CURRICULUM VITAE

ALISON CARROLL, MD

Pediatric Hospital Medicine Fellow, PGY-5 Division of Pediatric Hospital Medicine Monroe Carell Jr. Children's Hospital at Vanderbilt Vanderbilt University Medical Center Pediatric Administrative Offices 2141 Blakemore Avenue Nashville, TN 37232 678-296-1625 alison.carroll@vumc.org

EDUCATION

- 2011-2015 Doctor of Medicine University of North Carolina at Chapel Hill (UNC) School of Medicine Chapel Hill, NC
- 2020-2022 Master of Public Health, Epidemiology Track (anticipated completion May 2022) Vanderbilt University School of Medicine Nashville, TN
- 2005-2009 Bachelor of Science in Psychology, *Magna Cum Laude* Davidson College Davidson, NC

POSTGRADUATE TRAINING

- 2019-2021 Pediatric Hospital Medicine Fellowship Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN
- 2018-2019 Chief Resident, Pediatrics UNC School of Medicine and N.C. Children's Hospital, Chapel Hill, NC
- 2015-2018 Internship and Residency, Pediatrics N.C. Children's Hospital, Chapel Hill, NC

CONTINUING EDUCATION

- 2018 UNC School of Medicine Residents as Teachers Professional Development Series
- 2017-2018 UNC School of Medicine Academy of Educators Member

EMPLOYEMENT

2009-2011 Research Assistant and Post-Baccalaureate Fellow Carolina Institute for Developmental Disabilities (CIDD) Duke-UNC Brain Imaging and Analysis Center (BIAC), Durham, NC Principal Investigator: Dr. Gabriel Dichter, Department of Psychiatry, UNC

MEDICAL LICENSURE

2019-Present State of Tennessee - #0000059267	
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2018-2019 State of North Carolina - # 2018-00303

PROFESSIONAL AND SOCIETY MEMBERSHIPS

- 2020-Present Academic Pediatric Association
- 2018-Present Society of Hospital Medicine
- 2015-Present American Academy of Pediatrics
- 2015-Present North Carolina Pediatric Society

HONORS AND AWARDS

2020 38th Annual Vanderbilt University Medical Center Research Forum Honorable Mention for Research Abstract Harvey J. Hamrick Outstanding Teaching Resident Award, UNC Dept. of Pediatrics 2018 Nominated by UNC School of Medicine third and fourth year medical students 2018 Harvey Hamrick Award for Best Case Report, UNC Dept. of Pediatrics Thomas F. Boat Day of Scholarship, "A SCN-tillating diagnosis: An infant with recurrent thrush and new perineal lesions" 2016 "High 5" recipient, N.C. Children's Hospital Nominated by N.C. Children's Hospital staff for outstanding patient care 2016 WakeMed Intern of the Year, Wake Area Health Education Center Selected for excellence in patient care and service among my intern class 2005-2009 Division I Varsity Soccer, Davidson College Four-year lettermen

TEACHING AND EDUCATION

- 2018-2019 Fourth-Year Medical Student Pediatric Conference Series Developed and led didactic sessions for UNC and visiting fourth-year medical students.
- 2016-2019 UNC Medical Student Transitions Workshop Small group leader for third-year medical students preparing to start pediatrics clerkship. Developed pediatrics ward tips guide that was distributed to entire third year medical school class. Led small group to teach medical students how to use EMR to pre-round.
- 2016-2018 Good Grief Curriculum Lecturer and organizer for series developed by UNC pediatric residents to teach residents how to communicate bad news.

- 2016-2018 "Teaching Resources" Repository Developed and evaluated the effectiveness of a Google Drive repository for handouts and lectures to serve as a resource for residents to use to teach medical students on the wards.
- 2014-2015 Teaching Assistant, UNC School of Medicine Clinical Skills Course Small group leader teaching physical exam and presentation skills to second year medical students.

