but unedited)

“My gap year internship at Cohen Children’s Medical Center has allowed me the opportunity to explore topics of interest to me, collaborate with incredibly motivated and enthusiastic peers, and work with mentors who truly have our best interests at heart. While I loved conducting research during my undergraduate years, I was initially worried about how I would handle the independence given to gap year interns during this program. However, I quickly learned that while Dr. Adesman and Dr. Milanaik want us to gain independence as researchers, they are also so helpful in teaching us about the research process and how we can bring a project of interest to us to life.

Not only are Dr. Adesman and Dr. Milanaik encouraging research mentors, they also have been so supportive of each of us throughout the medical school application process. From giving us flexibility in our schedules to giving advice for update letters, they have made this process far less stressful for us. Additionally, the opportunities I have had in this internship to interact with patients and families, extrapolate from interactions to inform research interests, and learn more about the multifaceted role of a physician has strengthened my love of medicine and helped me better understand what I want in my future career.

Another highlight of this internship was the opportunity to work with incredible fellow interns. They took on every challenge without hesitation, were genuinely excited about the projects we undertook together, and supported each other throughout the medical school application process. They truly are some of the brightest people I have ever had the privilege of working with, and working with them fostered a supportive and collaborative environment that helped us all succeed. Applying for this internship was the best decision I could have possibly made for my gap year, and I cannot recommend it enough to those considering applying.”

-- C.C., Washington University in St. Louis

“The gap year internship at the Cohen Children’s Medical Center had everything I was looking for in a post-baccalaureate program, and then some. I hoped to find a clinical research position that would allow for project independence and creativity, have ample opportunities to improve my scientific thinking and writing, and connect me with life-long mentors. Looking back, working with Dr. Adesman and Dr. Milanaik during this internship has exceeded all my expectations.

Through my research experiences in undergrad, I knew that I worked best in labs where I could consult my mentor for advice but still had enough room to think for myself and make my own decisions about the direction of my project. And that is exactly how this program is set up: Dr. Adesman and Dr. Milanaik are happy to let me take the lead on as many projects as I am interested in but also never fail to make room in their busy schedules to answer any questions I may have. Project independence aside, I also treasure the creative freedom gap year interns have when coming up with new studies. As long as the project is feasible, Dr. Adesman and Dr. Milanaik are eager to help realize studies on almost any topic. The wide breadth of topics consequently allows gap year interns to explore several areas of interest—a unique opportunity that few other labs can offer. The multiple projects I have become involved in have consequently created numerous opportunities to present and publish my work at national conferences and in journals.

However, I would have to say what makes the gap year internship truly one of a kind is the chance to work with mentors like Dr. Adesman and Dr. Milanaik. I feel so lucky to have such amazing advisors who are so supportive, understanding, and eager to help. The fact that this attitude applies not just to research but also extends beyond to other areas of our lives—such as the medical school application process and our wellbeing—is a testament to how sincerely they care about each and every one of the gap years. Their values are further reflected by the stellar cohort of gap year interns they pick each year—my co-workers are all incredibly motivated and helpful, and it has been a pleasure getting to know and work with each of them. In retrospect, I am extremely happy with my decision to work at Cohen Children's and cannot recommend this gap year internship highly enough!"

-- E.L., Yale

"The gap year internship in Developmental and Behavioral Pediatrics at Cohen Children's Medical Center is a wonderful opportunity for anyone looking to hone their research skills as they prepare for a career in medicine. Unlike most gap year positions available for college graduates, which tend to assign interns to existing projects, this program encourages interns to actively pursue their intellectual interests, allowing interns to experience all aspects of the research process, from developing a research question to navigating the peer review process. Although this freedom seems daunting at first, Dr. Adesman and Dr. Milanaik offer constant support and mentorship. Thanks to their guidance, in just nine months of working in this position, I have already had the opportunity to present my research at several national conferences, and I have coauthored three published works.

Their support extends beyond the office, especially during the medical school application season. Both Dr. Adesman and Dr. Milanaik were our biggest supporters as we prepared our applications and traveled around the country for interviews, offering us not only advice for structuring our applications, but also a flexible work schedule to accommodate the demands of the application process.

In addition to the support offered by Dr. Adesman and Dr. Milanaik, the collaborative environment created by the amazing cohort of interns in this program has been an essential driving force in my development as a researcher. Each intern has brought a unique set of skills and perspectives to the position, creating an environment where we are constantly helping each other improve our projects as we learn from each other. Ultimately, it is this environment, in conjunction with the extensive mentorship of Dr. Adesman and Dr. Milanaik, which makes me confident that this position is one of the best, if not the best, opportunities for anyone interested in contributing to the field of academic medicine."

-- E.R., Cornell

Comments from 2018 - 2019 “Gap Year” Research Interns:

(solicited, but unedited)

“Working with Dr. Adesman and Dr. Milanaik at the Cohen Children’s Medical Center has been an incredibly informative and rewarding educational experience. They truly empower their interns to pursue any research question that is “meaningful” and “feasible”, while providing us with any guidance we would need to turn our interests into an original research project. Through this internship, I have been able to design and execute an entire survey research project, improve my scientific writing abilities, and refine my statistical analysis skills. I was a little intimidated to have so much freedom and responsibility over my research, but it has been a refreshing and unique opportunity to critically explore my interests in child development at a deeper level.

Both Dr. Adesman and Dr. Milanaik were also always available and excited to assist us in every step of the research process. Whether it was helping us brainstorm project ideas, troubleshooting any issues that arose, or editing abstracts, they provided much needed insight and advice. They are both amazing role models who are not only great researchers and dedicated clinicians, but also fantastic mentors who genuinely care about your success and wellbeing beyond this internship. I definitely would not have been able to apply and interview for medical schools with relatively low stress without their flexibility and support.

One of the other remarkable features of this program is the collaborative work environment. I have had the privilege to work on a multitude of other projects and study new areas of pediatrics that I had never been exposed to before. My fellow researchers are all exceptionally hard working and passionate and have been an incredible source of support and advice throughout this experience.

Overall, I am extremely happy with my decision to spend my gap year here at Cohen Children’s and would certainly recommend it to anyone who wants to conduct interesting and meaningful research with a fantastic group of mentors and peers.”

-- R.G, Yale

“This internship is an incredible opportunity for those embarking on a gap year between their undergraduate careers and medical school. Not only do you develop a thorough understanding of each step in the research process, but you are also exposed to unique opportunities. For example, within my first few months in the office I was co-writing a textbook chapter regarding the potential health effects of augmented reality gaming on children and adolescents. Furthermore, I have gained considerable insight into a physician’s daily tasks and responsibilities.

Dr. Adesman and Dr. Milanaik are our biggest supporters. They are constantly encouraging us to explore topics we find interesting, providing productive and sincere feedback, and are extremely understanding of how inconsistent our schedules can become during the application process. Their primary objective is to prepare us as best they can, both as medical school applicants and future physicians.

The biggest benefit this internship provides is the privilege of working with such talented, thoughtful, and encouraging co-workers or in my mind, teammates. My fellow interns—summer and

gap year—have supported me in a variety of ways, from providing constructive feedback and unique perspectives on project ideas and abstracts to creating a spreadsheet of the best restaurants to grab lunch.”

-- D.J., Duke

“This gap year internship is one of the best for any competitive applicant interested in gaining firsthand research experience. When I was deciding what to do during my gap year, I had three priorities in mind: (1) having access to mentors invested in my success, (2) working with like-minded, driven peers, and (3) being able to develop my own projects. Through this internship, I have found my expectations exceeded. Each day, I have the opportunity to work with valuable mentors who are deeply invested in ensuring that I have the most productive, enjoyable gap year possible; collaborate closely with the four other gap year interns, with whom I have authored multiple abstracts and manuscripts; and grow my research skills by executing my own projects from start to finish.

