

CURRICULUM VITAE

HANNA S. SAHHAR, MD, FAAP, FACOP

Professor of Pediatrics, VCOM

Discipline Chair for Pediatrics, VCOM Carolinas

350 Howard Street, Spartanburg, SC 29303

Tel: 864-327-9861

hsahhar@vcom.edu

www.hannasahharmedical.com

<https://www.vcom.edu/people/hanna-sahhar>

Education:

University of Mosul/Mosul IRAQ 08.1988-07.1994 MBChB 07.20.1994 Doctor of Medicine

Internship:

Makassed Hospital/Jerusalem ISRAEL 10.1994-08.1995

Residencies or Post Doctoral:

Internal Medicine. Al-Hussein (Beit-Jala) Hospital/ Beit-Jala PALESTINE 08.1995-11.1995

General Pediatrics. Caritas Baby Hospital/Bethlehem PALESTINE 11.1995-05.1999

Pediatric Critical Care Medicine. Hope Children's Hospital/OakLawn/IL 08.1999-01.2002

General Pediatrics. Hope Children's Hospital/Oak Lawn/IL 01.2002-01.2004

Pediatric Critical Care Medicine. Hope Children's Hospital/Oak Lawn/IL 01.2004-10.2004

Employment Post Training:

Midwest NeoPed Associates, Ltd Oak Brook/IL 10.2004-08.2005

Spartanburg Regional Healthcare System Spartanburg, SC 10.2005-current

Edward via College of Osteopathic Medicine Spartanburg, SC 10.2011-current

Specialty/Board Certification:

ABP/General Pediatrics 10.2004 (MOC 2024)

ABP/Pediatric Critical Care Medicine 08.2006 (MOC 2026)

Licensure:

ECFMG 1998-Permenant

ILLINOIS PHYSICIAN AND SURGEON	2002-ACTIVE
CALIFORNIA PHYSICIAN AND SURGEON	2003-ACTIVE
SOUTH CAROLINA PHYSICIAN AND SURGEON	2005-ACTIVE
NEVADA PHYSICIAN AND SURGEON	2012-ACTIVE
MONTANA PHYSICIAN AND SURGEON	2013-ACTIVE

Faculty Appointments:

2007 Assistant Professor of Pediatrics, Medical University of South Carolina-Area Health Education center

2011 Associate Professor, Department of Pediatrics, Edward Via College of Osteopathic Medicine-Carolinas Campus

2012 Associate Professor of Pediatrics, Medical University of South Carolina-Area Health Education center

2016 Professor of Pediatrics, Medical University of South Carolina-Area Health Education center

2016 Professor, Department of Pediatrics, Edward Via College of Osteopathic Medicine-Carolinas Campus

Administrative Appointments:

2005-current Medical Director, Pediatric Intensive Care/Spartanburg Medical Center

2011- current Chairman, Department of Pediatrics/Edward Via College of Osteopathic Medicine-Carolinas Campus

2012- current Director, Pediatric Hospitalist Program/Spartanburg Medical Center

2014- current Chairman, Department of Pediatrics, Spartanburg Medical Center

Hospital Appointments/Privileges:

CURRENT:

Pediatrician/Pediatric Intensivist (Medical Director PICU)

2005-current Spartanburg Medical Center/Spartanburg, SC

Other Experience:

2002-current Certified Pediatric Flexible Fiberoptic Bronchoscopist and Laryngoscopist

Advocate Hope Children's Hospital/Department of Pediatrics/Division of Pediatric Pulmonology.
Spartanburg Regional Healthcare System/Department of Pediatric In-patient Medicine/Pediatric Intensive Care.

Extramural Professional Activities:

March 2005- September 2005
Master of Business Administration/Health Administration
Benedictine University/WebFlex/ Lisle, Illinois
(Three courses out of sixteen have been completed with Grade "A" each)
I voluntarily dropped out due to personal dissatisfaction with the program.

Membership in professional/scientific societies:

ACTIVE:

National Societies:
American Academy of Pediatrics (AAP) Active Member ... "Fellow"
Council on Medical Student Education in Pediatrics (COMSEP)
American College of Osteopathic Pediatricians (ACOP) ... "Fellow"

INACTIVE:

International:
Jordan Medical Society (1994-1999)

National:

American Heart Association/American Stroke Association (AHA/ASA) (2009, 2010)
American Medical Association (AMA) (2004, 2005)
Society of Critical Care Medicine (SCCM), Virginia-Carolina Chapter ... "Fellow"

Local:

South Carolina Children's Hospital Collaborative (2011)
South Carolina Pediatric Critical Care Consortium (2010, 2011)
Spartanburg County Medical Society (2014-2017)
Trials and Research Network For More" (TRANSFORM) South Carolina –
Pediatrics-Physician Champion (2016-2020)

Academic Committee Activities (past 15 years):

2005-2010 Pediatric Case Review Committee / SRHS /Member
2005-2014 Pediatric Physician Advisory Council/ SRHS /Member
2005-2014 Critical Care Committee/ SRHS /Member
2005-current Resuscitation Committee/ SRHS /Ad Hoc Member
2007-2010 Medical Staff Quality Council / SRHS /Member
2007-current Spartanburg SAFE KIDS Coalition/Council/ Board Member

2007- current Pediatric Critical Care Committee/ SRHS /Chairman
2007- current Pediatric Resuscitation Committee/ SRHS /Chairman
2008-2010 Women's & Children's Services Center/Free Standing facility/ SRHS
Panning Committee Member
2009- current Trauma Multidisciplinary Committee / SRHS /Member
2010-2016 Pediatric Case Review Committee/ SRHS /Chairman
2010- current Pediatric Moderate Sedation Committee/ SRHS /Chairman
2010- current Physician Leadership Council/Women's & Children's Committee/
SRHS /Member
2011- current Clinical Curriculum Committee-VCOM Carolinas Campus-Member
2011- current Emergency Medicine Case Review Committee/ SRHS /Ad Hoc Member
2011-2017 Pediatric Outreach Committee/SRHS/Member
2012-2018 Faculty Senate/VCOM-Carolinas Campus/Member
2012-current Lactation Services, SRHS, Medical Director
2014- current Pediatric Physician Advisory Council, SRHS, Chairman
2014- current Medical Executive Committee, SRHS, Member
2014- current Pharmacy & Therapeutics Committee, SRHS, Member
2015- current Trauma Case Review Committee/ SRHS /Ad Hoc Member
2015- current EPIC/Peds Inpatient, SRHS, Physician Champion
2016- 2020 Infectious Disease Expert Panel/VCOM-Carolinas Campus/Member
2016-2020 TRANSFORM-SC Network/Health Sciences South Carolinas/SRHS Core
Site, Physician Champion
2017- current Physician Technology Committee, SRHS, Member
2017- 2021 Professional and Ethical Standards Board, VCOM, Member
2018- current Quality and Process Improvement Council, SRHS, Member
2021- current Pain Management and Opioid Stewardship Committee, SRHS,
Member and Peds Group Chair
2021- current Pediatric Advisory Group-MGC, SRHS, Member
2021- current Multidisciplinary Case Review Committee, SRHS, Member

Community Committee/Boards Memberships (past 10 years):

2005- current SafeKids Spartanburg, Board Member
2012-2014 Middle Tyger Community Center, Lyman/ Board of Trustees/Member
2016-2020 Trials and Research Networks For More (TRANSFORM)-South Carolina,
PI and Physician Champions-Spartanburg Site
2018- current South Carolina Child Well-Being Coalition, Member/Spartanburg Site
Leader
2022 Family Connections of Spartanburg, SRHS, Medical Director

Major Clinical Interests:

Areas of Interest:

Respiratory Diseases in Children

Areas of Expertise:

Asthma, Airway Endoscopy, Respiratory Care Advanced Technology, Toxicology, Diabetes, Kawasaki Disease

Major Teaching Responsibilities (Current):

Undergraduate Medical Education

Osteopathic Students-VCOM Carolinas Campus

Graduate Medical Education

Family Medicine Residency Program-SRHS

Hospital Medicine Fellowship Program-SRHS

Hospice/Palliative Medicine Fellowship Program-SRHS

Graduate Studies Education

ACPNP-Vanderbilt, Alabama, USC Upstate, and Cincinnati Universities

Continuing Nursing Education

Annual Symposia-Spartanburg

Annual Pediatric Clinical Nursing Courses-SRHS

Continuing Medical Education

Pediatrics Grand Round-SRHS

Medical Staff Updates-SRHS

Fundamental of Critical Care Support-SRHS

Pediatric Intensive Care Course (PICU Boot Camp)-SRHS

VCOM Faculty Lectures/Presentations/Courses/Workshops:

Clinical Medicine-Lecture Based Teaching:

Course1: Foundation of Medicine:

Approach to a Well Child Check

Course2: Musculoskeletal System:

Congenital Disorders of Thoracic and Lumbar Spine

Congenital Disorders of Lower Extremities

Developmental Dysplasia of the Hip

Pediatric Ankle and Foot Deformities

Course3: Neurological System:

Stroke Syndromes in Children

Cerebral Palsy

Congenital Neurological Disorders in Children

Acquired Neurological Disorders in Children

New Onset Seizures in Children

Course4: Cardiopulmonary Systems:

Upper Respiratory Tract Diseases in Children

Course5: Gastrointestinal System:
Inflammatory Bowel Disease and Constipation in Children

Course6: Renal, Reproductive/Endocrine Systems:
Urinary Tract Infections in Children
Child Abuse
Immediate Care of the newborn

Course8: Comprehensive Review:
Newborn-Genetic Disorders-Comprehensive Review

Clinical Skills Courses and Workshops:

Block3:
Lumbar Puncture Clinical Skills-Course Champion and Instructor
Block3:
Pediatric Simulation-Course Director and Instructor
Block6
Neonatal Simulation-Course Director and Instructor

OMS2 Students:
Pediatric and Neonatal Boot Camp-Course Director and Instructor

OMS4 Students:
Pediatric Intensive Care Unit Boot Camp-Course Director and Instructor

Awards, Honors, Membership in Honorary Societies:

Active member of the **International High IQ Society** (2005).