QUALITY IMPROVEMENT PROJECTS

2019-Present	Decreasing Pre-Procedural Fasting Times in Hospitalized Children: A Patient-Centered Quality Improvement Project
	Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN
2017-2019	N.C. Children's Hospital Standardized Pediatric Discharge: The Discharge Planning Tool Aims to improve the safety and accuracy of pediatric inpatient discharges.
2017-2018	Improving Work Flow and Decreasing Patient Visit Times in Continuity Clinic Aimed to improve patient flow in continuity clinic by handing out developmental screening forms in the waiting room.
2016	"COPS:" Check Order for Patient Safety Multi-disciplinary PICU order accuracy committee, refined standardized rounds in PICU to improve order accuracy and wrote a resident PICU guide highlighting the changes.
2016-2018	The Attending-Resident Handoff Evidence-basEd piLot Study (TARHEELS) Aimed to implement the I-PASS method to improve the quality of resident sign-out on the

Aimed to implement the I-PASS method to improve the quality of resident sign-out on the wards. Led expansion of I-PASS to additional training sites as well as the PICU and NICU.

ADVOCACY

2017-2019 Co-Founder/Co-Leader of UNC SKIPP (Safe Kids Injury Prevention Project) Partnership between UNC Pediatric Residency Program and Orange County, NC Early Head Start Center in Hillsborough, NC to improve the safety of young children in our community by providing parental education on prevention of common accidental injuries in children. To ensure sustainable funding of program, served as Principal Investigator for 2018 American Academy of Pediatrics (AAP) CATCH Grant (application not accepted).

RESEARCH EXPERIENCE

Vanderbilt Patient/pRactice Outcomes and Research in Effectiveness and Systems Science (PROgRESS) T32 Program

"Development and Evaluation of a Health-Literacy Informed Communication Intervention for Discharge Medication Counseling in Hospitalized Children" Dates: July 2020-July 2022 Principal Investigators of PROgRESS program: Christianne Roumie, MD, MPH and Carlos Grijalva, MD Co-Mentors: Derek Williams, MD, MPH and Amanda Mixon, MD, MSPH Role: Principal Investigator Funding: Agency for Healthcare Research and Quality (AHRA), NIH Project Number 5T32HS026122-02

N.C. Children's Hospital

"Picture of the Day" Curriculum for Medical Students in the Newborn Nursery Dates: July 2016-Present Mentor/Co-Principal Investigator: Dr. Eric Zwemer, MD, General Pediatrics and Adolescent Medicine, University of North Carolina Children's Hospital, UNC Hospitals Role: Co-Principal Investigator. Conceptualized the study, wrote and prepared IRB, developed "Picture of the Day" curriculum, wrote surveys, collected all data, performed data analysis, prepared abstract and poster Funding: AHEC Campus Innovation Grant Fund, "Dissemination and Evaluation of a Novel and Interdisciplinary Picture of the Day"

Description: Designed, implemented, and evaluated a "Picture of the Day" curriculum based on the One-Minute Preceptor (OMP) model in the newborn nursery to improve resident-led teaching of medical students and to improve residents' abilities to evaluate students' clinical reasoning.

University of North Carolina School of Medicine

"Shared Decision Making in the Selection of Outpatient Analgesics for Older Adults with Acute Musculoskeletal Pain"

Dates: June 2012-August 2012

Research Sponsor: Dr. Timothy Platts-Mills, MD, Department of Emergency Medicine and Department of Anesthesiology, UNC

Faculty Sponsor: Ellen Roberts, PhD, MPH, Department of Medicine; Academic Coordinator of Geriatric Medical Education and Training at UNC School of Medicine

Funding: Medical Student Training in Aging Research (MSTAR), NIH/NIA T35AG038047-03 and NC TraCS \$2K Pilot grant #2KR421205

Role: Conceptualized study, wrote and developed all surveys and study materials, wrote IRB, wrote and received NC TraCS grant, assisted in manuscript preparation

Description: Assessed the association between shared decision making regarding outpatient pharmacologic treatment of acute pain in older adults and pain relief during the subsequent week.

Carolina Institute for Developmental Disabilities (CIDD)

Research Assistant, Clinical Affective Neuroscience lab, Duke-UNC Brain Imaging and Analysis Center (BIAC), Durham, NC

Dates: June 2009-July 2011

Principal Investigator: Dr. Gabriel Dichter, Department of Psychiatry, UNC

Role: Recruited all research subjects, administrated all study assessment tools, supervised fMRI testing, maintained all data, performed fMRI data analyses, developed tables and charts, conducted literature reviews, and wrote methods sections for published article manuscripts.