Of equal importance, however, is how this experience has fulfilled aspects of a gap year that I didn't even realize would be important. Throughout the entire application process, Dr. Adesman and Dr. Milanaik were incredibly understanding, encouraging me to take the necessary time off to work on secondaries and perfect pieces of my application. They have also developed a work environment filled with people I genuinely like and who push me to grow. In my fellow interns, I have found long-term friends who have helped me with my applications and who I truly enjoy spending time with outside of the office. In Dr. Adesman and Dr. Milanaik, I have found mentors who have given me advice for my research, my medical school applications, and my future career. I am immensely grateful for this experience and cannot recommend this internship enough!”

-- N.S., University of Pennsylvania

“As a gap year intern, I have had the opportunity to hone my research skills while working in a collaborative, supportive environment. Since day one, Dr. Milanaik and Dr. Adesman have continuously encouraged me to independently investigate research questions that I find most interesting. As a result, I have had the freedom to conduct research on topics that I am most passionate about, including an investigation surrounding adolescent menstrual health. My research projects were a common topic during my interviews, giving me the opportunity to talk about ideas that I care deeply about.

While Dr. Adesman and Dr. Milanaik gave me independence, they also provided me with continuous support, using their vast research expertise to help guide me. They prioritize their role as mentors and despite their many responsibilities, they have an open-door policy, welcoming interns at all times. They are also extremely flexible and were very understanding when I had to take time off to finish medical school applications and attend interviews, making a pretty stressful period so much easier!

In addition to learning from Dr. Adesman and Dr. Milanaik, I have had the immense privilege of learning from the other interns in my cohort. Each intern brings unique skills to the table and, by collaborating with each of them, I have been able to achieve research goals that I

would have been unable to accomplish alone. I have also been able to build lasting friendships and have cherished getting to know my coworkers outside of work as well.

At Cohen Children's, I have developed skills essential to conducting research. I have also furthered my medical career by publishing my work. Most importantly, though, I have gained lifelong mentors and friends. I am so incredibly grateful for this opportunity and would encourage everyone to apply!"

-- M.S., Duke

Comments from 2017 - 2018 “Gap Year” Research Interns:

(solicited, but unedited)

“What began as a brief summer internship after my junior year of college has evolved into an extremely fruitful professional experience that has profoundly shaped my long-term career goals.

I first began working in the Division of Developmental and Behavioral Pediatrics in the summer of 2014, and was immediately impressed by the degree of freedom that Dr. Adesman and Dr. Milanaik granted to their research interns. Whereas many research experiences for undergraduates require students to work on projects conceived by graduate students or other senior personnel, this position grants interns an unparalleled degree of intellectual autonomy. Students are given the opportunity to identify a research question of their choice and to take complete ownership of the project – from the conception of the idea to the publication of the findings in a peer-reviewed journal. This independence is balanced by the guidance of Dr. Adesman and Dr. Milanaik, both of whom are exceptionally accomplished clinical researchers and extraordinary mentors.

Thanks to their guidance, I have had the opportunity to publish three first-author manuscripts in peer-reviewed journals and have given more than a dozen poster or oral presentations at regional and national research meetings. I have worked on numerous projects that I am truly passionate about, gaining experience with a diverse range of research studies – including large-scale epidemiological datasets, cross-sectional surveys, and prospective, longitudinal studies.

Overall, this opportunity is truly unmatched in its ability to prepare motivated undergraduates for productive careers in medicine and clinical research.”

-- B.K., Yale (also a summer intern, 2014)

“As a premedical student with a fairly nontraditional background, I searched extensively for programs that combined my desire to conduct research with my passion for working with families and children, particularly those with disabilities. The Gap Year Internship Program fit my interests and career goals perfectly and I was absolutely thrilled to have the chance to participate in this one-of-a-kind opportunity.

Throughout my time as a Gap Year Intern, I have investigated topics ranging from supplementary learning tools for students with ADHD to pediatric medical education on vaccine-preventable diseases. Dr. Adesman and Dr. Milanaik are brilliant researchers in the field of developmental and behavioral pediatrics and have been the most supportive mentors in helping me explore pediatric issues, synthesize questions, design whole studies, and write up abstracts and manuscripts for consideration to national conferences and peer-reviewed medical journals. Thanks to their guidance, all of my abstracts were accepted as either platform or poster presentations to pediatric conferences, and I even won an award for my work at one of these meetings! To date, I have published three papers with another two currently being reviewed and at least two others in the process of being written.

I cannot thank Dr. Adesman and Dr. Milanaik enough for all the amazing opportunities I have had. My experiences and achievements during this program have by far been some of the

strongest aspects of my medical school application and have been discussed extensively during my interviews. Without a doubt, the skills I learned in this position will help me in my future research endeavors, and I wholeheartedly recommend this internship!”

-- P.D., Cornell (also a summer intern, 2015)

“Under the mentorship of Dr. Adesman and Dr. Milanaik, I have had the opportunity to pursue a myriad of research interests in a supportive and friendly environment. Dr. Adesman always says, “if it’s feasible and it is worthwhile, we can do it,” a motto that is truly emblematic of the freedom I have experienced in pursuing personal research interests. Given the encouragement and independence to collaborate with my peers, I have designed novel experiments, collected and analyzed data, and submitted several abstracts to national pediatric conferences. I am tremendously grateful to have the chance to learn from clinician-scientists like Dr. Adesman and Dr. Milanaik as well as from my peers, whose diverse research interests have also informed and inspired my own.

This gap year position is undoubtedly an excellent choice for students interested in expanding their understanding of clinical research while having fun! Working with Dr. Adesman and Dr. Milanaik has been the absolute best way to spend my gap year, an experience that has truly transformed my skillset as a scientist, renewed my interest in pursuing a career in medicine, and given me lifelong mentors. If you are looking for a rewarding year of research with warm, compassionate and driven colleagues, I strongly encourage you to apply!”

-- K.F., Cornell

“Looking back, I am so happy I decided to spend my gap year conducting clinical research with Dr. Adesman and Dr. Milanaik at the Cohen Children’s Medical Center. This position enables college graduates interested in medicine and research to spend time honing their skills prior to medical school while working in a clinical setting with friendly, intelligent and like-minded peers and mentors.

While I frequently met with Dr. Adesman and Dr. Milanaik to discuss the projects I was working on, ranging from the UV protection provided by children’s sunglasses to the prevalence of antibiotic diversion, they encouraged us to work independently on all steps of each study, from composing IRB proposals to writing abstracts that were submitted to national pediatrics conferences. As a result of having this much autonomy, interns both learned a huge amount and received substantial recognition for their work, with several first author abstracts being submitted to prestigious conferences. I had the opportunity to work with Dr. Adesman and Dr. Milanaik one-on-one to put together manuscripts and received considerable attention, only possible because of the small group of interns. Through designing research questionnaires, analyzing results and writing abstracts, I have become more experienced in many aspects of the research process that will help me in medical school and beyond. Dr. Adesman and Dr. Milanaik are always receptive to our ideas for research projects and would always take the time to teach us about study design and manuscript preparation.

Importantly, Dr. Adesman and Dr. Milanaik were extremely understanding of the demands of the medical school application process. They accommodated requests to take time off to work on secondary applications or prepare for interviews and were very supportive of our travels to visit

medical schools. I do not think I would have received as much support in any other gap year position!

I would recommend this position to anyone who is passionate about research and is hoping to work on a team with accomplished fellow interns and incredibly inspiring mentors!”

-- T.K., Cornell

“The first time I walked into the doors of this office, I was a summer intern who was just trying to get more research experience in a clinical setting. However, what I did not know at the time was that I would want to spend much more than a summer here. I decided to return for a gap year because of the amazing people I met and the experiences I had that summer. Since I returned, I have been working on projects I devised myself, such as one determining the outcomes/effects of NICU therapeutic touch programs, and collaborative projects with other interns, such as another assessing the electronic device usage of toddlers and young children.