Award winner of **best poster by fellow/resident** at the Dimensions of Excellence/Nesset Research Forum. Research Title “*Pharmacological Treatment of Obesity in children With and Without Hyperinsulinemia*”.

The **fourth highest score nationwide** of the Pediatric Critical Care in-service exam (MCCKAP) for the year 2004 with score of 727 (98.4%).

Spartanburg Regional Healthcare System: **Regional Respect Superstar** Banquet award, 2006, 2009, 2010

American’s Top Pediatricians: Consumer’s Research Council of America (2009-2021)

American’s Top Physicians: Consumer’s Research Council of America, 2013

Best Poster Award –Research: 2014 ACOP Spring Conference. *The Efficacy and Comparison of Non-Invasive Mechanical Ventilation (NIV) with High Flow Nasal Cannula (HFNC) Therapy in Management of Severe Respiratory Distress in Infants*

Second Place Best Research Award: 2015 AOA Annual Conference. *Assessment of Respiratory Syncytial Virus Hospitalizations Following Implementation of Updated Palivizumab Treatment Recommendations*

Clinical Faculty of the Block Award. VCOM-Carolinas Campus 2016

Preceptor of the Year 2015-2016 “Excellence in Student Clinical Education” VCOM

Third Place Best Poster-Research. *Learning to PLAY! Promoting Lifelong Activity in Youth to prevent pediatric obesity through a holistic intervention at an elementary school in South Carolina.*

2016 the American College of Osteopathic Family Physicians (ACOFPP) Annual Conference, Puerto Rico.

Best Poster Award –Research. Does Pre-Clinical Pediatric Experience Improve Competence and/or Confidence in Performance During 3rd Year Pediatric Rotations? 2017 ACOP Spring Conference

Best Oral Presentation-Clinical Research: A retrospective analysis of the impact of FilmArray respiratory panel utilization on the management of pediatric asthma exacerbations.

Megan Barcroft, OMS III; Stephanie Bland, OMS III; Kristen Turner, PharmD; Hanna S. Sahhar, MD

VCOM Research Day, March 30, 2018

ACOP - Pediatric Research & Education for **Students (PRES) 2018 Fund Award.**

PLAY - Promoting Lifelong Activity in Youth - an Osteopathic Approach to Engage Children in Physical Activity While Incorporating Step Tracking Devices

Hannah Carroll, OMS II; Kristina Freund, OMS II; Ernest Carl Von Harten, OMS II; Alexis M. Stoner, PhD; Liang Shan, PhD; Hanna S. Sahhar, MD

Second Place for best Oral Presentation-Clinical Research: Retrospective analysis of the impact of FilmArray respiratory panel utilization on the management of pediatric influenza cases

VCOM Research Day, April 13, 2019

Hannah Driscoll, OMS III; Meghan Quigley, OMS III; Kristen Turner, PharmD; Hanna S. Sahhar, MD

First Place Best Clinical Studies/Research: Kawasaki Disease: Do Early Diagnosis and Treatment Improve Outcome and Prevent Complications?

Nicole Samies, DO, Ekta Sharma, DO, Carrie Downing-Larick, MPH, OMS-IV, Devonne Gerstenacker, RN, MSN, Sami Rishmawi, MD, Hanna S. Sahhar, MD
VCOM-Carolinas Research Day, April 17, 2020

First Place Best Clinical Case-Base Reports: Invasive sinusitis with Arcanobacterium Haemolyticum and Fusobacterium Necrophorum complicated by subdural empyema in an Immunocompetent young adolescent
Erica Rubin, OMS-II, Matthew Logan, OMS-III, Sami Rishmawi, MD, Hanna S. Sahhar, MD
VCOM-Carolinas Research Day, April 17, 2020

Second Place Best Clinical Studies/Research: Multisystem Inflammatory Syndrome in Infant with Negative SARS-CoV-2 RT-PCR and Antibodies
Karly Derwitz OMS-IV
AOA/OMED 2020. October 16, 2020

First Place Best Clinical Studies/Research: A Retrospective Analysis of Human Parainfluenza Virus in the Pediatric Population
Hanna S. Sahhar, MD; Kristen Turner, PharmD; Rebecca Raffler, DO; Darcy Luck, DO; Diana Vasilakos, OMS IV; Sarah Straka, OMS IV
VCOM-Carolinas Research Day, March 19, 2021

Third Place Best Clinical Case-Base Reports. Introducing Two New Toxidromes: Antipsychotics and Atypical Antidepressants.
Mya Lor OMS-IV; Erica Rubin OMS-IV; Hanna S. Sahhar, MD, FAAP, FACOP
VCOM-Carolinas Research Day, March 19, 2021

Best Poster Award –Research. Multisystem Inflammatory Syndrome in Children (MIS-C). Is it Kawasaki-like Syndrome or SARS-CoV-2 Triggered Kawasaki Disease
Hanna S. Sahhar, MD, FAAP, FACOP; Bhuvna Mahajan, OMS II; Nicole Rosenberg, OMS III
ACOP-Spring Conference, April 8, 2021

2021 Researcher of The Year. Edward Via College of Osteopathic Medicine-Carolinas

Top Five Stars (Best Presentation Award). 2021 VCOM Research Retreat. Edward Via College of Osteopathic Medicine. Hilton Head, SC December 3, 2021.

First Place Best Research, Oral and Poster Presentation Award. Epstein Barr Virus Positive Kawasaki Disease with False Positive SARS-CoV-2 Antibodies in the Era of COVID-19 pandemic
Rebecca Basch, OMS IV, Kaitlin Downes, OMS IV, Hanna S. Sahhar, MD, FAAP, FACOP
VCOM-Carolinas Research Day, February 11, 2022

Second Place Best Research and Poster Presentation Award. Pediatric intensive care unit boot camp: a preparatory course for intern year
Vivian Louviere, OMS III; Lauren Dunn, OMS III; Nicholas Gavin, OMS III; Hanna S. Sahhar, MD, FAAP, FACOP
VCOM-Carolinas Research Day, February 11, 2022

Outstanding Clinical Faculty of the Year 2022. Edward Via College of Osteopathic Medicine-Carolinas

Best Poster Award-Case Study Research. Human Paraechovirus (HPeV) Meningoencephalitis in an 8-day-old infant
Nicole Ivan, OMS-III; Katlin Hencak, OMS-III; Hanna S. Sahhar, MD
ACOP-Spring Conference, Louisville, KY, April 30, 2023

Lectures and Presentations:

Invited lectures and presentations

- Clinical Faculty, Caritas Baby Hospital / Nursing School.
October 1995- April 1999. *Anatomy*
- Clinical Faculty, Nursing Training Center in Jerusalem.
October 1996- March 1999. *Anatomy and Physiology*
- Speaker, Pediatric Critical Care Nursing Class. Hope Children's Hospital
July and December 2000. *Chest Tubes and Pneumothorax*
- Speaker, Pediatric Advance Life Support. Hope Children's Hospital
March, April, June and October 2001: *Integration of Shock and Respiratory Failure*
May 2001: *Trauma*
September 2001: *Recognition of Respiratory Failure and Shock*
- Instructor, Advanced Training Skills Lab. Hope Children's Hospital
March and October 2001
- Speaker, PICU lectures for First Year Residents. Hope Children's Hospital
June 2001, 2002 and 2003: *Status Asthmaticus.*
 - *Mechanical Ventilation.*
- Invited Speaker, Caritas Baby Hospital, Bethlehem Palestine
April 2005: *Status Asthmaticus.*
 - *Emergency Procedures.*
 - *Recognition of Shock and cardiopulmonary failure.*

