Updated 04/06/2022	
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	james.l.wynn@gmail.com
Date and Place of Birth:	August 26, 1969; Marietta, Ohio
NIH eCommons ID:	jwynn153
Laboratory website:	http://wynn.research.pediatrics.med.ufl.edu
ORCID iD:	<u>0000-0001-7052-4836</u>
Twitter:	<u>@Wynn_JL</u>
LinkedIn:	https://www.linkedin.com/in/james-wynn-5a88b780/
Doximity:	https://www.doximity.com/pub/james-wynn-md-9647012d

Education:

College:	Florida Atlantic University (Boca Raton, FL), Bachelor of Science-summa
	cum laude, May 1998
Professional:	University of Florida, Doctor of Medicine, 2002
Residency:	Pediatrics, UF Health Shands Hospital, University of Florida, 2002-2005
Fellowship:	Neonatal-Perinatal Medicine, UF Health Shands Hospital, University of
Research:	Florida, 2005-2008
Research.	Post-doctoral research mentor Lyle L. Moldawer, PhD University of Florida, 2005-2008
Other:	Pediatric Critical Care Ultrasound Workshop, University of Florida, August 25-27 th , 2017
Licensure and Certification:	North Carolina (#2008-00193), February 2008-July 2012
	Tennessee (#48373), February 2012-July 2015 Florida (#123962), April 2015-present
Specialty Boards:	American Board of Pediatrics, Pediatrics, October 2006 American Board of Pediatrics, Neonatal-Perinatal Medicine, March 2010
Academic Appointments:	Medical Instructor, Department of Pediatrics, Duke University , July 2008- October 2010

	Assistant Professor of Pediatrics, Department of Pediatrics, Vanderbilt University , July 2012-June 2015
	Associate Professor of Pediatrics, Department of Pediatrics, University of Florida, July 2015-2019
	Associate Professor of Experimental Medicine, Department of Pathology, Immunology, and Laboratory Medicine, University of Florida , September 2015-20019
	Associate Director, Neonatal-Perinatal Medicine Fellowship Program, (website: <u>http://neonatology.pediatrics.med.ufl.edu/fellowship-</u> <u>program/</u>), University of Florida , July 2015-2017
	Professor (tenured) of Pediatrics, Pathology, Immunology, and Laboratory Medicine, University of Florida , July 2019-
Current Hospital Appointments: Professional Organizations:	UF Health, Shands Teaching Hospital, July 2015-
Elected:	Shock Society, 2014-2019
	Society for Pediatric Research, 2011-present
	Perinatal Research Society Associate Member, 2012-2015 Full Member, 2015-present Council Member: 2017-2021
	American Association of Immunologists, 2015-2022 American Pediatric Society, November 2019-present
Invited:	Vanderbilt Research Advisory Committee, Department of Pediatrics, 2012-2014
	American Heart Association's Immunology Basic Science III Peer Review Committee, 2014-2018
	<i>Council of Faculty and Academic Societies</i> , Association of American Medical Colleges, Junior Faculty representative (2015-2018), Appointed by Dr. Marian Limacher, Senior Associate Dean for Faculty Affairs
	<i>The Vanderbilt Pre³ Initiative</i> : Pre venting adverse Pre gnancy outcomes and Pre maturity: 2014 <u>https://medschool.vanderbilt.edu/pre3-initiative/</u>
	Precision Vaccines Program: 2016-2022
	http://www.childrenshospital.org/research-and-
	innovation/research/departments/medicine/precision-vaccines-program
	USAID/Gates Foundation Grand Challenges Annual Meeting, 2017