In addition, I have had multiple opportunities to write literature reviews and original science articles for publication to top pediatric journals as well as abstracts for national conferences. Fortunately, Dr. Milanaik and Dr. Adesman are there every step of the way and have provided us with a remarkable amount of their time given their many clinical responsibilities. They are extremely supportive of all of our ideas and consistently want to make sure that we are getting everything we wish for out of the internship. Moreover, the faculty, staff, and my fellow interns make coming into work each and every day a delight.

I have truly made lifelong friendships and continue to keep in touch with interns of the past. If you are looking for a warm and friendly place that will provide you with every chance to shine in the medical school applicant pool, you are in the right place. You will engage in many meaningful research projects while simultaneously being surrounded by the most wonderful people.”

-- S.S., Cornell

“I’m so grateful to Dr. Adesman and Dr. Milanaik for the opportunities of this gap year position as a clinical research intern in Developmental and Behavioral Pediatrics! Unlike many positions that have students doing menial work, this internship lets interns get genuinely involved in projects and teaches them to tackle clinical observations through meaningful research projects on child development. Interns are given the freedom to come up with new projects and collect original data, as well as the opportunity to jump into exciting projects working with national data sets. With their support, I have had first authorship on multiple abstracts to be presented at pediatric research conferences and plan on having authorship on several manuscripts on topics ranging from household ADHD and breastfeeding to digital device usage in toddlers.

The internship’s unique structure puts you in an office community where you get to work closely with two mentors who genuinely enjoy working with students and constantly provide friendly support and guidance. They’re great at selecting fellow interns who create a collaborative, fun environment, and you also get to know the rest of the staff and see the working structure of a medical center department. Both doctors’ accommodations with the medical school application cycle -- from advice to time off for interviews/writing -- help to alleviate the cycle’s stress. These

experiences foster development of not just academic writing skills, but also of discussion of clinically prevalent research topics, which was particularly helpful during interviews.

I'm so glad that I made the decision to spend my gap year at Cohen Children's, and I'd recommend this position to anyone hoping to spend their year doing substantial research under the mentorship of two fantastic doctors committed to making your year productive and enjoyable!"

-- H.L., Cornell

Gap Year Research Internship

Division of Neonatology

2024 - 2025 “Gap Year” Clinical Research Position in the Division of Neonatology

Description: The Division of Neonatology at Cohen Children’s Medical Center of New York offers multiple 12-24 month paid research internships annually. Cohen Children’s Medical Center is the flagship children’s hospital of the Northwell Health System. The Division of Neonatology serves a large population of ill newborns and their families from across the southern tri-state area in a top performing high acuity neonatal intensive care unit (NICU), provides nationally recognized clinical teaching to learners at all levels from diverse backgrounds, and conducts internationally recognized collaborative clinical and translational research. As such, our work falls into multiple domains: clinical medicine, clinical research, basic science research, quality improvement, medical education, and administration.

We are offering 2 Research Internships for the 2024-2025 academic year: a Clinical Research Internship and a Basic Science Internship. Both Internships offer an accomplished undergraduate the opportunity to work closely with research mentors within the Division on one or more projects relevant to perinatal development and pediatric outcomes. Clinical projects involve direct contact with participants and their families as well as retrospective chart reviews. Basic Science projects involve animal modeling (rodent models), histopathology, and

Both Internships involve data management and/or analysis. Much of our clinical research portfolio currently works at the interface of neonatology and children’s environmental health. Projects with available opportunities for Research Interns include:

- Multiple cohorts within the NIH ECHO program: <https://echochildren.org>
- Pharmacokinetic profile of phthalate metabolism across the preterm developmental spectrum: <https://reporter.nih.gov/search/44TfLepc9U-w50N5kfiZSg/project-details/10736301>

Responsibilities:

Students are integral members of our research team, participating in all components of our projects. Gap Year Interns will assist faculty and research staff with ongoing research projects and/or work collaboratively with one or more mentors in designing new projects of mutual interest. With the guidance of the research team, Research Interns will learn relevant job tasks necessary for success in their chosen area of research. For Clinical Research Interns these include consenting study participant families, abstracting relevant clinical data from the medical record, administering in-person and remote surveys, collecting biospecimens and biometric data, and analyzing primary and secondary data. For Basic Science Interns this includes all techniques necessary for animal modeling of multi-organ system diseases related to prematurity from ethical experimental design through tissue staining and biochemical analysis.

Additional responsibilities include:

- Provide administrative support to the team, including scheduling and preparing for meetings, trainings, and presentations.
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- Complete frequent project evaluations to monitor progress and outcome measures.
- Draft and edit research study manuscripts. The Research Intern may also write for pediatric/ health policy/ health advocacy sites, articles, or presentations as they arise, such as Grand Rounds, health/environmental health/parent-focused and related blogs, pediatric online resources, and more.
- Conduct comprehensive literature reviews on topics pertaining to research and quality improvement initiatives within the Division.
- Manage various project responsibilities as they arise.

The Gap Year Intern will be expected to learn how to complete tasks with the initial guidance and support of Dr. Stroustrup (the Division Director and primary mentor for the Gap Year program) or current research coordinators, Division faculty, clinical fellows, or other research staff. The intern will be able to contribute to processes and projects from start to finish; they will develop the logistical knowledge required at all phases of projects and be able to recognize the value they added to the final product.

The Division has both internal and ongoing federal funding for clinical research through the end of the Internship. Gap Year Interns are not expected to write grants.

This clinical research internship is open to students who excelled while pursuing their Bachelor's degree from any U.S. college or university. Although the ideal candidate is a student who aspires to attend further education in a health-related field (MD, MPH, PhD, DrPH, NP, etc.) in the near future, has a strong academic record and writing skills, research experience, knowledge of statistics, and a demonstrated interest in public health, vulnerable pediatric populations, and/or health policy, we welcome applications from any students who have excelled in any area of study.

Preference will be given to individuals who are bilingual in English and Spanish. Candidates from backgrounds typically underrepresented in medicine, biomedical research, or related fields are encouraged to apply.

Research Abstracts: Gap Year Interns may be co-investigators on any research abstracts submitted to national research meetings.

Research Publications: With guidance from faculty mentors, Gap Year Interns may be responsible for drafting and revising research manuscripts for submission to peer reviewed pediatric journals. Interns will be encouraged to take a leadership role on projects, with authorship order based on level of project involvement (i.e. an intern who writes a supervised first draft of a manuscript would be eligible for first author positioning). The Division consistently submits annual presentations to the national meetings of the American Academy of Pediatrics, the Eastern Society of Pediatric Research, and the Pediatric Academic Societies.

Review Article: There may be an opportunity for Gap Year Interns to be first or second author on a review article for a peer-reviewed medical journal.

Other Activities/ Expectations/Opportunities: The primary focus of the internship is involvement in the research process. It is expected that this will comprise 90% of one's time. Gap Year Interns will have the opportunity to attend clinical lectures of interest available throughout the Children's Hospital. There will also be opportunities for occasional shadowing of clinicians in our subspecialty area and other pediatric subspecialties as well. Gap Year Interns may occasionally be asked to assist with other academic or administrative tasks.

Program Dates: Start and completion dates for the Gap Year is somewhat flexible. Priority will be given to applicants prepared to make at least a full-time 12-month commitment or longer; a 2-year commitment is encouraged as this provides the best experience/opportunity for the intern. With advance notice, interns may take as many days off (without pay) as needed during their internship for approved professional development (including professional school interviews).

Stipend: This is a paid internship; interns will be paid \$20.00 per hour for days worked.