Description: Used functional magnetic resonance imaging (fMRI) to understand the neurobiology of psychiatric conditions and the potential mechanisms of action of effective interventions for these conditions, including autism in children.

ADMINSTRATIVE SERVICE AND VOLUNTEER WORK

2020-present Member of Musculoskeletal Infection Clinical Practice Guideline Committee, Monroe Carell Jr. Children's Hospital at Vanderbilt

2018-2019	N.C. Children's Hospital Improvement Council Member
2018-2019	Clinical Competency Committee (CCC) Member, UNC Pediatric Residency Program
2018-2019	UNC Pediatric Residency Program ACGME Self-Study Committee Member
2016-2018	Co-Leader of Pediatric Intensive Care (PICU) Interest Group Organized quarterly meetings including journal clubs and simulation training for residents, fellows and ICU attendings.
2016-2018	Leader of Tar Healers, N.C. Children's Hospital Organized events for N.C. Children Hospital's patients and families including an annual Halloween party for patients and family dinners at the Ronald McDonald House.
2015-2017	Pediatrics Representative, UNC Tarheel Housestaff Council Served as a departmental representative on a UNC Healthcare resident council to foster dialogue and improvement within our respective programs.
2015-2018	Organizing Committee Member, "Femurary," N.C. Children's Hospital Fundraiser and silent auction held in February to raise money for mothers of children admitted at N.C. Children's Hospital to promote self-care.

PUBLICATIONS (peer-reviewed)

- Holland WC, Hunold KM, Mangipudi SA, Rittenberg AM, Yosipovitch N, Platts-Mills TF. A Prospective Evaluation of Shared Decision-making Regarding Analgesics Selection for Older Emergency Department Patients with Acute Musculoskeletal Pain. *Acad Emerg Med*. 2016;23(3):306-314. doi:10.1111/acem.12888.
- Richey JA, Rittenberg A, Hughes L, Damiano CR, Sabatino A, Miller S, Hanna E, Bodfish JW, Dichter GS. Common and distinct neural features of social and non-social reward processing in autism and social anxiety disorder. *Soc Cogn Affect Neurosci*. 2014;9(3):367-377. doi:10.1093/scan/nss146.
- Sabatino A, Rittenberg A, Sasson NJ, Turner-Brown L, Bodfish JW, Dichter GS. Functional neuroimaging of social and nonsocial cognitive control in autism. *J Autism Dev Disord*. 2013;43(12):2903-2913. doi:10.1007/s10803-013-1837-4.
- Smoski MJ, Rittenberg A, Dichter GS. Major depressive disorder is characterized by greater reward network activation to monetary than pleasant image rewards. *Psychiatry Res*. 2011;194(3):263-270. doi:10.1016/j.pscychresns.2011.06.012.
- Richey JA, Damiano CR, Sabatino A, Rittenberg A, Petty C, Bizzell J, Voyvodic J, Heller AS, Coffman MC, Smoski M, Davidson RJ, Dichter GS. Neural Mechanisms of Emotion Regulation in Autism Spectrum Disorder. *J Autism Dev Disord*. 2015;45(11):3409-3423. doi:<u>10.1007/s10803-015-2359-z</u>.
- Dichter GS, Richey JA, Rittenberg AM, Sabatino A, Bodfish JW. Reward circuitry function in autism during face anticipation and outcomes. *J Autism Dev Disord*. 2012;42(2):147-160. doi:10.1007/s10803-011-1221-1.

 Dichter GS, Felder JN, Green SR, Rittenberg AM, Sasson NJ, Bodfish JW. Reward circuitry function in autism spectrum disorders. *Soc Cogn Affect Neurosci*. 2012;7(2):160-172. doi:10.1093/scan/nsq095.