	S ynbiotics to PR event Infections in N ewborns T rial (SPRINT) planning workshop sponsored by the <i>Bill and Melinda Gates Foundation. Invited for expertise on neonatal sepsis and definitions</i>		
Other:	PODIUM (Pediatric Organ Dysfunction Information Update Mandate) Invited as the only neonatologist among a group of pediatric critical care experts and relevant stakeholders assembled to develop consensus definitions, diagnostic criteria, and data elements for MODS in children		
	Society of Critical Care Medicine (SCCM) Pediatric/Children's Sepsis Definition Task Force. Invited as the only neonatologist among a group of international pediatric critical care experts and relevant stakeholders assembled to develop consensus definitions and diagnostic criteria		
	Advisory Board Member for the AAP NPM Section Neonatal and Developmental Medicine Symposium, 2019-present		
	American Academy of Pediatrics (#1003919), 2008-Present Section on Perinatal Pediatrics, 2008-Present		
Professional Activities: National Institutes of Health:	Loan Repayment Program Reviewer 2013/08 ZHD1 DSR-K (LR) 1 2016/08 ZHD1 DSR-K (LR) 1 2017/08 ZHD1 DSR-K (LR) 1 2018/08 ZHD1 DSR-K (LR) 1 2020/08 ZHD1 DSR-K (LR) 1 2021/08 ZHD1 DSR-K (91) 1 NIAID reviewer, 2013 Human Immunology Project Consortium (HIPC) NICHD Chair 2014/05 ZHD1 DSR-A (51) 1 - Pediatric Critical Care and Trauma Scientist Development Program 2019/01 ZHD1 DSR-G (50) NHLBI reviewer 2017/05 ZHL1 CSR-R (M2) 1 2018/05 ZEB1 OSR-D (M1) S		
	2018/05 NIH-NIBIB POCTRN U54 ZRG1 reviewer 2016/08 ZRG1 SBIB-V (55) R 2017/01 ZRG1 SBIB-H (82) S 2019/01 ZRG1 SBIB-D (82) R 2020/05 ZRG1 EMNR-C(55) 2020/10 ZRG1 BST-R (02) M NICHD reviewer 2021/01 PN 2021/01 PN 2021/01 ZHD1 DSR-T (51) 1 2021/10 PN		

Referee-Grant agencies:	American Heart Association, Immunology Basic Science III: 2014-2016 USAID: Saving Lives at Birth program Thrasher Fund King's Health Partners R&D Challenge Fund National Children's Research Centre Grants
Associate Editor:	Pediatric Research . Neonatology Section: 2016-present 4 th Edition of Neonatology: Questions and Controversies. Infectious Disease, Immunology, and Pharmacology
Guest Editor:	Frontiers Journals. Special Issue: The Neonatal Immune System: A Unique Host-Microbial Interface <u>http://journal.frontiersin.org/researchtopic/5017/the-neonatal- immune-system-a-unique-host-microbial-interface#articles</u>
	American Journal of Perinatology Reports American Journal of Respiratory Cell and Molecular Biology American Journal of Respiratory and Critical Care Medicine Arch of Disease in Childhood; Fetal/Neonatal BMC Genomics BMC Pediatrics BMJ Epocrates BMJ Open Brain Behavior and Immunity Clinical Infectious Diseases Clinical and Vaccine Immunology Eastern Journal of Medicine EBioMedicine European Journal of Immunology Expert Review of Clinical Immunology Expert Review of Clinical Immunology Expert Review of Molecular Diagnostics Frontiers in Immunology Immunology Immunology Infection and Immunity Infate Immunity JAMA Pediatrics Journal of Clinical Investigation Journal of Infectious Diseases
	Journal of Leukocyte Biology Journal of Neonatal-Perinatal Medicine Journal of Pediatrics Journal of Perinatology Journal of Reproductive Immunology Journal of the American Medical Informatics Association

Laboratory Investigation Lancet: Respiratory Medicine Lancet: Infectious Diseases Nature Communications Neonatology Pediatric Critical Care Medicine Pediatric Research Pediatric Academic Societies, abstract reviewer Pediatrics PLoS ONE **Regulatory Peptides** Scandinavian Journal of Clinical & Laboratory Investigation Science Translational Medicine The Pediatric Infectious Disease Journal

Special Awards or Recognition for Professional Activities:

World Journal of Pediatrics **Research Awards:** 2007 Children's Miracle Network (CMN) Travel Award for travel to Trauma, Shock, and Inflammation Society (TSIS) meeting 2007 in Munich, Germany 2007 Douglas J. Barrett Academic Fellowship Physician Award (\$50,000 salary) 2007 Pediatric Academic Society Young Investigator's Travel Award for travel to PAS meeting 2007 Toronto, Canada 2008 Pediatric Academic Society Young Investigator's Travel Award for travel to PAS meeting 2008 Hawaii 2008 University of Florida, Department of Pediatrics, Henry Kokomoor Outstanding Pediatric Fellow Research Award 2011 National Institutes of Health, Loan Repayment Award-Pediatric Research 2012 NIH/NICHD-Sponsored-Perinatal Research Society R13 Young **Investigator Award: Grant Writing Seminar** 2012 Perinatal Research Society, Young Investigator, Cassady Presidential Award 2013 National Institutes of Health, Loan Repayment Award Renewal-Pediatric Research 2013 Evaluation of Peripheral Blood Neutrophil Gene Expression During Neonatal Sepsis featured among all Gerber Foundation (GF) funded studies in GF Annual Research Report 2014 Accepted to the Early Career Reviewer (ECR) Program, Center for Scientific Review, National Institute of Health 2016 Perinatal Research Society Prize for an Outstanding Paper by an Associate Member. "Targeting IL-17A attenuates neonatal sepsis