To Apply: To Apply: You must submit a completed application through the form linked here (<https://forms.gle/xwxnJpfGKEx1AEaw7>); this application (a Google form) will also ask you to attach a CV or résumé, an unofficial transcript, and a recent photograph. All materials should be submitted electronically. Any questions can be directed to Annemarie Stroustrup using the subject line "Gap Year Research Internship".

Application Process & Deadline: There is a rolling submission deadline. However, priority will be given to candidates who submit all materials by Sunday, March 3, 2024, at 11:59 PM (EST). The most promising candidates will be invited to interview by video conference, and notification of decisions will be made soon thereafter.

Past Interns: The Gap Year Internship program at Cohen Children's Medical Center was established in 2014. Gap Year students are typically accepted to multiple medical schools. Although these research students are typically very strong applicants even prior to participating in these internship programs, the Gap Year internship program adds significantly to an applicant's relevant clinical and research experience and accomplishments. Moreover, Gap Year Interns often find it very helpful to discuss one or more of their different Gap Year research experiences when interviewed by professional schools.

Testimonials: Each January, we ask our most recent research assistant and summer intern to provide us with feedback about their research experience. You can read their unedited comments on the following pages.

For Further Information: The Gap Year Internship in Neonatology is coordinated by Dr. Annemarie Stroustrup, Division Director, Division of Neonatology. Questions regarding the Gap Year internship or the application process may be directed to her directly (astroustrup@northwell.edu).

Comments from Neonatology's Most Recent Research Assistant & Summer Intern

“The gap year research position in Neonatology at the Cohen Children’s Medical Center with Dr. Annemarie Stroustrup is a precious and growth-inducing opportunity in one of the most supportive environments I have ever been in. With the variety of projects and the breadth of diverse opportunities to learn from various team members in a Level IV NICU, I have been excited to start each day learning and refining new skills like cultural awareness, empathy, and scientific writing. As a research intern, I have been able to learn about the harmonious unity of research and the clinical setting with the opportunity to see the work on both sides through projects ranging from one-on-one recruitment with mothers and in discussions with fellows and attending physicians about how the daily care for all our patients intertwines directly in the research we conduct. In this department, I was pleasantly surprised to learn the support given and how involved providers are with the research conducted where all of the team knows about the projects we do and supports it with curiosity and precise care.

Alongside working with different clinical research coordinators and all the care providers in Neonatology, I’ve been able to immerse myself in the kind of environment I’d like to work in in the future and the importance of all the roles each plays. The intellectual autonomy I’m given in terms of always being able to pursue and get involved with the projects I truly am interested in is truly a valuable and hard-to-find component of this position, especially in contrast to the duration. For example, one of the main projects ongoing throughout my time investigates phthalate exposure to babies in the NICU. Having no background in this field was absolutely no concern as I was able to dive in and learn from shadowing different rounds about the treatments the babies receive first-hand and the exact sources from the equipment used in such procedures that is the phthalate exposure itself. Teamwork was especially emphasized in this project since it is because of all the daily carers of nurses and physicians to help us collect different urine samples to analyze alongside the recruiters that this project can run smoothly. This blend of both being able to be in the clinical setting while combining the field of research that I love to analyze and write about was helping me to learn so much in an accelerated timeline emphasizing inclusion, academic inquisition, interpersonal skills, and teamwork. I love how the reason for the research in Neonatology always stems back to the very goal of medicine in being about helping patients and working to improve health outcomes as a whole in the long run. These projects are valuable in my own applications to medical school in both helping to provide me with first-hand experience in a clinical setting and helping to bolster my research portfolio with unique projects.

Whenever I have a question or am curious about anything, I have always been welcomed with open arms to ask and learn from anyone and everyone directly. Working with Dr. Stroustrup is such a rewarding and nurturing experience where each and every question I have is always answered with thought and compassion, and her willingness to always regularly meet and provide both advice and opportunities for the areas I’m curious about has demonstrated her to be a mentor I truly treasure and will never forget. She is always willing to discuss different topics with me to help me learn as much as possible and always feel supported and seen.

Working as a gap year student has reaffirmed my dedication to healthcare and given me first-hand experience clinically that helps me prepare for my future as a physician. With the compassion and patience to teach embodied with the inclusion emphasized by Dr. Stroustrup and

all her team members, I'm grateful to have been given the opportunity to work in this environment that represents one I want to be in in the future with confidence."

-M.H.Z., New York University

"As a volunteer research assistant at Cohen Children's Medical Center for the summer in the Division of Neonatology, I participated in a broad range of experiences that all helped shape and fortify my journey toward medical school. Between her busy clinical practice, research, and administrative work, Dr. Stroustrup still carved out plenty of time to mentor and support research interns. Even after my official internship ended, I was able to collaborate with a current intern on research remotely, due to Dr. Stroustrup's ongoing support and communication.

Working with the Division of Neonatology offered a unique opportunity to get involved in projects that are each at different points in their completion. For instance, during my summer, I was able to recruit for a multi-site study, help scaffold upcoming research, and help a project transition to its next phase, meeting a variety of collaborative team members and encouraging clinical staff along the way. Additionally, the unique diversity of the patient population that Northwell works with provided an incredibly enriching experience. Every day was different and rewarding in its own right. Whether you are seeking more patient interaction, research, writing, networking, or other clinical opportunities, you will find it in your time with the Division of Neonatology."

-- A.P., Haverford College

Gap Year Research Internship

Division of General Pediatrics

2024 - 2025 “Gap Year” Clinical Research Assistant Position in the Division of General Pediatrics

Description: A 12-24 month paid research internship program is offered by Cohen Children’s Medical Center of New York – the flagship children’s hospital of Northwell Health. The mission of the Division of General Pediatrics is to enhance the lives of children and families locally and nationally through clinical care, teaching, research, and community service. As such, our work falls into multiple domains: clinical medicine, clinical research, quality improvement, medical education, health policy, and administration.

This Clinical Research Internship will offer 1-3 accomplished students the opportunity to work closely with faculty mentors within the Division of General Pediatrics on research projects on a wide variety of topics relevant to general pediatrics, ranging from pediatric health outcomes research to quality improvement to health services and health policy research. Examples of ongoing projects in the Division of General Pediatrics include:

- Coordination of NYS-wide organizations working to improve children’s environmental health;
- Assessing health outcomes of adolescents with complex health needs transitioning to adult care;
- Testing the effectiveness of interventions to improve future planning and overall well-being of families of those with intellectual and developmental disabilities;
- Developing programs to address childhood obesity prevention;
- Understanding primary care’s role in screening for social determinants of health and referral for identified social needs.

Responsibilities:

Research assistants will be integral members of our team in the Department of General Pediatrics, participating in all components of our projects. Research Assistants (RA’s) will assist faculty with ongoing research projects and/or work collaboratively with one or more mentors in designing new projects of mutual interest. With the guidance of faculty, research assistants will learn to perform chart reviews, conduct in-depth interviews, administer in-person and online surveys, run focus groups, analyze and code transcripts, and analyze primary and secondary data.

Additional responsibilities include:

- Provide administrative support to the team, including scheduling and preparing for meetings, trainings, and presentations.
- Work with local organizations to provide affordable and accessible community resources for patients and their families.
- Draft and edit research study manuscripts. The research assistant may also write for additional pediatric/ health policy/ health advocacy sites, articles, or presentations as they arise, such as Grand Rounds, health policy blogs, pediatric online resources, and more.
- Take the lead in managing all facets of clinical studies, including but not limited to: recruitment and enrollment of patients, communication with study sponsors, and leadership at

sponsor visits, management of regulatory documents, and keeping up-to-date on all IRB (Institutional Review Board) documents and communication.

- Conduct comprehensive literature reviews on topics pertaining to research and quality improvement initiatives within the Division.
- Manage various administrative, clinical, and project responsibilities as they arise.