- *Multiorgan Dysfunction Syndrome/Multiorgan System Failure (MODS/MOSF) Case Presentation*
- Fundamental Critical Care Support, Instructor 2002 (Active). 2005-2017. Pediatric Considerations (Lecture)
 - Pediatric Mechanical Ventilation skills (Workshop).
- Speaker, CME, Pediatrics Grand Rounds. Spartanburg Regional Healthcare System
June 2006. *Guidelines for Management of Status Asthmaticus.*
- Speaker/Panel Participant, CME, PICU Grand Round. Spartanburg Regional Healthcare System
August 2006. *PICU Trauma Patient "From the Scene to Discharge"*
- Speaker, Organizer, Planner, CME, First Annual Pediatric Critical Care Symposium. Spartanburg Regional Healthcare System/Children's Regional Health. November 2006. *Status Asthmaticus*
- Speaker, CME, Pediatrics Grand Rounds. Spartanburg Regional Healthcare System
February 2007. *Guidelines for Management of Diabetic Ketoacidosis in Children.*
- Organizer and Planner, CME, Second Annual Pediatric Symposium. Spartanburg Regional Healthcare System/Children's Regional Health. May 2007.
- Invited Speaker, Caritas Baby Hospital, Bethlehem Palestine, Educational 3 days
September 2007: *Status Asthmaticus, Noisy Breathing in Children, Pediatric Emergency Medications, Status Epilepticus, Innovative Respiratory Care, ARDS and HFOV*
- Speaker, CME, Pediatric Grand Round. Spartanburg Regional Healthcare System
October 2007. *Noisy Breathing in Children*
- Invited Speaker, Emergency Department Staff, Spartanburg Regional
January 2008: *Cuffed vs. Uncuffed ETT in Children*
- Speaker, Organizer, Planner, CME, Second Annual Pediatric Critical Care Symposium. Spartanburg Regional Healthcare System/Children's Regional Health.
April 2008: *Noisy Breathing in Children*

- Speaker, CME, Pediatric Grand Round. Spartanburg Regional Healthcare System
October 2008. *Laryngomalacia and Subglottic Stenosis*
- Invited Speaker, Emergency Department Staff, Spartanburg Regional
December 2008: *Helium-Oxygen (Heliox) Therapy in Children*
- Speaker, CME, Pediatric Grand Round. Spartanburg Regional Healthcare System
February 2009. *Heliox Treatment in Severe Respiratory Distress*
- Organizer and Planner, CME, Third Annual Pediatric Symposium.
Spartanburg Regional Healthcare System/Children's Regional Health.
April 2009.
- Invited Speaker, Emergency Department Staff, Spartanburg Regional
May 2009: *Nitrous Oxide*
- Speaker, CME, Pediatric Grand Round. Spartanburg Regional Healthcare System
June 2009. *Drowning*
- Pediatric Fundamental Critical Care Support, Instructor 2009 (Active).
- Speaker, Organizer, Planner, CME, Third Annual Pediatric Critical Care Symposium. Spartanburg Regional Healthcare System/Children's Regional Health.
April 2010: *Initial Assessment of the Critically Ill Child*
- Speaker, CME, Pediatrics Grand Round. Spartanburg Regional Healthcare System
June 2010. *Kawasaki Disease*
- Invited Speaker, Anesthesia Department Staff, Spartanburg Regional
December 2010: *AHA 2010 CPR ECC Guideline Review & Update*
- Speaker/Panel Participant, Organizer, planner, CME, PICU Grand Round. Spartanburg Regional Healthcare System
March 2011. *A PICU Success Story "From Harm to Healing"*
- Organizer and Planner, CME, Fourth Annual Pediatric Symposium.
Spartanburg Regional Healthcare System/Children's Regional Health.
April 2011.

- Speaker, Organizer/Director, Planner, Nursing CE. Pediatric Clinical Nursing Conference. Spartanburg Regional Healthcare System.
May, June, July 2011. *Seizures, Respiratory Distress, Congenital Heart Disease/Heart sounds and Murmurs.*
- Speaker, CME, Pediatrics Grand Round. Spartanburg Regional Healthcare System
July 2011. *AHA 2010 CPE ECC Guidelines Updates and Review*
- Invited Speaker, Emergency Medical Services, Spartanburg County
August 2011: *Keys to Successful Resuscitations*
- Invited Speaker, SC Society for Respiratory Care, Piedmont Region, Education Forum
February 2012: *Advances in Management of Severe Respiratory Distress in Children*
- Invited Speaker, Department of Respiratory Care, Spartanburg Regional.
April 2012: *Respiratory Distress, Advanced Technology*
- Speaker, Organizer, Planner, CME, Fourth Annual Pediatric Critical Care Symposium. Spartanburg Regional Healthcare System/Children's Regional Health.
April 2012: *Airway Management Skill Station*
- Invited Speaker, Emergency Medical Services, Spartanburg County
May 2012: *Pediatric Emergency Transport: Be Prepared, Always Be Ready*
- Invited Speaker, CME, Pediatrics Grand Round. Spartanburg Regional Healthcare System
July 2012. *Seizures in Children-Clinical Approach*
- Organizer and Planner, CME, Fifth Annual Pediatric Symposium. Spartanburg Regional Healthcare System/Children's Regional Health.
April 2013.
- Invited Speaker, CME, Pediatrics Grand Rounds. Spartanburg Regional Healthcare System
July 2013. *Seizures in Children*
- Invited Speaker, CME, Second Annual Summer Workshop, Spartanburg County School Nurses. Spartanburg Regional Healthcare System/Children's Regional Health.
August 2013: *Concussion in Schools*

- Organizer and Planner, CME, Fifth Annual Pediatric Critical Care Symposium. Spartanburg Regional Healthcare System/Children's Regional Health.
April 2014
- Invited Speaker, CME - Palliative and Hospice Medicine Fellowship Program. Spartanburg Regional Healthcare System
June 2016 and June 2017. Pediatric Palliative and Hospice Care in Children-
The Basics.
- Speaker, CME, Pediatrics Grand Round. Spartanburg Regional Healthcare System
March 2017. *Kawasaki Disease. A Clinical review*
- Organizer, Speaker, and Planner. Nursing Continuing Education (10.08 contact credit hours). Spartanburg Regional Healthcare System.
June 2018. *Pediatric Intensive Care Course*
- Speaker, CME, Pediatric Grand Round. Spartanburg Regional Healthcare System.
June 2018. *Seizures in Children. 2017 New Classifications*
- Speaker, CME, Pediatric Grand Round. Spartanburg Regional Healthcare System.
September 2018. *Status Diabeticus Management Guidelines*
- Speaker, CME, Pediatric Care Symposium. Spartanburg Regional Healthcare System/Regional Children's Health.
November 2018. *Types of Seizures in Children*
- Director, Speaker, and Course developer. Nursing Continuing Education (10.08 contact credit hours) and Physician Continuous Medical Education (8 contact hours). Spartanburg Regional Healthcare System.
December 2019. *Pediatric Intensive Care Course (PICU Boot Camp)*
- Invited Speaker, South Carolina Osteopathic Medical Society (SCOMS)-2021 Winter CME Conference.
February 2021. *Management Guidelines of Status Asthmaticus in Children*
- Director, Speaker, and Course developer. Second Year Osteopathic Medical Students. Credit hours 0.5 (8 contact hours). Edward Via College of Osteopathic Medicine
April 2021. *Pediatric and Neonatal Skills Course (Peds-Neo Boot Camp)*

- Invited Speaker, CME. 2021 VCOM Research retreat. Credit hours 1 (1 contact hour). Edward Via College of Osteopathic Medicine December 2021. *Engaging DO Students in Research*
- Director, Speaker, and Course developer. Nursing Continuing Education (5.5 contact credit hours). Spartanburg Regional Healthcare System. September 2022. *Pediatric Acute and Critical Care Refresher Course*
- Invited Panelist Speaker, CME. 2022 VCOM Research retreat. Credit hours 1 (1 contact hour). Edward Via College of Osteopathic Medicine November 2022. *How to Conduct Medical Research in a Busy Clinical Practice*
- Director, Speaker, and Course developer. ***PICU Boot Camp course (VCOM Course# MED 8163)***: for AY2022-2023 the course is delivered monthly for OMS-IV students rotating in PICU from all VCOM campuses (Total 40-50 students per year)
- Director, Speaker, and Course developer. ***Virtual PICU Course***: for AY 2022-2023, some OMS-IV VCOM students of all campuses took the elective online course developed and implemented by Dr. Hanna Sahhar and earned 4 academic credit hours.
- Director, Speaker, and Course developer. ***Pediatric Acute and Critical Care Refresher Course***: Twenty-Two pediatric nurses and respiratory therapists participated in the 5.5 hours on-site course on September 12th and 13th, 2022. They earned 5.5 CE hours.
- ***Lumbar Puncture Clinical Skills Workshop***: for AY 2022-2023, the Sahhar adopted the role of ***Course champion***, prepared all the course materials for the students and instructors, delivered the faculty development session for all the course instructors. The instructor led lab session was delivered February 6 and 7, 2023 for all 1st year VCOM Carolinas students.
- Director, Speaker, and Course developer. Second Year Osteopathic Medical Students. Certificate of Completion (8 contact hours). Edward Via College of Osteopathic Medicine- Carolinas Campus April 2023. *Pediatric and Neonatal Skills Course (Peds-Neo Boot Camp)*
- Director, Speaker, and Course developer. ***Pediatric Acute and Critical Care Refresher Course***: Twenty-Two pediatric nurses and respiratory therapists participated in the 4.5 hours on-site course on November 1st and 2nd, 2023.
- Director, Speaker, and Course developer. ***PICU Boot Camp course (VCOM Course# MED 8163)***: for AY2023-2024 the course is delivered monthly for OMS-

IV students rotating in PICU from all VCOM campuses (Total of 40 students participated and completed the course)

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Submitted presentations (Abstracts and Posters)

- *Pharmacological Treatment of Hyperinsulinemia Obesity Syndrome in children.*
Published in: The Journal of Advocate Health Care, spring/summer 2003, Vol. 5, No.1

Presented as a poster in the 3rd Annual Dimension of Excellence Conference.