mortality induced by IL-18"

Updated 04/06/2022 **Teaching Awards:** 2004 Society of Teaching Scholars: Resident Teaching Award for Outstanding Medical Student and Housestaff Teaching-Department of Pediatrics, University of Florida, College of Medicine 2005 Society of Teaching Scholars: Resident Teaching Award for Outstanding Medical Student and Housestaff Teaching-Department of Pediatrics, University of Florida, College of Medicine 2005 *Resident Teaching Award*: Peer-elected as most outstanding teacher for University of Florida Class of 2005 2022 Richard Rivas, MD Memorial Great Teacher Award, Specialty Review in Neonatology

Teaching Activities:

Continuing Medical Education:

<u>Program Director 2015-2018</u>: University of Florida Department of Pediatrics, Neonatal Grand Rounds. I initiated and developed this cyclically updated, 90-lecture, live-streaming and archived 2-year physiology and pathophysiology didactic lecture series that offers AMA category 1 CME credit per lecture created to offer our neonatology providers (including our fellows) a structured learning experience. My responsibilities included scheduling presentations and speakers, organization of materials, and assessment of participants' performance.

http://neonatology.pediatrics.med.ufl.edu/fellowshipprogram/education/neonatal-grand-rounds-talks/

Invited Lecturer. Annual Specialty Review in Neonatology/Perinatology. "Neonatal Immunology", February 2011-present.

<u>Invited Lecturer</u>. *IPOKRaTES* course, *Infectious Diseases and Immunologic Disorders in the Newborn*. Lisbon, Portugal. October 2012.

Invited Lecturer. IPOKRaTES course, Infectious Diseases and Immunologic Disorders in the Newborn. Bangalore, India. March 2015.

<u>Invited Lecturer</u>. Advances in Neonatology and Pediatrics Conference. Hyderabad, India. March 2017.

Invited Lecturer. AAP, NeoPREP, 2018-

Research Supervision/Mentoring:

Dr. Cheryl Lin (Medical student, Duke University)

<u>Project title</u>: Very low birth weight neonates who survive early-onset sepsis do not have an increased risk of developing late-onset sepsis Project completed July 2012 and manuscript published November 2012. <u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, data handling, and manuscript preparation

Completed PCCM fellowship 2018, Columbia University

Dr. Jillian Crouchley (neonatology fellow, Duke University)

<u>Project title</u>: The effects of low dose dopamine on urine output in oliguric preterm infants PAS abstract 2012, Manuscript accepted January 2013. <u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, data handling, and manuscript preparation **Neonatologist, Raleigh NC**

Dr. Kevin Dufendach (neonatology fellow, Vanderbilt University) July 2014-June 2015 <u>Project title</u>: Virulence Determinants of an Aggressive Escherichia coli isolate causing lethal neonatal meningoencephalitis <u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, data handling, and manuscript preparation **Neonatology faculty, Cincinnati Children's Hospital**

Dr. Joann Romano-Keeler (Clinical Instructor, Vanderbilt University) July 2013-June 2015

<u>Project titles</u>: Oral colostrum priming shortens hospitalization without changing the immunomicrobial milieu; Neonatal CD71+ Erythroid Cells Do Not Modify Murine Sepsis Mortality; Great expectorations: the potential of salivary 'omic' approaches in neonatal intensive care. <u>My Role</u>: Mentor, Training of faculty in hypothesis, study design, data handling, and manuscript preparation.

Neonatology faculty, University of Illinois at Chicago

Dr. Scott O. Guthrie (Associate Professor, Vanderbilt University) June2013-June 2015

<u>Project title</u>: Postnatal Age Is a Critical Determinant of the Neonatal Host Response to Sepsis; Histological chorioamnionitis shapes the neonatal transcriptomic immune response.