The research assistant will be expected to learn how to fulfill them with the initial guidance and support of Dr. Jan, Caren Steinway, or current research coordinators and assistants. The research assistant will be able to contribute to processes and projects from start to finish; they will develop the logistical and medical knowledge required at all phases of projects and be able to recognize the value they added to the final product.

The Division has internal funding for clinical research. RA's are not expected to write grants, and their research including endeavors and activities are not dependent on extramural grants.

This clinical research internship is open to students who excelled while pursuing their Bachelor's degree from any U.S. college or university. Although the ideal candidate is a student who aspires to attend further education in a health-related field (MD, PhD, DrPH, NP, etc.) in the near future, has a strong academic record and writing skills, research experience, knowledge of statistics, and a demonstrated interest in public health, vulnerable pediatric populations, and/or health policy, we welcome applications from any students who have excelled in any area of study.

Preference will be given to individuals who are bilingual in English and Spanish.

Research Abstracts: RA's will be co-investigators on any research abstracts submitted to national research meetings.

Research Publications: With guidance from faculty mentors, RA's will be responsible for drafting and revising research manuscripts for submission to peer reviewed pediatric journals. RA's will generally be identified as either the first or second author of any paper submitted for publication. The Division consistently submits annual presentations to the national meetings of the American Public Health Association and Pediatric Academic Societies. The Division has also presented at the American Academy of Pediatrics, Academy Health, Annual Health Care Transition Research Consortium Research Symposium, and the American Association on Intellectual and Developmental Disabilities.

Review Article: There may be an opportunity for RA's to be first or second author on a review article for a peer-reviewed medical journal.

Program Dates: Start and completion dates for the Gap Year internship are somewhat flexible, with preferred start dates in June/early July 2024. Priority will be given to applicants prepared to make at least a full-time 12-month commitment or longer, though alternate schedule arrangements will be considered. With advance notice, research interns may take as many days off (without pay) as needed during their internship to visit medical schools for interviews.

Other Activities/ Expectations/Opportunities: The primary focus of the internship is clinical research and writing. It is expected that this will comprise 90% of one's time. RA's will have the opportunity to attend clinical lectures of interest available through the Children's Hospital. There will also be opportunities for occasional shadowing of clinicians in our sub-specialty area and other pediatric sub-specialties as well. RA's may occasionally be asked to assist with other academic or administrative tasks.

Stipend: This is a paid internship; interns will be paid \$20.00 per hour for days worked.

To Apply: You must submit a completed application through the form linked here (<https://forms.gle/YYxyicDtUtUym7gw6>); this application (a Google form) will also ask you to attach a CV or résumé, an unofficial transcript, and a recent photograph. All materials should be submitted electronically. Any questions can be directed to Caren Steinway, csteinway@northwell.edu using the subject line "Gap Year Research Internship".

Application Process & Deadline: There is a rolling submission deadline. However, priority will be given to candidates who submit all materials by Sunday, March 3, 2024 at 11:59 PM (EST). The most promising candidates will be invited to interview virtually via Microsoft Teams, and notification of decisions will be made soon thereafter.

Past Interns: The Gap Year Internship program at Cohen Children's Medical Center was established in 2014. Gap Year RA's are typically accepted to multiple medical schools. Although these RA's are typically very strong applicants even prior to participating in these internship programs, the Gap Year internship program typically adds multiple abstracts and/or publications to each RA's list of accomplishments. Moreover, RA's often find it very helpful to discuss one or more of their different Gap Year research projects when interviewed by medical schools.

Testimonials:

“My time as a Gap Year Intern on Dr. Jan's team has been incredibly valuable and rewarding for me both professionally and personally, and has helped me further develop my interests in healthcare. I have had opportunities to contribute and take leadership roles in a number of different research projects, ranging from smaller quality improvement projects in the clinic, to large, multi-year IRB approved research studies, all of which focus on improving the health of complex and vulnerable pediatric populations. I have been able to write and publish work about the research I've done and further develop my interests in pursuing population health research and working with underserved communities in the future. Further, through my position here I have had the opportunity for personal learning experiences including clinical shadowing, resident grand rounds presentations, and special speakers and events at Northwell. Most importantly, the research team here is an amazing and supportive group of people who I look forward to spending time with each day and who have become incredible mentors to me. Their support for my medical school application process was invaluable this year and has helped set me up for success as I continue on to med school next year!” - Jane

“I have had a wonderful experience this past year as part of the general pediatrics research team. It has been an eye-opening experience having the opportunity to speak with people from all walks of life about their individual experiences with the health care system. I feel like I am contributing to projects with the potential to improve the lives of patients and their families while concurrently solidifying my medical school application. I cannot think of a better opportunity for students looking to be productive in the medical field prior to beginning their own medical careers.” - Matt

“I have been at this position for little less than a year and a half. I have grown and learned so much during my time here. As research assistants, we are given the freedom to explore projects and areas that are of interest to us, which is something that is rare to find. I am able to learn from my mistakes while also knowing that I have many people to turn to when I need help. The populations that we work with are mostly children who have chronic conditions and need extra supports for their care. The projects that I work on involve conducting quality improvement surveys to receive feedback on an existing NYS waiver program, collecting data and research on environmental health to then distribute to concerned parents through social media channels, and conducting focus groups in order to develop a long-term care planning intervention tool in the form of a website. My time here has deepened my appreciation for the work that we conduct as researchers in pediatrics. The outcomes of our projects are priceless to the families that we help. Not only that, but I have also developed bonds with my co-workers, feeling as though I have a second family and support system when I come to work. This position and my coworkers have given me the tools to be successful and compassionate in this field.” - Vanessa

“The General Pediatrics Gap Year Internship has been an amazing opportunity for me over the past year and a half. The Gen Peds team is extremely welcoming, supportive, and collaborative. During my time here, I have worked on projects that support caregivers of children with intellectual and developmental disabilities, projects that include quality improvement surveys for a NYS Medicaid program, projects that identify ways to improve the care of medically complex children, and projects that target the environmental health of children. My supervisors have made sure to get me involved with projects that I was particularly interested in and with projects that would help me gain the skills that I wanted before starting medical school. I have had the opportunity to help with data collection, submitting grants, paper writing, presentations, and project creation. My time with the team has offered me fantastic mentors, great experiences in speaking with families, and a thorough research experience that will ultimately help me as a future medical student and future physician.” - Ariana

“My time working as a Research Assistant (RA) for the past two years has been an incredibly rewarding experience, and I am so grateful to have had the chance to work with such a collaborative, supportive, and friendly team. As an RA, I valued being a part of studies that aimed to improve health outcomes for patients, especially for minority and/or underserved patient populations. I worked on the COMETS study that aimed to mitigate health disparities for adolescent Sickle Cell Disease (SCD) patients transitioning to adult care. Furthermore, I also worked on the INPUT study that worked to improve patient trust for children with complex medical needs enrolled in the New York State Medicaid Health Home program. These studies have not only allowed me to gain integral research skills by recruiting patients, drafting manuscripts, and analyzing data, but I

have also been able to make direct impacts on patient lives. I have learned what it means to address factors leading to disparate health outcomes and medical distrust, while developing ways to further strive for health equality for as many patients as possible. Additionally, I have been able to utilize my background in anthropology to conduct a qualitative research project regarding the experiences of Community Health Workers (CHWs) in the COMETs study. I loved being able to conduct in-depth interviews with CHWs and use narratives to highlight the experiences and impact of CHWs in the lives of patients with SCD. Lastly, alongside my role as an RA, I started a role as a Patient Navigator. As a Patient Navigator, I have been able to communicate with patients and assist them with important social, legal, and financial help, taking into account the social determinants of health that may impact their quality of life. All in all, my two gap years have allowed me to take a deep dive into pediatrics and further learn the importance of research and public health in medicine. I have been able to build a tight-knit relationship with my supervisors and team, who have supported me throughout my medical school application process and preparation for medical school. My role as an RA has allowed me to address health disparities and work to mitigate factors impacting minority, disadvantaged, and vulnerable populations. I have seen the importance of not only working to diagnose patients and improve physical health, but also providing compassionate care, addressing social needs, and working with patients to meet their goals.” - Toyosi

For Further Information: The research internship in General Pediatrics is coordinated by Caren Steinway, Director of Research, Division of General Pediatrics. Questions regarding the Gap Year internship or the application process may be directed to her directly (csteinway@northwell.edu) with the subject line "Gap Year Research Internship".