Published in: The Endo 2003 Research Book Summaries.

Presented as a Poster in the Endocrine Society's 85th Annual Meeting.

Published in: The Journal of Pediatric Research. 2003 Vol. 54, No. 5.

Presented as a poster in the 44th Annual Midwest Society for Pediatric Research Meeting.

- *Pharmacological Treatment of Obesity in children With and Without Hyperinsulinemia.*

Published in: The Abstract Book of the 4th Annual Dimensions of Excellence Conference (2004).

Presented as a poster in the conference as a part of the 12th Annual Nessel Research Forum.

Published in: A Supplemental Issue of Pediatric Research Journal 2004.

Presented as a poster in the 2004 Pediatric Academic Societies' Annual Meeting.

- *The Anti-Inflammatory And Hemodynamic Effects Of Milrinone Following Endotoxin Challenge – A Placebo-Controlled, Blinded, Randomized Study.*

Published in: *Pediatr Crit Care Med*-01-JUL-2003;4(3)(SUPPL.): A137-8.

Presented as a poster in the 4th Annual Dimensions of Excellence Conference (2004), as a part of the 12th Annual Nessel Research Forum.

- *Prospective, Randomized Comparison of Continuous Nebulized Racemic- Albuterol with Levalbuterol in Pediatric Patients.*

Published in *JAOA*, August 2012, Volume 112, Number 8, Page 548

Presented as a poster in American Osteopathic Association Research Conference- Abstracts, 2012, San Diego, CA Poster #C28

- *Kawasaki Disease: Do Early Diagnosis and Treatment improve Outcome and Prevent Complications?*

Published in: The Journal of the American Osteopathic Association, January 2014, Volume 114, Number 1, page e18

Presented as a poster at the 57th AOA Annual Research Conference and the AOA's Osteopathic Medical Conference & Exposition (OMED) 2013, Las Vegas, NV Poster #S47

- *Comparison of Invasive Mechanical Ventilation with Non-Invasive Ventilatory Support Modalities in Management of Severe Respiratory Distress in Infants*

Presented as a poster at the 2014 ACOP Spring Conference, Kansas City, MO

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Spring 2014, Volume 6, Number 3

- *The Efficacy and Comparison of Non-Invasive Mechanical Ventilation (NIV) with High Flow Nasal Cannula (HFNC) Therapy in Management of Severe Respiratory Distress in Infants*

Presented as a poster at the 2014 ACOP Spring Conference, Kansas City, MO

Awarded Best Poster for Research.

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Spring 2014, Volume 6, Number 3

- *Permissive Hypercapnia: An Acceptable Prevention of Ventilator-Associated Acute Inhalation Injury in the Presence of Carbon Monoxide Poisoning and Acute Lung Injury Secondary to Smoke Inhalation*

Presented as a poster at the 2014 ACOP Spring Conference, Kansas City, MO

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Spring 2014, Volume 6, Number 3

- *Effectiveness of Heliox as adjunct therapy with High Flow Nasal Cannula (HFNC) in Children with Respiratory Distress*

Presented as a poster at the 2015 ACOP Spring Conference, Fort Lauderdale, FL

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Summer 2015, Volume 7, Number 4

- *A New Insight to the Cause of Oculo-Auriculo-Vertebral Spectrum. A Case Report.*

Presented as a poster at the 2015 ACOP Spring Conference, Fort Lauderdale, FL

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Summer 2015, Volume 7, Number 4

- *Evaluation of the efficacy of Diabetic Ketoacidosis (DKA) management protocol in correcting the Metabolic Acidosis and Dehydration*

Presented as a poster at the Florida Chapter of the American Academy of Pediatrics (FCAAP) and Pediatric Students Research Forum, Orlando FL, 2015.

- *Diabetic Ketoacidosis (DKA) management and through put time in the Emergency Department*

Presented as a poster at the Florida Chapter of the American Academy of Pediatrics (FCAAP) and Pediatric Students Research Forum, Orlando FL, 2015.

- *Treatment and Medical management of infants with Bronchiolitis: Effect of guideline implementation on Length of Stay, Transfer Rate to Critical Care and Cost*
Presented as a poster at the Florida Chapter of the American Academy of Pediatrics (FCAAP) and Pediatric Students Research Forum, Orlando FL, 2015.

- *Idiopathic Idiosyncrasies in a Pediatric Patient. A Case Report*
Presented as a poster at the Florida Chapter of the American Academy of Pediatrics (FCAAP) and Pediatric Students Research Forum, Orlando FL, 2015.

- *Malignant Hyperthermia in a Patient with Freeman-Sheldon Syndrome Complicated by Severe Bronchospasm. A Case Report*
Presented as a poster at the Florida Chapter of the American Academy of Pediatrics (FCAAP) and Pediatric Students Research Forum, Orlando FL, 2015.

- *Assessment of Respiratory Syncytial Virus Hospitalizations Following Implementation of Updated Palivizumab Treatment Recommendations*
Published in: The Journal of the American Osteopathic Association, December 2015, Volume 115, Number 12, page e84
Presented as a poster at the 58th Annual American Osteopathic Association (AOA) Research Conference and the AOA's Osteopathic Medical Conference & Exposition (OMED) 2015, Orlando, FL Poster #C24
Awarded Second Place Best Poster for Research.

- *Comparison and Evaluation of Immunofluorescence Assay and Polymerase Chain Reaction methods in detecting Respiratory Viruses in Pediatric Patients*
Published in: The Journal of the American Osteopathic Association, December 2015, Volume 115, Number 12, page e104
Presented as a poster at the 58th Annual American Osteopathic Association (AOA) Research Conference and the AOA's Osteopathic Medical Conference & Exposition (OMED) 2015, Orlando, FL Poster #C40

- *Effectiveness of Heliox as adjunct therapy with High Flow Nasal Cannula (HFNC) in Children with Respiratory Distress*
Presented as a poster and Theater Snapshot at the 2016 45th Annual Critical Care Congress Orlando, FL (#725)
Published in: The Journal of Critical Care Medicine- Crit Care Med 2015. Volume 43. Number 12 (Suppl.)

- *Learning to PLAY! Promoting Lifelong Activity in Youth to prevent pediatric obesity through a holistic intervention at an elementary school in South Carolina.*
Poster and Study was presented April 6, 2016 at the American College of Osteopathic Family Physicians (ACOF) Annual Conference in Puerto Rico
Awarded Third Place Best Poster-Research.

- *Modified Whipple on a 2-Year-Old Child with Pancreatic Transection and Duodenal Rupture Following a Motor Vehicle Accident*

Presented at 2017 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Louisville, KY and at VCOM Research Day, April 7, 2017

- *Does Pre-Clinical Pediatric Experience Improve Competence and/or Confidence in Performance During 3rd Year Pediatric Rotations?*

Presented at 2017 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Louisville, KY and at VCOM Research Day, April 7, 2017

Awarded Best Poster for Research.

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Fall 2017, Volume 10, Number 1

- *Infectious Mononucleosis in a 17-month-old male manifesting as persistent fever, lymphocytosis, lymphadenopathy, bilateral otitis media, and unilateral facial palsy*

Presented at 2017 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Louisville, KY and at VCOM Research Day, April 7, 2017

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Fall 2017, Volume 10, Number 1

- *Continuing to PLAY (Promoting Lifelong Activity in Youth). An Osteopathic Approach to Preventing Childhood Obesity.*

Presented at 2017 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Louisville, KY and at VCOM Research Day, April 7, 2017

Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Fall 2017, Volume 10, Number 1

- *Evaluation of the Accuracy of Temporal Artery Thermometer in Children.*

The study was presented as a poster at "International Conference on Nursing Science & Practice", Dallas, TX April 26, 2017.