<u>My Role</u>: Mentor, Training of faculty in hypothesis, study design, data handling, and manuscript preparation.

Neonatology faculty, Vanderbilt University

Dr. Blair Stocks (MSTP student, Vanderbilt University)

July 2013-June 2015 <u>Project title</u>: *Neonatal CD71+ Erythroid Cells Do Not Modify Murine Sepsis Mortality* <u>My Role</u>: Co-mentor on specific project, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation. **Urology resident, Baylor University**

Dr. Chris O. Wilson (Post-bac student, Vanderbilt University) July 2013-June 2015 <u>Project title</u>: Targeting IL-17A attenuates neonatal sepsis mortality induced by IL-18. <u>My Role</u>: Co-mentor on specific project, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation.

Post-doc, Vanderbilt University

Dr. Mhd Wael Alrifai (neonatology fellow, Vanderbilt University July 2014-June 2015

<u>Project title</u>: Neonatal CD71+ Erythroid Cells Do Not Modify Murine Sepsis Mortality.

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation.

Neonatology faculty, Vanderbilt University

Dr. Junaid Iqbal (post-doc, Vanderbilt University)

January 2015-June 2015

<u>Project title</u>: Lethal neonatal meningoencephalitis caused by multi-drug resistant, highly virulent Escherichia coli.

<u>My Role</u>: Co-mentor on specific project, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation. **Microbiology Faculty, Aga Khan University**

Ms. Taryn Tolle (Undergraduate Volunteer)

May 2016-January 2017

<u>Project title</u>: *Murine neonatal sepsis is associated with significant cachexia and neurodevelopmental impairment. PAS 2017, Shock 2017* <u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, animal husbandry, animal modeling of human disease, molecular laboratory techniques, data handling/statistical methods, experimental protocol design, and manuscript preparation

University of Florida Veterinary School of Medicine, Class of 2022

Dr. Steven J Raymond (surgical resident, University of Florida) July 2016-2018

<u>Project titles</u>: Adjuvant pretreatment with alum protects neonatal mice in sepsis through myeloid cell activation; Unique transcriptomic response to sepsis is observed among patients of different age groups; Neutrophil chemotaxis and transcriptomics in term and preterm neonates; Impact of Early-Life Exposures to Infections, Antibiotics, and Vaccines on Perinatal and Long-term Health and Disease; Immunological Defects in Neonatal Sepsis and Potential Therapeutic Approaches.

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation

Dr. Megan Tzeng (PCCM fellow, PCCM faculty at University of Florida) November 2016-2018

<u>Project title</u>: Characterization of lactic acidosis in pediatric post-operative cardiac surgery patients

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation

Ms. Ashley Royce (Undergraduate Volunteer, University of Florida) March 2017-September 2018

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, animal husbandry, animal modeling of human disease, molecular laboratory techniques, data handling/statistical methods, experimental protocol design, and manuscript preparation

University of Florida graduate 2019, Research Assistant at Florida Space Institute

Mr. Ryan Loveland (Undergraduate Volunteer, University of Florida) May 2017-July 2018

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, animal husbandry, animal modeling of human disease, molecular laboratory techniques, data handling/statistical methods, experimental protocol design, and manuscript preparation

University of Florida graduate 2020, Certified Nursing Assistant at North Florida Regional Medical Center

Dr. Irina Prelipcean (Neonatology fellow, University of Florida) July 2017-present

<u>Project title</u>: *Relative adrenal insufficiency in preterm infants* <u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation **Neonatology faculty, University of Rochester 2020**

Dr. Russ Hawkins (surgical resident, University of Florida)

July 2017-2019 <u>Project title</u>: *Microfluidic Assessment of Clinical Outcomes in Preterm Newborns.*

<u>My Role</u>: Co-mentor, data handling, and manuscript preparation **Pediatric surgery fellowship, University of Florida 2022**

Dr. Youness Tolaymat (neonatology fellow, University of Florida) January 2018-2020

<u>Project title</u>: The role of inhaled nitric oxide in hypoxic-ischemic injury <u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, study design, data handling, and manuscript preparation **Neonatologist, Columbus Ohio 2020**

Ms. Kaitlyn Wendling (Undergraduate Volunteer, University of Florida) May 2018-2020