**Gap Year Research Assistant
and
Research Coordinator Positions**

Division of Pediatric Nephrology

2024 - 2025 “Gap Year” Clinical Research Assistant Position In Pediatric Nephrology

Description: An at-least 12-month program in clinical research related to pediatric nephrology in children and adolescents is offered by Cohen Children’s Medical Center of New York (CCMC) – the flagship children’s hospital of Northwell Health.

The Gap Year Internship offers 1-2 accomplished student(s) the opportunity to work closely with a faculty mentor on one or more research projects related to pediatric nephrology. Students will assist the faculty member in ongoing research projects and/or work collaboratively with the mentor in designing a new project of mutual interest. Many projects include retrospective chart reviews, but there will also be projects that will involve direct contact with patients. The student is expected to take ownership of a research project and write a manuscript by the end of the year. Throughout the program, interns will have the opportunity to shadow in our clinics and on rounds. Research interns will also be encouraged to attend other lectures of interest available through the Division of Pediatrics at CCMC.

The internship is open to students who excelled while pursuing their Bachelor’s degree from any U.S. college or university. The ideal candidate is a student with a strong academic record and aspires to attend a doctoral program in medicine.

This program is flexible in the number of hours per week but at minimum we require at least two full weekdays (9am-5pm) per week commitment. This program has a minimum 1-year commitment with opportunity to extend interns meet and exceed expectations.

Research Abstracts/Publications: It is anticipated that students will be included as co-investigators on one or more research abstracts submitted to national research meetings. Students who successfully write a manuscript for journal submission of their research findings will be identified as the first or second author of any paper submitted for publication. A list of research abstracts accepted for presentation at national meetings is attached.

Other Activities/ Expectations/Opportunities: Although the primary focus of the internship is clinical research and writing, and it is expected that this will comprise 70-75% of one’s time, interns often welcome the opportunity to engage in other academic or clinical activities. A breakdown of these educational, clinical, and administrative support functions follows:

- ▶ Lectures:
 - Attend conference lectures on general pediatrics topics
 - Pediatric Nephrology lectures: 2-3 per week
- ▶ Clinical Observation:
 - Shadow pediatric nephrologists in the out-patient clinic and attend in-patient rounds

► **Miscellaneous:**

- Maintenance of records and data for other ongoing research studies
- Assist with special projects and other general office support

Stipend: \$5,000 for the full program duration

To Apply: You must submit a completed application through the form linked here (<https://forms.gle/fkxUVpDqLRbEj1GV6>); this application (a Google form) will also ask you to attach a CV or resume and an unofficial transcript. (If you receive an error message regarding data loss prevention on the Google Form, please try accessing it through a non-school Gmail. If you encounter further problems, please email mschuchman@northwell.edu to troubleshoot.)

Application Process & Deadline: The submittal deadline is Sunday, March 3rd, 2024, at 11:9PM (EST); all materials must be received by that date. It is anticipated that notification of decisions will be made by late February.

For Further Information: The research internship is coordinated by Matthew Schuchman (mschuchman@northwell.edu). Questions regarding the internship or its application should be directed to Matthew Schuchman (mschuchman@northwell.edu) or Dr. Sethna (CSethna@northwell.edu) with the subject line: Gap Year Internship Program.

Publications

Hydronephrosis in Infants and Children: Natural History and Risk Factors for Persistence in Children Followed by a Medical Service. *Clinical Medicine: Pediatrics* 2009;1 63-70. ^A

The Value Of Tacrolimus Drug Levels In The Management Of Nephrotic Syndrome In Children *The Internet Journal of Nephrology* ISSN: 1540-2665
<http://www.ispub.com/journal/the-internet-journal-of-nephrology/volume-6-issue-2/1386557986the-value-of-tacrolimus-drug-levels-in-the-management-of-nephrotic-syndrome-in-children.html>. ^A

Concordance of Measures of Left-Ventricular Hypertrophy in Pediatric Hypertension. *Pediatr Cardiol.* 2013 Nov 20. ^B

Second-line Immunosuppression Therapy in the Treatment of Childhood Nephrotic Syndrome: A Single Center Experience. *Nephron Extra*, January 2014. ^A

The Prevalence of Hypertension and Associated Risk Factors in a Latino Subgroup: A Rural Batey Population in the Dominican Republic. *Science Journal of Public Health.* 2014; 2(5): 480-485 doi: 10.11648/j.sjph.20140205.26. ^A

Blood Pressure Variability in Children with Primary vs. Secondary Hypertension. *J Clin Hypertens.* 2014 Jun;16(6):437-41. ^A

High Prevalence of Nephrotic Syndrome in South Asian Children. *Journal of Clinical Pediatric Nephrology.* 2015 Vol 1(1). ^A

Role of Race in Kidney Transplant Outcomes in Children with FSGS. *Pediatric Transplantation.* 2016 Sep;20(6):790-7. ^A

Blood Pressure and Urolithiasis in Children. *Journal of Urology.* 2016 Sep 18. Pii: S1477-5131^A

Renal Volume and Ambulatory Blood Pressure in Children. *Journal of Clinical Hypertension.* 2017 May;19(5):498-503

Heterogeneity Index and Echogenicity in Hypertension. *Journal of the American Society of Hypertension,* 2018 Dec: 12(12) e77-e83

Effect of Pre-Transplant Obesity, Overweight and Underweight on Pediatric Kidney Transplant Outcomes. *Pediatric Nephrology,* 2018 Dec;33(12):2353-2362

Left Ventricular Cardiac Geometry and Ambulatory Blood Pressure in Children. *Journal of Clinical Hypertension*. 2019 May;21(5):566-571.

Restoration of nocturnal blood pressure dip and reduction of nocturnal blood pressure with evening anti-hypertensive medication administration in pediatric kidney transplant recipients: A pilot randomized clinical trial. *Pediatr Transplant*. 2020 Dec;24(8):e13854. Doi: 10.1111/ptr.13854. Epub 2020 Oct 7. PMID: 33026142. ^B

Isolated nocturnal hypertension in pediatric kidney transplant recipients. *Pediatr Transplant*. 2021;00:e14192. Doi:10.1111/ptr.14192 ^B

Treatment Updates in Alport Syndrome, *Kidney News*, 2021. 13(4), 25-27.
https://www.kidneynews.org/view/journals/kidney-news/13/4/article-p25_8.xml ^A

Influence of Donor Race and Donor-recipient Race-matching on Pediatric Kidney Transplant Outcomes. *Transplantation Direct*. June 2022 – Volume 8 – Issue 6 – p e1324 doi: 10.1097/TXD.0000000000001324 ^A

Vortex Formation Time is a Novel Measure for Early Detection of Diastolic Abnormalities in Adolescents with Hypertension. *Pediatr Cardiol*. 2023 Jun;44(5):1135-1142. ^A

Hypertension after multisystem inflammatory syndrome in children (MIS-C). *Pediatr Nephrol*. 2023 Dec;38(12):4083-4091. ^B

Acute kidney injury post-abdominal surgery in infants: implications for prevention and management. *Frontiers in Pediatrics*. 2023;11. doi: 10.3389/fped.2023.1162863. ^A

Abstract/ Poster presentation at Pediatric Academic Societies (PAS) 2023: Vitamin A intake and Cardiometabolic Risk Factors among Adolescents: National Health and Nutrition Examination Survey (NHANES)

A –Research intern as 1st author

B –Research intern as co-author

Comments from Gap Year Research Interns

“Working at the Pediatric Nephrology Department as a Clinical Research Intern has been an incredible learning experience which proved to be instrumental in my professional development. Here, I had the opportunity to refine my scientific writing abilities and improve my data analysis skills. This has not only expanded my knowledge but also deepened my passion to continue pursuing research as a medical student and a future physician. The mentorship that I received from the research team was invaluable in shaping my understanding of the intricate steps that must be taken to establish meaningful research projects. I thoroughly appreciate the collaborative and inclusive environment fostered here in every single day!