- *Evaluation of Lumbar Puncture Assist Tool (LPat®) as a guide and training tool for successful lumbar Puncture.*

The study was presented as a poster at "VCOM Research Retreat and Conference", Asheville, NC November 11, 2017.

- *Human Metapneumovirus Causing Pertussis-like Syndrome. First Reported Case in Medical Literature.*

Presented at 2018 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Fort Myer, FL and at VCOM Research Day, March 30, 2018

- *Silver-Russell Syndrome in the Pediatric Population: A Phenotypic Comparison and Differentiation of Patient Presentations*

Presented at VCOM Research Day, March 30, 2018

- *PLAY - Promoting Lifelong Activity in Youth - an Osteopathic Approach to Engage Children in Physical Activity While Incorporating Step Tracking Devices*

Presented at 2018 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Fort Myer, FL and at VCOM Research Day, March 30, 2018
Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Winter-Spring 2018, Volume 10, Number 2

- *A retrospective analysis of the impact of FilmArray respiratory panel utilization on the management of pediatric asthma exacerbations*

Presented at 2018 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Fort Myer, FL and at VCOM Research Day, March 30, 2018, and at South Carolina Medical Association (SCMA) 2018 Annual Conference, Greenville, SC
Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Winter-Spring 2018, Volume 10, Number 2

- *Retrospective analysis of the impact of FilmArray respiratory panel utilization on the management of pediatric influenza cases*

Presented at 2019 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Pittsburgh, PA and at VCOM Research Day, April, 26 2019
Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Summer 2019, Volume 11, Number 3

- *Effectiveness of continuous nebulization treatment of bronchodilation in patient admitted to PICU diagnosed with acute bronchiolitis*

Presented at 2019 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Pittsburgh, PA and at VCOM Research Day, April, 26 2019
Published in: The electronic Journal of the American College of Osteopathic Pediatricians-eJACOP, Summer 2019, Volume 11, Number 3

- *Measles in an Infant*

Presented at 2019 Spring Conference of the American College of Osteopathic Pediatricians (ACOP), Pittsburgh, PA and at VCOM Research Day, April, 26 2019
Published in: Journal of Osteopathic Family Physicians (OFP)

- *Kawasaki Disease: Do Early Diagnosis and Treatment Improve Outcome and Prevent Complications?*

Nicole Samies, DO, Ekta Sharma, DO, Carrie Downing-Larick, MPH, OMS-IV, Devonne Gerstenacker, RN, MSN, Sami Rishmawi, MD, Hanna S. Sahhar, MD
Presented at VCOM-Carolinas Research Day, April 17, 2020

- *Invasive sinusitis with Arcanobacterium Haemolyticum and Fusobacterium Necrophorum complicated by subdural empyema in an Immunocompetent young adolescent*

Erica Rubin, OMS-II, Matthew Logan, OMS-III, Sami Rishmawi, MD, Hanna S. Sahhar, MD

Presented at VCOM-Carolinas Research Day, April 17, 2020

- *A Qualitative Analysis of the Use of Step Trackers to Measure Physical Activity in Children*

Erin R. Christensen, John C. Efstathiades, Benjamin D. Tift, Alexis M. Stoner Ph.D, Hanna S. Sahhar, M.D.

Presented at VCOM-Carolinas Research Day, April 17, 2020

- *High Index of Suspicion for Congenital Adrenal Hyperplasia in Infants presenting in Shock*

Wesley Shane, OMS-IV, Sami Rishmawi, MD, Hanna S. Sahhar, MD

Presented at VCOM-Carolinas Research Day, April 17, 2020

- *Multisystem Inflammatory Syndrome in Infant with Negative SARS-CoV-2 RT-PCR and Antibodies*

Hanna S. Sahhar, MD, FAAP, FACOP; Karly Derwitz, OMS-IV; Erica Rubin, OMS-IV

(Presented as poster/virtual oral presentation at AOA/OMED 2020 Conference on October 14, 2020) Poster# C26

Published in: Journal of Osteopathic Family Physicians (OFP)

- *Usability of Step Trackers to Measure Physical Activity in Children*

Erin R. Christensen, John C. Efstathiades, Benjamin D. Tift, Alexis M. Stoner Ph.D, Hanna S. Sahhar, M.D.

(Presented as poster/virtual oral presentation at AOA/OMED 2020 Conference on October 14, 2020) Poster# B23

- *A Retrospective Analysis of the Impact of FilmArray Respiratory Panel Utilization on the Management of Pediatric Influenza*

Hannah Carroll Driscoll, OMS-IV, Meghan Quigley, OMS-IV, Kristen Turner, PharmD, BCPS, BCPPS, Hanna S. Sahhar, MD, FAAP, FACOP

Presented as oral presentation at VCOM Research Day, April 13, 2019

Published in: Clinical Pediatrics-Open Access

- *Effectiveness of Heliox as Adjunct Therapy with High Flow Nasal Cannula (HFNC) in Pediatric Intensive Care Unit Patients with Respiratory Distress*

Hanna S. Sahhar, MD, Sami Rishmawi, MD, Carrie A. Downing-Larick, MPH, DO, Elizabeth W. Barnhardt, DO, Jessica Gancar, DO, Elizabeth Gantan, DO, Mary Keith, DO, and Julia Killingsworth, DO

In-Press: Journal of American Osteopathic association

- *Arthrocentesis in Pediatric Septic Arthritis of the Knee. A Case Report*

Kaitlyn Wright, OMS-IV; Daniel Schleppehorst, OMS-IV; Hanna S. Sahhar, MD

(Presented as poster/virtual oral presentation at AOA/OMED 2020 Conference on October 14, 2020) Poster# H17

- *A Retrospective Analysis of Human Parainfluenza Virus in the Pediatric Population*

Hanna S. Sahhar, MD; Kristen Turner, PharmD; Rebecca Raffler, DO; Darcy Barr, DO; Diana Vasilakos, OMS IV; Sarah Straka, OMS IV

(Presented as poster/virtual oral presentation at AOA/OMED 2020 Conference on October 14, 2020) Poster# C13 at VCOM-Carolinas Research Day, March 19, 2021
Published in: Clinical Pediatrics-Open Access

- *Evaluation of the Diabetic Ketoacidosis Management in the Critically Ill Children and Adolescents*

Mackenzie Dreher, OMS-IV, MPH; Brittany Skaggs, OMS-IV; Christine Angeles, OMS-IV; Jacob Andrews, OMS-IV; Alyssa DaVolio, OMS-IV; Ning Cheng, MS, PhD; Hanna S. Sahhar, MD, FAAP, FACOP

(Presented as poster/virtual oral presentation at AOA/OMED 2020 Conference on October 14, 2020) Poster# C75 and at VCOM-Carolinas Research Day, March 19, 2021

- *Evaluation of the Emergency Department Management of Children with Diabetic Ketoacidosis*

Alyssa DaVolio, OMS-IV; Jacob Andrews, OMS-IV; Brittany Skaggs, OMS-IV; Christine Angeles, OMS-IV; Mackenzie Dreher, OMS-IV, MPH; Ning Cheng, MS, PhD; Hanna S. Sahhar, MD, FAAP, FACOP

(Presented as poster/virtual oral presentation at AOA/OMED 2020 Conference on October 14, 2020) Poster# C14 and at VCOM-Carolinas Research Day, March 19, 2021

- *New onset ischemic cerebellar infarction secondary to multi-vessel occlusion in sixteen-year-old male: a case report*

Gretel Rodriguez, OMS-IV; Emily Medhus, OMS-IV; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, March 19, 2021

- *Introducing Two New Toxidromes: Antipsychotics and Antidepressants*

Mya Lor, OMS-IV; Erica Rubin, OMS-IV; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, March 19, 2021

- *A Pediatric Case of Orbital Cellulitis with Pansinusitis and Subperiosteal Abscess*

Karly Derwitz, OMS-IV; Kelly Ward, OMS-IV; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, March 19, 2021

Published in: Journal of Osteopathic Family Physicians (OFP)

- *Aeromonas hydrophila* and *Klebsiella pneumoniae* Septic Arthritis in a Pediatric Patient
Kaitlyn Wright, OMS-IV; Daniel Schleppehorst, OMS-IV; Hanna S. Sahhar, MD
Presented as poster at ACOP-Spring Conference , April 8, 2021 and at VCOM-Carolinas Research day March 19, 2021.
Published in: The electronic Journal of the American College of Osteopathic

- *Respiratory Syncytial Virus (RSV) associated with Syndrome of Inappropriate Antidiuretic Hormone (SIADH) in Pediatric Patients. A Case Report*
Megan Donaldson, OMS-III; Katelyn Hernandez, OMS-III; Hanna S. Sahhar, MD
Presented as poster at ACOP-Spring Conference , April 8, 2021 and at VCOM-Carolinas Research day March 19, 2021.
Published in: The electronic Journal of the American College of Osteopathic

- *The Impact of Early Intravenous Immunoglobulin Treatment on Coronary Artery Disease in Children with Kawasaki Disease*
MacKenzie LeMay, OMS IV; Ning Cheng, PhD; Jessica Resnick, OMS III, Lucas Hooks, OMS III; Hanna S. Sahhar, MD, FAAP, FACOP;
Presented as poster at ACOP-Spring Conference , April 8, 2021 and at VCOM-Carolinas Research day March 19, 2021.