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, animal husbandry, animal modeling of human disease, molecular laboratory

techniques, data handling/statistical methods, experimental protocol design, and manuscript preparation Florida State University physician's assistant program

Ms. Hannah Baker (Undergraduate Volunteer, University of Florida) May 2018-2020

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, animal husbandry, animal modeling of human disease, molecular laboratory techniques, data handling/statistical methods, experimental protocol design, and manuscript preparation

Florida International University School of Medicine, Class of 2025

Ms. Sarah Welch (Undergraduate Volunteer, University of Florida) May 2018-2020

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, animal husbandry, animal modeling of human disease, molecular laboratory techniques, data handling/statistical methods, experimental protocol design, and manuscript preparation

Accepted to nursing school 2021

Ms. Hayley Moyer (Master's of Medical Sciences, University of Florida) August 2019-present

<u>My Role</u>: Mentor, Direct supervision of trainee in hypothesis, animal husbandry, animal modeling of human disease, molecular laboratory techniques, data handling/statistical methods, experimental protocol design, and manuscript preparation.

Successful defense 11/2020, Medtronic Manager

Dr. Orlyn Lavilla

January 2020-present <u>Project title</u>: Maximum Vasoactive-Inotropic Score and Mortality in Extremely Premature, Extremely Low Birth Weight Infants. <u>Project title</u>: Hourly kinetics of critical organ dysfunction in extremely preterm infants <u>My Role</u>: Mentor, Training of faculty in hypothesis, study design, data handling, and manuscript preparation.

Neonatology faculty, University of Florida (Jacksonville)

Dr. Khyzer Aziz (Neonatology fellow)

January 2020-present <u>Project title</u>: Maximum Vasoactive-Inotropic Score and Mortality in Extremely Premature, Extremely Low Birth Weight Infants. <u>Project title</u>: Hourly kinetics of critical organ dysfunction in extremely preterm infants <u>My Role</u>: Mentor, Training of faculty in hypothesis, study design, data handling, and manuscript preparation.

Neonatology faculty, Johns Hopkins University

<u>Consulting:</u>	Bristol-Myers Squibb. Consultant for neonatal sepsis expertise My role is to advise on the clinical trial of Opdivo [®] (nivolumab, anti-PD1) for pediatric sepsis (Spring 2017)
	Bill and Melinda Gates Foundation. Invited consultant Synbiotic Trial Planning Workshop. March 2018 Passive immunotherapy for the prevention and treatment of neonatal sepsis. October 2018
	Fluid Imaging Technologies. Consultant for neonatal sepsis expertise. Diagnostic platform to detect bacteremia in neonates. Spring 2019
	Evolve Biosystems. Consultant for neonatal sepsis expertise. Clinical trial to reduce neonatal sepsis. Fall 2019
	Roche Diagnostics. Consultant for neonatal sepsis expertise. 2021
Clinical Service Awards:	
2007	UF Health Shands Distinguished Customer Service by Physicians- nominated by patients, families, and peers
2008	UF Health Shands Distinguished Customer Service by Physicians- nominated by patients, families, and peers
2008	Induction into Gold Humanism Honor Society
2009	Alamance Regional Medical Center: <i>Distinguished Customer Service</i> by Physicians-nominated by patients, families, and peers
2010	Alamance Regional Medical Center: <i>Distinguished Customer Service</i> by Physicians-nominated by patients, families, and peers
2011	Alamance Regional Medical Center: <i>Distinguished Customer Service</i> by Physicians-nominated by patients, families, and peers
2012	ELEVATE: recognized by Vanderbilt Nursing for service excellence and credo behavior
2012	ELEVATE: recognized by Vanderbilt Nursing for service excellence and credo behavior

Research Program: Submitted/In Preparation:

National Institutes of Health, SBIR R43, submitted September 2021 *Rapid, Low Blood Volume Host Response Diagnostics for Neonatal Infection* Co-I

National Institutes of Health, INTEND RFA, R01 submitted October 5th 2021 *Early life immune age (ELIA study)* Multi-PI (Kollmann, Aghaeepour, Lee, Verhasselt, Wynn)

National Institutes of Health, R01 submission November 2021 Biomimetic Macrophage Nanosponges as a Broad-Spectrum Therapeutic for Neonatal Sepsis, and Spontaneous Intestinal Perforation Co-I

National Institutes of Health, NIGMS RGM134156-A1, R01 submission February 2022 Modifiable Determinants of Neonatal Sepsis-Induced Brain Injury PI