Under the direct guidance of Dr. Sethna, I was able to participate in various components of the research process, ranging from actively screening patients for multiple research studies and consenting study participants all the way to participating in abstract and manuscript writing for publication. I wholeheartedly recommend this internship for all those who are considering a career in medicine and research!”

A.A. Stony Brooky University, Class of 2022.
Research Intern, Gap Year 2023-2024

“Working alongside Dr. Sethna in the Pediatric Nephrology department during my research gap year has been an incredibly transformative experience thus far. I was quickly immersed in ongoing studies, where I actively contributed to the exploration of various aspects of pediatric nephrology. The most rewarding moments were the interactions with patients—listening to their stories, understanding their health challenges, and being a part of their treatment journeys. These interactions provided invaluable insights into the practical facets of clinical care that no textbook could impart. As I took on the responsibility of managing treatment plans, I felt a profound growth in my ability to connect with patients and provide effective care. This experience ignited and nurtured my passion for pediatric care, solidifying my resolve to delve deeper into medical research.

Dr. Sethna's mentorship during my time as a research gap year intern was instrumental in shaping my perspective towards medicine and research. Her unwavering commitment to patient care and research excellence set an inspiring example. Under her mentorship, I found myself pushing academic boundaries, learning not just about medical practices but also about the compassion, dedication, and sacrifices that define this noble profession. This internship marked not just the end of my undergraduate studies but the foundation on which I aim to build my career in medicine—a foundation strengthened by the invaluable lessons, experiences, and values instilled by Dr. Sethna.”

M.A., Tufts University, Class of 2023.
Research Intern, Gap Year 2023-2024

“The gap year internship in the Pediatric Nephrology Department was a visceral and defining experience of my progress from undergraduate studies to applying these studies in clinical research. Involvement in various research stages, from obtaining study approvals to enrolling and training patients, allowed me to value each step's contribution to research outcomes. Interacting with patient families throughout the study, it provided me with a deeper understanding of the challenges patient families may face and to empathize with them.

Dr. Sethna inspires me through her dedication to her patients, research endeavors, and enthusiasm in teaching. She is a great mentor that I can turn for guidance, motivating me to become a compassionate and accomplished doctor. The collaborative environment within the Pediatric Nephrology team has been a rich learning and invaluable experience.”

S.K., Stony Brook University, Class of 2022
Research Intern, Gap Year 2022-2023

“As an intern for Pediatric Nephrology, I was able to experience the medical field through a scientific research lens. I interacted with patients, and took initiative in maintaining ongoing studies within nephrology. I was able to shadow the doctors, and learn proper techniques of clinical practice. The most rewarding part of the internship was getting to know patients first hand, and becoming a part of their health journey.

Dr. Sethna is an extremely hands on and dedicated physician that truly pushes interns to achieve the best they can. Personally, she has taught me what it means to be a physician, and the sacrifices that come with the profession. Under her guidance, I gained skills and knowledge beyond those that I have acquired in any classroom. Working as an intern in Pediatric Nephrology was an incredibly educating and humbling experience; it allowed me to complete my Undergraduate studies, and gave me a platform to begin a career in the medical field.”

O.B., Hofstra University, Class of 2020
Research Intern, 2019-2020

“Working with the Pediatric Nephrology Department, both over the summer and during my gap year, has afforded me the invaluable opportunity to hone my research skills. By contributing to a multitude of studies, I was able to expand the breadth of my experience to take with me to medical school this fall. I was given the demanding role to take the lead on clinical trials, which provided me with crucial hands-on practice working with patients and their families, taking vital signs, and managing treatment plans under the direct supervision of Dr. Sethna.

My passion for pediatrics and my confidence to pursue research was most definitely strengthened and solidified by this experience. Personally, Dr. Sethna became an instrumental source of guidance throughout my journey as a pre-medical student, and she will continue to be a role model to me.”

L.G., Cornell University, Class of 2019
Research Intern, Gap Year 2019-2020

Clinical Research Coordinator In Pediatric Nephrology

Description: A position as a clinical research coordinator in the Division of Pediatric Nephrology is offered by Cohen Children's Medical Center of New York – the flagship children's hospital of Northwell Health.

Clinical research coordinators are responsible for coordinating and maintaining various novel and ongoing clinical research studies under the supervision of principal investigators. This position involves access to medical records and extensive patient interaction as a member of a clinical research team as well as interaction with clinical staff (attending physicians, residents and fellows, nurses, and other clinical administrative staff). Successful candidates have strong interpersonal, organizational, and record keeping skills, are detail-oriented, and are highly motivated.

It is expected that candidates work onsite full-time.

- 37.5 hr/week (9am-5pm, 30-minute unpaid lunch break)
- In-person
- Minimum 2-year commitment

Responsibilities include but are not limited to:

- Evaluation of study candidates and recruitment of patients for research studies through in-person, telephone, and written communications with patients/families.
- Coordination of study visits and conducting of study procedures (e.g., administering questionnaires, biosample handling and processing, etc.).
- Acting as a guide and liaison for study patients/families throughout various stages of research studies and addressing questions or concerns they have.
- Coordination between outpatient clinics, hospital, and research laboratories to ensure correct testing/processing and adherence to study-specific protocols. Coordination and preparation of necessary documentation for Institutional Review Board (IRB) submissions with the Private Investigator of the study.
- Maintenance and review of data collection and data entry
- Preparing statistical reports and analytical summaries as needed
- Preparation of manuscripts for submission to medical journals
- Opportunity to assist with NIH grant-writing and submission
- Assistance with special projects and other general office support

Minimum Qualifications:

- Bachelor's degree (by the time of start date) from any U.S. college or university
- A two-year minimum commitment is expected.
- Ability to demonstrate professionalism and respect for patients' rights and needs inside and outside of research studies.

- Candidates with an interest in pursuing graduate studies or a career in medicine, clinical research, or public health are strongly preferred.

Preferred Qualifications:

- Previous research experience and/or experience in handling biosamples (blood, urine, etc.)
- Experience in statistics (R, SPSS, SAS, Python, etc.) and statistical research
- Careful attention to detail
- Good organizational skills
- Strong communication and interpersonal skill

Other Expectations/Opportunities: Assuming candidates meet the regular roles and responsibilities of the position, we offer the opportunity to engage in other academic or clinical activities. A breakdown of these educational, clinical, and administrative support functions follows:

- ▶ Lectures:
 - Pediatric Nephrology lectures: 2-3 per week
- ▶ Clinical Observation:
 - Shadow pediatric nephrologists in the out-patient clinic and attend in-patient rounds.
- ▶ Personal Research Projects:
 - Research coordinators may have the opportunity to assist faculty members in ongoing research projects and/or design new projects of mutual interest. This may include projects that involve direct contact with patients or retrospective chart reviews. Should the project be completed successfully, candidates may be identified in lead authorship roles for any submissions to journals for publication and to national/international conferences.
- ▶ Conference Attendance:
 - Opportunities to attend study-specific or international research conferences will be provided, based on specific study involvement and personal research project submissions.