- *A Multisystem Inflammatory Syndrome in Children (MIS-C). Is it Kawasaki-like Syndrome or SARS-CoV-2 Triggered Kawasaki Disease*
Hanna S. Sahhar, MD, FAAP, FACOP; Bhuvna Mahajan, OMS II; Nicole Rosenberg, OMS III
Presented as poster at ACOP-Spring Conference, April 8, 2021 and at VCOM-Carolinas Research day March 19, 2021.
 - The Clinical Characteristics of coronavirus subtypes infection in the pediatric population
Hanna S. Sahhar, MD, FAAP, FACOP; Adalee Gardner, OMS III; Samantha Hlebak, OMS III; Hannah Simpson, OMS III
Presented as poster at VCOM-Carolinas Research Day, February 11, 2022

 - Pediatric and Neonatal Boot Camp: A Preparatory Course for Pediatric Clinical Rotations
Abby Kabo, OMS III; OMS III, Emma Hand, OMS III; Hanna S. Sahhar, MD, FAAP, FACOP;
Presented as Oral presentation at VCOM-Carolinas Research Day, February 11, 2022, and at the AACOM Annual Conference in Denver, CO, in April 27, 2022

 - Pediatric intensive care unit boot camp: a preparatory course for intern year
Vivian Louviere, OMS III; Lauren Dunn, OMS III; Nicholas Gavin, OMS III; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, February 11, 2022, and at the AACOM Annual Conference in Denver, CO, in April 27, 2022

Awarded Second Place for Best Research and Poster Presentation at VCOM Carolinas Research Day.

- Epstein Barr Virus Positive Kawasaki Disease with False Positive SARS-CoV-2 Antibodies in the Era of COVID-19 pandemic

Rebecca Basch, OMS IV, Kaitlin Downes, OMS IV, Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, February 11, 2022

Awarded First Place for Research Presentation. Both Poster and Oral Presentation at VCOM Carolinas Research Day.

- Group A Streptococcal Infection Triggering Kawasaki Disease in a Two-Year-Old African American Female

Katherine Bohn, OMS III; Madison Capotosti, OMS III; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, February 11, 2022, and at ACOP-Spring Conference in Miramar Beach, FL, May 19, 2022

- Pneumonia and Respiratory Syncytial Virus Bronchiolitis in a patient with Au-Kline Syndrome

Juliana Mavellia, OMS IV; Ryan Holub-Ward, OMS IV; Sami Rishmawi, MD, FAAP; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, February 11, 2022

- Pyloric Stenosis: a Clinical or Radiographic Diagnosis?

Lucas Hooks, OMS IV; Alex Gabe, OMS III; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, February 11, 2022

- Systemic Inflammatory Response Syndrome (SIRS) triggered by Human Metapneumovirus (hMPV)

Linzee Clark, OMS III; Melissa Saganich, OMS III; Jaime Brown, MD; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Carolinas Research Day, February 11, 2022, and at ACOP-Spring Conference in Miramar Beach, FL, May 19, 2022

- Human Metapneumovirus Induced Syndrome of Inappropriate Antidiuretic Hormone Secretion in an Infant

William Kenan, OMS III; Abby Kabo, OMS III; Adarsh Kancharla, MD; Hanna S. Sahhar, MD, FAAP, FACOP

Presented as poster at VCOM-Auburn Research Day, February 18, 2022, and at ACOP-Spring Conference in Miramar Beach, FL, May 19, 2022

- Preliminary Investigation of Intravitreal Anti-VEGFs Injection of

Bevacizumab for the Treatment of Retinopathy of Prematurity
Alexandra Gaither, Geethika Malla, OMS III; OMS III; Laura Mann, OMS III;
Hanna S. Sahhar, MD, FAAP, FACOP
Presented as poster at ACOP-Spring Conference in Miramar Beach, FL, May 19,
2022

- Generalized Tetanus in a Pediatric Patient
Abby Kabo, OMS III; William Kenan. OMS III; Hanna S. Sahhar, MD, FAAP,
FACOP
Presented as poster at ACOP-Spring Conference in Miramar Beach, FL, May 19,
2022

- The incidence of respiratory syncytial virus bronchiolitis and concomitant
urinary tract infection (UTI) in young infants
Wesley Gregory, OMS-IV; Luke Saunders, OMS-IV; Samantha Houston, OMS-III;
David Redden, PhD; Sami Rishmawi, MD; Hanna S. Sahhar, MD
Presented as poster at OMED-22 Conference in Boston, MA, October 27, 2022, and
VCOM-Carolinas Research Day, February 10, 2023

- Human Paraechovirus (HPeV) Meningoencephalitis in an 8-day-old infant
Hanna S. Sahhar, MD; Nicole Ivan, OMS-III; Katlin Hencak, OMS-III
Presented as poster at VCOM-Carolinas Research Day, February 10, 2023, and at
ACOP-Spring Conference in Louisville, KY, April 30, 2023

- Periapical Abscess Management in Children and Adults
Hanna S. Sahhar, MD; Josephine Bolin, OMS-IV; Caitlin Lazurick-Gann, OMS-IV
Presented as poster at VCOM-Carolinas Research Day, February 10, 2023

- Calcium Channel Blocker “Amlodipine” Overdose causing ARDS and AKI
Hanna S. Sahhar, MD; Larsen Welch, OMS-III, Jeremy Bose, OMS-III
Presented as poster at ACOP-Spring Conference in Louisville, KY, April 30, 2023

- Verrucous Epidermal Nevus in a Newborn-Visual and Differential Diagnosis
Hanna S. Sahhar, MD; Alicia Yin, OMS-III; Mackenzie, OMS-III
Presented as poster at ACOP-Spring Conference in Louisville, KY, April 30, 2023

- New onset ischemic cerebellar infarction secondary to multi-vessel occlusion in
sixteen-year-old male: a case report
Alexandra Zapp, OMS-IV; Blair Starling, OMS-II; Gretel Rodriguez, DO; Emily
Medhus, DO; Hanna S. Sahhar, MD
Presented as poster at ACOP-Spring Conference in Louisville, KY, April 30, 2023

- Provetella Denticola Dacryocystitis and Abscess in a Child with Goldenhar
Syndrome

Karen Yang, OMS-III; Jessica Oleske, OMS-III; Sami Rishmawi, MD; *Hanna S. Sahhar, MD*

Presented as poster at ACOP-Spring Conference in Louisville, KY, April 30, 2023

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Publications:

Peer Reviewed Journal Articles:

- Sahhar HS, Mara S, Shahid R, Akhter J. *Juvenile Xanthogranuloma: A rare cause of Subglottic Cyst and Stenosis*. Ear Nose Throat J. 2003 Sep;82(9): 725-6.
- Sahhar HS, Mara S, Boyd C⁺, Akhter J. *Ectopic Subglottic Thymic Cyst: a rare cause of Congenital Stridor*. Ear Nose Throat J. 2003 Nov;82(11): 873-4.
- Akhter J, Sahhar HS. *Flexible Fiberscope Directed Removal of Mucus Plugs in a Child with Plastic Bronchitis*. J Bronchol 2004 Apr;11(2): 112-4.
- Sahhar HS, Cantrell K. *A Sticky Situation: Type I (inflammatory) Plastic Bronchitis in infant treated with aerosolized Tissue Plasminogen Activator. A Case report*. ACOP-eJournal, Spring 2012, Vol. 4, No. 3
- Hays J, Sahhar HS. *HELIOX: Help or Hindrance? The use of Heliox in the Pediatric ICU Setting*. ACOP-eJournal, July 2012, Vol. 4, No. 4
- Barrick CJ, Thompson MM, Sahhar HS. *Bordetella bronchiseptica in an Immunocompetent Infant with No Known Animal Exposure Later Diagnosed with Autism Spectrum Disorder. A Case Report*. ACOP-eJournal, Spring 2013, Vol. 5, No. 3
- Turner H, Taylor M, Sahhar HS. *Severe Interstitial Lung Disease (ILD) in an infant with Respiratory Syncytial Virus (RSV) Infection. A Case Report*. ACOP-eJournal, Fall 2013, Vol. 6, No. 1
- Howard AC, Sahhar HS. *Henoch-Schönlein Purpura (HSP) in a 44-Day-Old Female Infant*. ACOP-eJournal, Summer 2014, Vol. 6, No.4
- Sahar NH, Lusher E, Monaghan SB, Sahhar HS. *Salmonella Schwarzengrund-Induced Meningitis and Septicemia in a Seven-Week-Old Infant*. ACOP-eJournal, Spring 2015, Vol. 7, No. 3
- Mains ND, Sahhar HS. *Bronchiolitis Obliterans Organizing Pneumonia (BOOP) in a 12 year-old adolescent male*. ACOP-eJournal, Spring 2016, Vol. 7, No. 6