National Institutes of Health, Large-scale, multi-center R01, submission February 2022 Neonatal Sequential Organ Failure Assessment (nSOFA) Scores by Gestational Age and Outcome Pl

Active:

National Institutes of Health, NIGMS R01GM128452	4/2018-3/2023
Modifiable Determinants of Mortality in Neonatal Sepsis	
James L. Wynn, PI, 35% FTE	

National Institutes of Health, NICHD R01HD0899398/2017-5/2022Microfluidic Assessment of Clinical Outcomes in Preterm NewbornsLyle L. Moldawer, Daniel Irima, James L. Wynn; Multi-PI, 10% FTE

National Institutes of Health, NICHD R01HD0970817/2019-6/2024Salivary Diagnostics for Sepsis Screening in the NeonateJames L. Wynn, Co-I (J. Maron-PI), 10% FTE

National Institutes of Health, NIBIB R43EB0298639/2020-8/2022A New Tool to Rapidly Diagnose Sepsis using Flow Imaging Microscopy and Machine LearningJames L. Wynn, Co-I, 5% FTE

Children's Miracle Network 7/2021-6/2022 Pediatric Sequential Organ Failure Assessment and Outcomes in the PICU. James L. Wynn, Co-I (Mentor; PI-Dr. Lara Nichols)

Completed:

Children's Miracle NetworkEvaluation and Characterization of Immunological Changes in Murine Neonatal Sepsis.James L. Wynn, Pl1/2005-12/2006

Biosynexus Inc. Phase 2b/3, Multi-center, Randomized, Double-Blind, Placebo Controlled Trial to Evaluate the Safety and Efficacy of Pagibaximab Injection in Very Low Birth Weight Neonates for the Prevention of Staphylococcal Sepsis

James L. Wynn, Site Pl

3/2009-5/2011

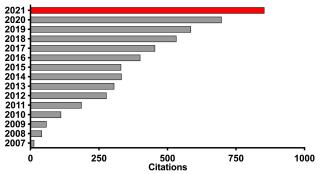
HHSN-201000003I-TO3

PTN Task Order #3 - Safety and Pharmacokinetics of Multiple Dose Metronidazole in Premature Infants (Cohen-Wolkowiez, PI)

Updated 04/06/2022 James L. Wynn, Site PI	12/6/2012-9/5/2012
NIH-NICHD 2U10HD040492-11 Cooperative Multicenter Neonatal Research Network Ronald Goldberg, Pl	4/4/2011 6/21/2012
James L. Wynn, Significant Contributor	4/1/2011-6/31/2012
National Institutes of Health, Loan Repayment Award-Pediatric	
Evaluation of Peripheral Blood Neutrophil Gene Expression Dur	-
James L. Wynn, Pl	7/2011-7/2015
Gerber Foundation Evaluation of Peripheral Blood Neutrophil Gene Expression Du	ring Neonatal Sepsis
James L. Wynn, Pl	1/2011-12/2013
Vanderbilt Pediatrics, Turner-Hazinski Research Award The Role of the Inflammasome in Neonatal Sepsis	
James L. Wynn, Pl	7/2013-6/2014
National Institutes of Health: NIGMS R01GM096994 MMP-8 As a Novel Therapeutic Target in Sepsis	
James L. Wynn, Collaborator	4/2011-3/2015
Thrasher Research Fund Effect of Colostrum on Innate Mucosal Immunity in Very Preter	rm Infants
James L. Wynn, Pl	2/2013-11/2015
National Institutes of Health, NIGMS K08GM106143	
The Role of the Inflammasome in Neonatal Sepsis	
James L. Wynn, Pl	4/2013-4/2018
	021

Publications and presentations:

>5500 citations since 2007 per <u>Google Scholar</u> h-index: **35** i10 index: **68**



Original Science Publications (first or senior author in bold):

- Scumpia PO, Delano MJ, Kelly KM, O'Malley K, Efron PA, McAuliffe PF, Brusko T, Ungaro R, Barker T, Wynn JL, Atkinson MA, Reeves WH, Clare Salzler MJ, and Moldawer LL. Increased natural CD4⁺CD25⁺ regulatory T cells and their suppressor activity does not contribute to mortality in murine polymicrobial sepsis. J Immunol 2006 Dec 1;177(11):7943-9. PMID: 17114466
- 2. Scumpia PO, Delano MJ, Kelly-Scumpia KM, Weinstein JS, Wynn JL, Winfield RD, Xia C, Chung CS, Ayala A, Atkinson MA, Reeves WH, Clare-Salzler MJ, Moldawer LL. Treatment with GITR agonistic antibody

corrects adaptive immune dysfunction in sepsis. *Blood*. 2007 Nov 15;110(10):3673-81. *PMCID: PMC2077315*