PRESENTATIONS – Abstracts/Posters/Oral Presentations/Workshops

Oral Presentations

- 1. Antoon, J, Brown, C, **Carroll, A.** What's Left to Know About FUO? Updates on Pediatric Fever of Unknown Origin. **Clinical Quick Hit.** Pediatric Hospital Medicine Annual Meeting, Lake Buena Vista, FL, July 23-26, 2020. (*Accepted. Meeting canceled due to COVID-19 outbreak*)
- 2. Schefft, M, Brady, P, Coffey, M, Johnson, D, **Carroll, A.** Misadventures in Statistical Process Control Charts—How to Use and Not Use Them. **Workshop**. Pediatric Hospital Medicine Annual Meeting, Lake Buena Vista, FL, July 23-26, 2020. (*Accepted. Meeting canceled due to COVID-19 outbreak*)
- 3. Ngo, ML, **Carroll, A**, Brown, C, Chokshi, S, Lind, CH, Browning, W. Baby, Baby, Are You OK: Testing and Management of Newborn Congenital Infections. **Mini-Plenary Session.** Pediatric Hospital Medicine Annual Meeting, Lake Buena Vista, FL, July 23-26, 2020. (*Accepted. Meeting canceled due to COVID-19 outbreak*)
- 4. Carroll A, Hall, M, Antoon, JW, Herndon, A, Brown, CM, Kreth, H, Johnson, D, Ngo, M, Browning, W, Chokshi, SB, Plemmons, G, Johnson, J, Hart, SR, Neeley, M, Williams, DJ. Sociodemographic Factors Associated with Pediatric Hospital Resource Utilization for Mental Health Conditions. Platform Presentation. Pediatric Academic Societies (PAS) Meeting, Philadelphia, PA, May 1-5, 2020. (Accepted. Meeting canceled due to COVID-19 outbreak but presentation given virtually via Zoom on 7/7/2020). Also selected for a Mini Oral Presentation at Pediatric Hospital Medicine Annual Meeting, Lake Buena Vista, FL, July 23-26, 2020. (Accepted. Meeting canceled due to COVID-19 outbreak and not given virtually).
- 5. **Carroll A**, St. Clair, T, Greene, KG, Willis, Z, Sylvester, F, Sweeney, A. Go with your Gut: A School-aged child with edema and vomiting. **Clinical Conundrum Oral Presentation**. Pediatric Hospital Medicine Annual Meeting, Atlanta, GA, July 2018.
- 6. **Rittenberg, A**, Seashore, C, Zwemer, E. "Picture of the Day" Curriculum for Medical Students in the Newborn Nursery. UNC Department of Pediatrics Day of Scholarship, Grand Rounds Presentation, Chapel Hill, NC, April 2017.

Poster Presentations

- Carroll A, McCoy, A, Johnson, D. Decreasing Pre-Procedural Fasting Times in Hospitalized Children: A Patient-Centered Quality Improvement Project. Academic Pediatric Association Conference: Advancing Improvement Science for Children's Health Care, Philadelphia, PA, May 1, 2020 and Pediatric Hospital Medicine Annual Meeting, Lake Buena Vista, FL, July 23-26, 2020. (Accepted. Meeting canceled due to COVID-19 outbreak)
- 2. **Carroll, A**, Westreich, KD, Sten, MB, Troxler, H, Gaghan, L. Taking the danger out of discharge: Use of a standardized discharge planning tool. Poster presented at Pediatric Hospital Medicine Annual Meeting, Seattle, WA, July 2019.