- Sahhar HS, Barcroft M, Farber S (2017) *Human Metapneumovirus Causing Pertussis-like Syndrome*. Clin Pediatr 2: 124. doi:10.4172/2572-0775.1000124
- Hyser E, Sahhar HS, Woollen C. *Modified Whipple on an 18-month-old with traumatic pancreatic transection and duodenal rupture*. Trauma Case Reports 23 (2019) 100241. doi.org/10.1016/j.tcr.2019.100241
- Reynolds C, Januchowski R, Sahhar H. *Rash on a Child*. Osteopathic Family Physician. Vol. 12 No. 3 (2020). doi: <https://doi.org/10.33181/12034>
- Quigley M, Driscoll HC, Sahhar HS. *Treatment and Medical Management of Infants with Bronchiolitis: Effect of Pathway Implementation on Length of Hospital Stay and Transfer Rate to Critical Care*. Clinical Pediatrics: Open Access. 2020;5(2). doi:10.35248/2572-0775.20.5.165
- Driscoll HC, Quigley M, Turner K, PharmD , Sahhar HS. *A Retrospective Analysis of the Impact of FilmArray Respiratory Panel Utilization on the Management of Pediatric Influenza*. Clin Pediatr, Vol. 6 Iss. 1 No:169. doi: 10.35248/2572-0775.21.6.169
- Sahhar HS, Turner K, Raffler E, Luck D, Straka S, Vasilakos D. *A Retrospective Analysis of Human Parainfluenza Virus in the Pediatric Population*. Clin Pediatr, Vol. 6 Iss. 2 No:176. <https://www.longdom.org/open-access/a-retrospective-analysis-of-human-parainfluenza-virus-in-the-pediatric-population.pdf>
- Sahhar HS, Derwitz K, Rubin E. *Multisystem Inflammatory Syndrome in an Infant with Negative SARS-CoV-2 RT-PCR and Antibodies*. Osteopathic Family Physician. Vol. 13 No. 3 (May/June, 2021). doi: <https://doi.org/10.33181/13036>
- Sahhar HS. *Aeromonas hydrophila and Klebsiella pneumoniae Septic Arthritis in a Pediatric Patient*. ACOP-eJournal, Summer 2021, Vol. 13, No. 2
- Donaldson ME, Hernandez KM, Sahhar HS. *Respiratory Syncytial Virus (RSV) associated with Syndrome of Inappropriate Antidiuretic Hormone (SIADH) in Pediatric Patients A Case Report*. ACOP-eJournal, Summer 2021, Vol. 13, No. 2
- Derwitz K, Sahhar HS, Ward K. *A Pediatric Case of Orbital Cellulitis with Pansinusitis and Subperiosteal Abscess*. Osteopathic Family Physician. Vol. 13 No. 5 (September/October, 2021). doi: <https://doi.org/10.33181/13051>
- Sahhar HS, Basch RE, Downes K (2022) *EBV Positive Kawasaki Disease with False Positive SARS Antibodies in the Age of COVID-19 Pandemic*. Clin Pediatr. 7:208. DOI: 10.35248/2572-0775.22.7.208

- Sahhar HS, Bohn K, Capotosti M (2022) Group A Streptococcal Infection Potentially Triggering Kawasaki Disease in a Two-Year-Old African American Female. Clin Pediatr. 7:210. DOI: 10.35248/2572-0775.22.7.210.
- Is it Kawasaki Disease or Multisystem Inflammatory Syndrome in Children? Katie Cobb Thrift, Janice S. Withycombe, Heide S. Temples K.C. Thrift et al. / The Journal for Nurse Practitioners 17 (2021) 1230-1236 DOI:<https://doi.org/10.1016/j.nurpra.2021.08.006> (Dr. Hanna Sahhar contributed all 8 figures published in the article and provided an expert opinion on the subject matter)
- Kabo AA, Kenan WO, Kancharla A, Sahhar HS. *Human Metapneumovirus* associated with Syndrome of Inappropriate Antidiuretic Hormone (SIADH). ACOP-eJournal, Spring-Summer 2022, Vol. 14, No. 1
- Sahhar HS, Bailey L, Rubin E (2022) Atypical Antidepressant Toxicity: a case report and a proposed new toxicity syndrome. Clin Pediatr. 7:218 DOI: 10.35248/2572-0775.22.7.218
- Sahhar HS, Lor MS, Bailey L (2022) Atypical Antipsychotic Toxicity: a case report and a proposed new toxicity syndrome. Clin Pediatr. 7:220 DOI: 10.35248/2572-0775.22.7.220
- Muscle Spasms in a 19-year-old male. Puzzler-0323. Contemporary Pediatrics, March 2023. Abby Kabo, OMS IV; William Kenan. OMS IV; Hanna S. Sahhar, MD, FAAP, FACOP
- Welsh L H, Bose J T, Sahhar H S (August 20, 2023) Calcium Channel Blocker Overdose Causes Acute Respiratory Distress Syndrome and Acute Kidney Injury in a 15-Year-Old Female. Cureus 15(8): e43806. DOI 10.7759/cureus.43806 PMID: 37731443
- Sahhar HS, Houston S, Saunders L, Gregory W, Redden D, Rishmawi SE (2023) The Incidence of Respiratory Syncytial Virus (RSV) Bronchiolitis and Concomitant Urinary Tract Infection (UTI) in Young Infants. Clin Pediatr. 8:242. DOI: 10.35248/2572-0775.23.8.248.
- Bellingham E E, Hammond C G, Sahhar H S, et al. (August 30, 2023) Multimodal Management of Febrile Infection-Related Epilepsy Syndrome in a 17-Year-Old Male. Cureus 15(8): e44412. DOI 10.7759/cureus.44412 PMID: 37791156
- Sahhar H S, Rubin E, Rishmawi S E, et al. (September 01, 2023) Invasive Sinusitis With *Arcanobacterium haemolyticum* and *Fusobacterium necrophorum*

Complicated by Subdural Empyema in an Immunocompetent Adolescent Patient.
Cureus 15(9): e44517. DOI 10.7759/cureus.44517
PMID: 37790026

- Yang K, Oleske J, Rishmawi S, Sahhar HS. “Prevotella Denticola Dacryocystitis and Abscess in a Child With Goldenhar Syndrome”. *Osteopathic Family Physician*, vol. 15, no. 4, Dec. 2023, pp. 33-36, doi:10.33181/13107.

Chapters in Scholarly Books and Monographs

- Sahhar HS, Ostrowski D, Jaimovich DG. *Transport of Neonatal and Pediatric Patients Requiring Extracorporeal Life Support*. In Jaimovich DG, Vidyasagar D (2nd ed): Handbook of Pediatric and Neonatal Transport Medicine. Philadelphia, Hanley & Belfus, 2002, pp 248-259.
- Insoft RM, Jaimovich DG, Sahhar HS. *High-Tech Respiratory Care on Transport*. In Jaimovich DG, Vidyasagar D (2nd ed): Handbook of Pediatric and Neonatal Transport Medicine. Philadelphia, Hanley & Belfus, 2002, pp 260-266.

Peer Reviewed Electronic and other Publications:

- *Diagnostic Testing for Acute Head Injury in Children: When are Head Computed Tomography and Skull Radiography Indicated?* An Article Review. Available online at: <http://www.PedsCCM.org>. Published on September 28, 1999.
- *Noninvasive Ventilation in Severe Hypoxemic Respiratory Failure: A Randomized Clinical Trial*. An Article Review. Available online at: <http://www.PedsCCM.org>. Published on February 14, 2004.
- Pediatric Emergency Card “Pocket Card”. Copyright © 2006-2019 H. Sahhar. Library of Congress Catalog Card Number: TXu001805907
- Status Asthmaticus Guidelines “Pocket Card”. Copyright © 2007-2019 H. Sahhar. Library of Congress Catalog Card Number: TXu001806044
- NICU Resuscitation Wheel “Pocket Card”. Copyright © 2012 Whiteside & Sahhar. Library of Congress Catalog Card Number: TXu001815142
- Magazine Article: Children’s Health is No Accident. Belle Magazine, June 2011, pp 18, 20.
- Toxicology Flash Cards “Game and Study Guide”. Copyright © 2017 H. Sahhar.