- Delano MJ, Scumpia PO, Weinstein JS, Coco D, Nagaraj S, Kelly-Scumpia K, O'Malley K, Wynn JL, Antonenko S, Al-Quran S, Swam R, Chung C, Atkinson MA, Ramphal R, Gabrilovich D, Reeves W, Ayala A, Philips J, Laface D, Heyworth P, Clare-Salzer M, Moldawer LL. MyD88-Dependent expansion of an immature Gr1⁺CD11b⁺ population induces T-cell suppression and T_H2 polarization in sepsis. *J Ex Med*. 2007 Jun 11;204(6):1463-74. *PMCID: PMC2118626*
- 4. Wynn JL, Scumpia PO, Delano MJ, O'Malley K, Abouhamze A, Ungaro R, Moldawer LL. Increased mortality and altered immunity in neonatal sepsis produced by generalize peritonitis. *Shock*. 2007 Dec;28(6):675-683. *PMID:* 17621256
- 5. Wynn JL, Scumpia PO, Winfeld RD, Delano MJ, Barker T, Ungaro R, Levy O, Moldawer LL. Defective innate immunity predisposes neonates to poor sepsis outcome, but is reversed by TLR agonists. *Blood*. 2008 Sep 1;112(5):1750-8. *PMCID: PMC2518883*
- 6. Kelly-Scumpia KM, Scumpia PO, Delano MJ, Weinstein J, Cuenca AG, Wynn JL, Moldawer LL. Type I interferon signaling in hematopoietic cells is required for survival in murine polymicrobial sepsis by regulating CXCL10. *J Exp Med*. 2010 Feb 15;207(2):319-26. *PMCID: PMC2822595*
- Cuenca AG, Wynn JL, Kelly-Scumpia KM, Scumpia PO, Vila L, Delano MJ, Mathews CE, Wallet SM, Reeves WM, Behrns KE, Nacionales DC, Efron PA, Kunkel SL, Moldawer LL. Critical role for CXCL10 (IP-10)/CXCR3 signaling in the murine neonatal response to sepsis. *Infect Immun.* 2011 Jul;79(7):2746-54. PMID: 21518789, PMCID: PMC3191971
- 8. Wynn JL, Cvijanovich NZ, Allen GL, Thomas NJ, Freishtat RJ, Anas N, Meyer K, Checchia PA, Lin R, Shanley TP, Bigham MT, Wong HR. The influence of developmental age on the early transcriptomic response of children with septic shock. *Mol Med.* 2011;17(11-12):1146-56. PMID: 21738952, PMCID: PMC3321808
- Kelly-Scumpia KM, Scumpia PO, Weinstein JS, Delano MJ, Cuenca AG, Nacionales DC, Wynn JL, Lee PY, Kumagai Y, Efron PA, Akira S, Wasserfall C, Atkinson MA, and Moldawer LL. B cells enhance early innate immune responses during bacterial sepsis. J Exp Med. 2011 Aug 1;208(8):1673-82. PMCID: PMC3149216
- 10. Wynn JL, Benjamin Jr DK, Benjamin DK, Cohen-Wolkowiez M, Clark RH, Smith PB. Very Late Onset Infections in the Neonatal Intensive Care Unit. *Early Hum Dev.* 2012 Nov;88(11):905-9. PMID: 21924568, PMCID: PMC3248995
- 11. Wynn JL, Tan S, Gantz MG, Das A, Goldberg RN, Adams-Chapman I, Stoll BJ, Shankaran S, Walsh MC, Auten KJ, Miller NA, Sánchez PJ, Higgins RD, Cotten CM, Smith PB, Benjamin Jr DK, Neonatal Research Network. Outcomes following candiduria in extremely low birth weight infants. *Clin Infect Dis. 2012 Feb 1;54(3):331-9. PMID: 22144537, PMCID: PMC3258271*