Salary: This is a paid full-time position. Pay is commensurate with experience.

To Apply: You must submit a completed application through the form linked here (<https://forms.gle/zQeSNF9okg3t7Y6bA>); this application (a Google form) will also ask you to attach a CV or resume and an unofficial transcript. (If you receive an error message regarding data loss prevention on the Google Form, please try accessing it through a non-university Gmail. If you encounter further problems, please email mschuchman@northwell.edu to troubleshoot.)

Application Process & Deadline: The submittal deadline is Thursday, February 1st, 2024 at 5pm (EST); all materials must be received by that date.

For Further Information: Questions regarding the position or its application should be directed to Matthew Schuchman (mschuchman@northwell.edu) or Dr. Sethna (csethan@northwell.edu) with the subject line: Clinical Research Coordinator.

Gap Year Research Internship

Division of Pediatric Infectious Disease

2024 – 2025 Gap Year Clinical Research Internship in Pediatric Infectious Diseases

Description: A 10–12-month program in clinical research related to pediatric infectious diseases in children and adolescents is offered by Cohen Children's Medical Center of New York – the flagship children's hospital of Northwell Health.

This Gap Year Research Internship affords the student the opportunity to work closely with a faculty mentor on one or more research projects related to pediatric infectious diseases. Students will assist the faculty member in an ongoing research project and/or work collaboratively with the mentor in designing one or more projects of mutual interest. Most projects include literature review, retrospective chart reviews and data analyses. The student is expected to be an integral part of a team in designing and carrying out a research project. Recent projects include vaccine hesitancy projects, antimicrobial stewardship, and prevention of staphylococcal infections in the neonatal intensive care unit. Currently, the division is developing a Congenital Cytomegalovirus (CMV) infection program. The gap year research intern will be involved with: maintaining a database of babies enrolled in a statewide longitudinal follow up registry study of babies born with CMV, clinical assessment and follow-up of babies screened for hearing loss or other anomalies at birth, and coordinating legislative advocacy efforts to ensure that a current statewide pilot screening program becomes a permanent program in New York State.

While participating in the program, interns will have the opportunity to shadow in our clinics and on in-patient rounds (as Infection Prevention protocols allow). Research interns will also be encouraged to attend other lectures of interest available through the Department of Pediatrics at the Children's Hospital.

This clinical research internship is open to students who have excelled while pursuing their bachelor's degree from any U.S. college or university. Although the ideal candidate is a student who aspires to attend further education in a health-related field (MD, PhD, DrPH, etc.) in the near future, has a strong academic record and writing skills, research experience, and a knowledge of statistics, we welcome applications from any students who have excelled in any area of study.

Research Abstracts/Publications: It is anticipated that students will be included as co-investigators in one or more research abstracts submitted to national research meetings. Students who can successfully contribute to a manuscript for journal submission of the research findings will be identified as a co-author of any paper submitted for publication.

Program Dates: Start and completion dates for the Gap Year internship are flexible. Although priority will be given to applicants prepared to make at least a full-time 10-month commitment or longer, other time schedule arrangements will be considered. With advance notice, research interns may take as many days off as needed during their internship to visit medical schools or other graduate programs for interviews.

Stipend: This is an unpaid internship.

Past Interns: The Gap Year Research Internship program at Cohen Children's Medical Center was established in 2014. Gap Year RA's are typically accepted to multiple medical schools. Although these RA's are typically very strong applicants even prior to participating in these internship programs, the Gap Year internship program typically adds multiple abstracts and/or publications to each RA's list of accomplishments. Moreover, RA's often find it very helpful to discuss one or more of their different Gap Year research projects when interviewed by medical schools.

To Apply: You must submit a completed application through the form linked here (<https://forms.gle/tnYVK3WdFFV2TeHJ6>); this application (a Google form) will also ask you to attach a CV or résumé, an unofficial transcript, and a recent photograph.

Application Process & Deadline: The submittal deadline is Sunday, March 3, 2024 at 11:59 PM (EST); all materials must be received by this deadline. Applicants are strongly encouraged to submit their application as early as possible. The most promising candidates will be invited to interview by Zoom in early March (and possibly sooner). Notification of decisions will be made shortly thereafter.

For Further Information: This research internship is coordinated by Sunil Sood MD. Questions regarding the internship or the application process should be directed to Dr. Sood at ssood@northwell.edu with the subject line: Gap Year Research Internship.

Gap Year Research Internship

Division of Pediatric Neurology

2024 - 2025 “Gap Year” Research Internship Division of Pediatric Neurology

Description: A 12–18-month internship program in clinical research related to Pediatric Neurology in children and adolescents is offered by Cohen Children’s Medical Center of New York – the flagship children’s hospital of Northwell Health.

This “Gap Year” research internship program offers 1-2 accomplished students the opportunity to work closely with the clinical research department and/or faculty on one or more research projects related to pediatric neurology. Students may assist the faculty member in an ongoing research project and/or work collaboratively with the clinical research department on ongoing research projects. Most projects include retrospective chart reviews and/or clinical trials that will involve direct contact with patients.

While participating in the program, interns will have the opportunity to shadow in our clinics. Research interns will also be encouraged to attend other lectures of interest available through the Division of Pediatric Neurology. Research projects include a wide variety of topics relevant to pediatric neurology, including epilepsy, narcolepsy, migraines, and quality improvement projects.

The internship is open to students who excelled while pursuing their bachelor’s degree from any U.S. college or university. Although the ideal candidate is a student who aspires to attend further education in a health-related field (MD, PhD, DrPH, NP, etc.) in the near future and may have a background in neurology or neurosciences, we welcome applications from any student who has excelled in any area of study.

This program is flexible in the number of hours per week but at minimum we ask for at least two full business days per week as a commitment. Gap year positions are unpaid.

Research Abstracts/Publications: It is anticipated that students may be included as co-authors on research abstracts submitted to national research meetings. This is based on the discretion of the principal investigator.

Program Dates: Start and completion dates for the Gap Year internship are somewhat flexible. Priority will be given to applicants prepared to make at least a full-time 12 month commitment or longer, though alternate schedule arrangements will be considered. With advance notice, research interns may take as many days off as needed during their internship to visit schools for interviews.

Other Activities/ Expectations/Opportunities: Interns may have the opportunity to attend clinical lectures of interest available through the Division of Pediatric Neurology. There may also be opportunities for occasional shadowing of clinicians. RA’s may occasionally be asked to assist with other academic or administrative tasks.

Stipend: This is an unpaid internship.

Application Process & Deadline: Friday, March 03, 2023. Upon then, chosen candidates will be contacted for an interview by phone, via Zoom, and/or in-person with Dr. Sanjeev Kothare, Chief of Pediatric Neurology. It is anticipated that notification of decisions will be made in April 2023.

To Apply: You must submit a completed application through the form linked here (<https://forms.gle/UXfyeALfSYL531w97>); this application (a Google form) will also ask you to attach a CV or résumé, an unofficial transcript, and a recent photograph.

Application Process & Deadline: There is a rolling submission deadline. However, priority will be given to candidates who submit all materials by Sunday, March 3, 2024 at 11:59 PM (EST). All materials must be received by that date/time. Applicants are strongly encouraged to submit their application as early as possible. Upon then, chosen candidates will be contacted for an interview by phone, via Zoom, and/or in-person with Dr. Sanjeev Kothare, Chief of Pediatric Neurology. It is anticipated that notification of decisions will be made in April 2024.

For Further Information: The research internship in the Division of Pediatric Neurology is overseen by Dr. Sanjeev Kothare, Chief of Pediatric Neurology. Information regarding the Gap Year internship or the application process may be directed to Aaqil Ali (aali27@northwell.edu).