Submitted to U.S. Copyright Office May 16, 2017. Library of Congress Catalog Card Number: TX0008445549

- Pediatric Resuscitation & Stabilization Pocket Guide. Copyright © 2023 H. Sahhar. Library of Congress Catalog Card Number: TX 9-288-220
ISBN: 9781732341746
- Toxicology Flash Cards “Game and Study Guide”. Copyright © 2023 H. Sahhar. Library of Congress Catalog Card Number: Pending
ISBN: 9781732341715
- Status Asthmaticus Guidelines “Pocket Card”. Copyright © 2023 H. Sahhar. Library of Congress Catalog Card Number: TX 9-286-606
- ISBN: 9781732341739

Non-Peer Reviewed Electronic Publications:

- *Pediatric Pulmonology Immunology and Allergy*. Teaching CD-Rom. Copyright © 2004 Akhter & Sahhar. Library of Congress Catalog Card Number: TX0005900533
- *Pediatric Intensive Care ECG Interpretation*. CD-Rom. Copyright © 2006 H. Sahhar, MD.

Book Publication:

Pediatric Critical Care Handbook for PICU Rotations
1st Ed 2019

Library of Congress Catalog Card Number: TXu002143852
ISBN 978-1-7323417-0-8

Pediatric Critical Care Handbook for PICU Rotations
2nd Ed 2023

Library of Congress Catalog Card Number: Pending
Softcover: ISBN: 978-1-7323417-5-3
Hardcover: ISBN: 978-1-7323417-6-0

Invention/Innovation:

Human Lumbar Puncture Assist Device (LPat®)

Canadian Intellectual Property Office (Industrial Design) Patent Registration No. 166052 issued date July 20, 2016

<https://www.ic.gc.ca/app/opic-cipo/id/dsgnDtls.do?appNm=166052&lang=eng&status=OK&ordNum=1>

Manuscripts/papers in progress and preparation:

- Prospective, Randomized Comparison of Continuous Nebulized Racemic- Albuterol with Levalbuterol in Pediatric Patients.
Hanna Sahhar, MD, FAAP; Christine Steffensen, PharmD; Suporn Sukpraprut, PhD; Myra Zeb, OMS-I; David Jaimovich, MD
- The Anti-Inflammatory And Hemodynamic Effects Of Milrinone Following Endotoxin Challenge – A Placebo-Controlled, Blinded, Randomized Study.
Hanna S. Sahhar, MD, FAAP; Michael Verive, MD; David Jaimovich, MD
- Evaluation of the Pediatric Intensive Care Unit (PICU) clinical staff in the management of croup case (laryngotracheobronchitis) during mock code exercises utilizing high fidelity simulation technology
Fred Rawlins, DO, FACOEP; Hanna S. Sahhar, M.D., FAAP; Suporn Sukpraprut, PhD, MA, MSc; Watson Edwards, BSN; Christopher Martin, BS, NREMT-P; Janella Looney, BA; Carolyn Lucas, RN, MEd, EdS; Jennifer Januchowski, RN
- Comparison of the Pediatric intensive care unit (PICU) vs. Emergency Room staff in the management of croup case (laryngotracheobronchitis) during mock code exercises utilizing high fidelity simulation technology
Fred Rawlins, DO, FACOEP; Hanna S. Sahhar, M.D., FAAP; Suporn Sukpraprut, PhD, MA, MSc; Watson Edwards, BSN; Christopher Martin, BS, NREMT-P; Janella Looney, BA; Carolyn Lucas, RN, MEd, EdS; Jennifer Januchowski, RN
- Permissive Hypercapnia: An Acceptable Prevention of Ventilator-Associated Acute Inhalation Injury in the Presence of Carbon Monoxide Poisoning and Acute Lung Injury Secondary to Smoke Inhalation
Siddhi Gupta, OMS-IV and Hanna S. Sahhar, MD, FAAP, FACOP
- Evaluation of Lumbar Puncture Assist Tool (LPat®) as a guide and training tool for successful lumbar Puncture
(VCOM-IRB Protocol# 2015-003)

Ongoing Studies and Research Projects:

- Human Paraechovirus (HPeV) Meningoencephalitis in an 8-day-old infant
Nicole Ivan, OMS-III; Katlin Hencak, OMS-III; Hanna S. Sahhar, MD
(Submitted to OFP for publication)

- Tricyclic Antidepressant Overdose and Toxicity Cardiac Effect in an Overweight Adolescent
Hanna S. Sahhar, MD; David Eagerton, PhD; Mikayla Kidd, OMS-III; Austin Peterson, OMS-III
(Submitted to CUREUS for publication)
- Verrucous Epidermal Nevus in a Newborn-Visual and Differential Diagnosis
Hanna S. Sahhar, MD; Alicia Yin, OMS-III; Mackenzie, OMS-III
(Submitted to OFP for publication)
- Recurrent Subglottic Stenosis in a 2-year-old with Influenza A Infection
Allison Jakiel, OMS-IV, Krisdaniel Berreta, OMS-IV; Sami Rishmawi, MD; *Hanna S. Sahhar, MD*
(Submitted to CUREUS for publication)
- New onset ischemic cerebellar infarction secondary to multi-vessel occlusion in sixteen-year-old male: a case report
Alexandra Zapp, OMS-IV; Blair Starling, OMS-II; Gretel Rodriguez, DO; Emily Medhus, DO; Hanna S. Sahhar, MD
- Comparing Screening Measures for Childhood Obesity in Spartanburg County (VCOM-IRB Protocol# 2023-058)
- Rapidly Progressive Fatal Pneumococcal Meningitis in a Fully Immunized Child with History of Facial Bones Fractures. Brianna Stanely, OMS-III; Haya Rizvi, OMS-IV; Hanna S. Sahhar, MD
- A Case of Lemierre-Like Syndrome in a Pediatric patient.
Anjali Patel, OMS-IV; Karen Yang, OMS-IV; *Hanna S. Sahhar, MD*
- Bupropion Toxicity with Pulmonary Edema, Prolong QTc, and Serotonin Syndrome in Pediatric Patient. Madison Craft, OMS-II; Kaitlyn Burdsall, OMS-II; Hanna S. Sahhar, MD

Community Outreach/Volunteer Activities (2012-2023):

April 2012 Organizer and Planner, Fourth Annual Pediatric Critical Care Symposium. Spartanburg Regional Healthcare System/Children’s Regional Health

May 2012 Physician in Charge, Pump it Up-Guinness World Records Participation, "Spring Fling" Spartanburg SC

November 2012 Physician in Charge/Advisor, First Annual Kids-Wellness Fair, VCOM-CC, Spartanburg SC

December 2012 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

April 2013 Organizer and Planner, Fifth Annual Pediatric Symposium. Spartanburg Regional Healthcare System/Children's Regional Health

May 2013 Project Director, Spartanburg County Schools District 5 Tdap Vaccination, Middle Tyger Community center, Lyman SC

August 2013 Physician in Charge, Community Celebration "Back to School" Health Screening, Middle Tyger Community Center, Lyman SC

October 2013 Physician Volunteer, Special Olympics Physical Exams Charles Lea Center, Spartanburg SC

November 2013 Physician in Charge/Advisor, Second Annual Kids-Wellness Fair, VCOM-CC, Spartanburg SC

December 2013 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

April 2014 Organizer and Planner, Fifth Annual Pediatric Critical Care Symposium. Spartanburg Regional Healthcare System/Children's Regional Health

October 2014 International Medical Mission to El Salvador. VCOM-CC

November 2014 Physician in Charge/Advisor, Third Annual Kids-Wellness Fair, VCOM-CC, Spartanburg SC

December 2014 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

January 2015 Physician in Charge, Sparkle City Invitational. Kozeev's World of Gymnastics. Spartanburg, SC

October 2015 Organizer and Planner, Fifth Annual Pediatric Symposium. Spartanburg Regional Healthcare System

November 2015 Physician in Charge/Advisor, Fourth Annual Kids-Wellness Fair, VCOM-CC, Spartanburg SC

December 2015 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

May 2016 Physician Volunteer, Annual Safe Kids Day, Spartanburg SC

November 2016 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

March 2017 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Pediatric Outreach-Prince Hall and Virginia Gardens Schools, Spartanburg SC

May 2017 Physician Volunteer, Annual Safe Kids Day, Spartanburg SC

July 2017 Physician Volunteer, Back To School Health Fair, Gaffney SC

November 2018 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

October 2019 Physician in Charge/Advisor, Eight Annual Kids-Wellness Fair, VCOM-CC, Spartanburg SC

November 2019 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

October 2021 Physician in Charge, MSA Families and Community COVID-19 Vaccine Clinic, Thornton Activity Center, Spartanburg SC

November 2021 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

September 2022 Physician in Charge, Special Olympics Health Screening and Comprehensive Exams, Cleveland Academy, Spartanburg SC

November 2022 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC

December 2022 Physician in Charge, Health Screening, Arcadia United Methodist Church, Spartanburg SC

November 2023 Physician in Charge, Annual School Health Screening and Comprehensive Exams, Meeting Street Academy, Spartanburg SC