- 3. Carroll, A, Seashore, C, Zwemer, E. Apgars aren't the only thing that can happen in a minute: Using a visual one-minute preceptor-based curriculum to improve resident-led teaching of medical students in the newborn nursery. Poster presentation at Pediatric Hospital Medicine Annual Meeting, Atlanta, GA, July 2018, Academy of Educators Evening of Scholarship, Chapel Hill, NC, May 2018, Council on Medical Student Education in Pediatrics (COMSEP), Denver, CO, April 2018, and UNC Department of Pediatrics Thomas F. Boat Day of Scholarship, Chapel Hill, NC, April 2017.
- 4. **Carroll, A,** Zakhar, Z, Wu, EY, Smitherman, AB. It takes a Dorf: A 17-year-old with knee pain and lytic bone lesions. Poster presentation at Pediatric Hospital Medicine Annual Meeting, Atlanta, GA, July 2018, and UNC Department of Pediatrics Thomas F. Boat Day of Scholarship, Chapel Hill, NC, April 2018.
- 5. Cline, A, Parente, L, **Carroll, A,** Westmoreland, K. A SCN-tilating diagnosis: An infant with recurrent thrush and new perineal lesions. Poster presentation at Pediatric Hospital Medicine Annual Meeting, Atlanta, GA, July 2018, and UNC Department of Pediatrics Thomas F. Boat Day of Scholarship, Chapel Hill, NC, April 2018.
- 6. Westreich, KD, Sten, MB, Troxler, H, Hilzendager, A, **Carroll, A**. NC Children's Hospital Standardized Pediatric Discharge. Poster presentation at Pediatric Academic Society Annual Meeting, Toronto, Canada, May 2018.
- 7. **Carroll, A,** St. Clair, T, Greene, G, Willis, Z, Sylvester, F, Sweeney, A. Go with your gut: A School-aged child with edema and vomiting. Poster presentation at UNC Department of Pediatrics Thomas F. Boat Day of Scholarship, Chapel Hill, NC, April 2018.
- 8. Willis, E, **Carroll, A**, Rogers, M. If it's yellow, don't let it mellow: An uncommon cause of jaundice and direct hyperbilirubinemia in an infant. Poster presentation at UNC Department of Pediatrics Thomas F. Boat Day of Scholarship, Chapel Hill, NC, April 2018.
- 9. **Rittenberg, A** & Zwemer, E. Stuck in the Middle with Mu-cin: A 5 yo male with ophthalmoplegia and fever. Poster presentation a Pediatric Hospital Medicine Annual Meeting, Nashville, TN, July 2017, and UNC Department of Pediatrics Thomas F. Boat Day of Scholarship, Chapel Hill, NC, April 2017.
- Rittenberg, A, Matthews, S, Pereira, G, Keil, L, McLean, SA, Platts-Mills, TF. Shared Decision Making for the election of Analgesics for Older Adults with Acute Musculoskeletal Pain: A Prospective Observational Study. Poster presentation at The American Geriatrics Society, Dallas, TX, May 2012.
- Sabatino, A, Rittenberg, A, Sasson, N, Bodfish, JW, Dichter, GS. Cognitive Control of Social and Non-Social Information in Autism: An fMRI Investigation. Poster presentation at the International Meeting for Autism Research, Philadelphia, PA, May 2010.
- 12. Greeter, S, Sikich, L, Alderman, C, **Rittenberg, A**, Turner-Brown, L, Holtzclaw, T, Bodfish, JW, Richey, J, Dichter, GS. fMRI of Citalopram Treatment in Autism. Poster presentation at International Meeting for Autism Research, Philadelphia, PA, May 2010.
- 13. **Rittenberg, A.,** Matthews, S., Pereira, G., Keil, L, McLean, S. A., & Platts-Mills, T. F. Shared Decision Making for the Selection of Analgesics for Older Adults with Acute Musculoskeletal

Pain: A Prospective Observational Study. Poster presentation at University of North Carolina School of Medicine Student Research Day, January 2013.

- 14. Rittenberg, A, Matthews, S, Pereira, G, Keil, L, McLean, SA, Platts-Mills, TF. Shared Decision Making for the Selection of Analgesics for Older Adults with Acute Musculoskeletal Pain: A Prospective Observational Study. Poster presentation at The American Geriatrics Society, Dallas, TX, May 2013.
- 15. Smoski, MJ, Keng, SL, **Rittenberg, A,** Dichter, GS. Depression History as a Moderator of Neural Activation to Reappraisal versus Mindful Acceptance. Poster presentation at The 45th Annual Convention of the Association for Behavioral and Cognitive Therapies. Toronto, Canada, November 2011.
- Richey, JA, Dichter, GS, Rittenberg A, Edmonson, R, Ratto, A, Bodfish, JW. Disambiguating Reward Circuitry Function in Autism: New Insight into Social Cognition from a Three-Group fMRI study. Poster presentation at International Meeting for Autism Research, San Diego, CA, May 2011.