- LaTuga MS, Ellis JC, Cotten CM, Goldberg RN, Wynn JL, Jackson RB and Seed PC. Beyond Bacteria: a Study of the Enteric Microbial Consortium in Extremely Low Birth Weight Infants. *PLoS One.* 2011;6(12):e27858. Epub 2011 Dec 8. PMID: 22174751, PMCID: PMC3234235
- 13. Lin CB, Hornik CP, Clark R, Cotten CM, Benjamin Jr. DK, Cohen-Wolkoweiz M, Smith PB, Wynn JL. Very low birth weight neonates who survive early-onset sepsis do not have an increased risk of developing late-onset sepsis. *Early Hum Dev.* 2012 Nov;88(11):905-9. PMID: 22840605, PMCID: PMC3462255
- 14. Wynn JL, Hansen NI, Das A, Cotton CM, Goldberg RN, Sanchez PJ, Bell EF, Van Meurs KP, Carlo WA, Laptook AR, Higgins RD, Benjamin Jr DK, and Stoll BJ for the NICHD Neonatal Research Network (NRN). Early sepsis does not increase the risk of late sepsis in very low birth weight neonates. J Pediatr. 2013 May;162(5):942-8.e1-3. PMID: 23295144, PMCID: PMC3622770
- 15. Wynn JL, Li L, Cotten CM, Phelps DL, Shankaran S, Goldberg RN, Carlo WA, Van Meurs KP, Das A, Vohr BR, Higgins RD, Stoll BJ, and D'Angio CT for the NICHD NRN. Blood stream infection is associated with altered heptavalent pneumococcal conjugate vaccine immune responses in very low birth weight infants. J Perinatol. 2013 Aug;33(8):613-8. PMID: 23370608, PMCID: PMC3722279
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- 5. Wynn JL. Early onset and hospital acquired neonatal sepsis associated with high mortality. J Pediatr. 2019 Jan;204:320-323. PMID: 30579470.
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- Lavoie PM, Popescu CR, Molyneux EM, Wynn JL, Chiume M, Keitel K, Lufesi N, Levine GA, Ansermino JM, Kissoon N. *Rethinking management of neonates at risk of sepsis*. Lancet. 2019 Jul 27;394(10195):279-281. PMID: 31354128.
- 8. Bearer C, Agostoni C, Anand KJS, Ambalavanan N, Bhandari V, Bliss JM, Bloomfield F, Bonifacio SL, Buhimschi I, Cilio MR, Coppes M, Czinn SJ, El-Khuffash A, Embleton N, Felderhoff-Müser U, Ferriero

DM, Florin T, Fuentes-Afflick E, Gardner W, Gospe SM Jr, Gunn A, Gressens P, Guissani D, Haiden N, Hauptman M, Kim KS, Klebanoff M, Lachman P, Lanphear B, Ozen S, Roehr C, Roland D, Rosenblum N, Schwarz M, Staiano A, Stroustrup A, Valente EM, Wilson-Costello D, Wynn JL, Molloy E. *Toward the elimination of bias in Pediatric Research*. Pediatr Res. 2019 Sep 18. doi: 10.1038/s41390-019-0583-5. PMID: 31533126.

- Molloy EJ, Wynn JL, Bliss J, Koenig JM, Keij FM, McGovern M, Kuester H, Turner MA, Giannoni E, Mazela J, Degtyaeva M, Strunk T, Simons SHP, Janota J, Plotz FB, van den Hoogen A, de Boode W, Schlapbach LJ, Reiss IKM; on behalf of the Infection, Inflammation, Immunology and Immunisation (I4) section of the ESPR. *Neonatal sepsis: Need for consensus definition, collaboration and core outcomes.* Pediatr Res. 2020 Mar 19. PMID: 32193517
- 10. Wynn JL. Application of metabolomics to neonatal meningitis. Pediatr Res. 2020 May 12. PMID: 32396924

Podcasts:

 Time for a neonatal-specific consensus definition for sepsis. *Pediatr Crit Care Med.* 2014. <u>http://www.sccm.org/Communications/iCritical-Care/Pages/iCritical-Care.aspx</u> This podcast is one of twelve listed on the Surviving Sepsis Campaign website among the podcasts with "thought leaders".

http://www.survivingsepsis.org/Resources/Pages/Media.aspx

Press releases:

- 1. Commentary in Science, 2014: https://www.science.org/doi/abs/10.1126/science.345.6204.1550
- 2. PNAS manuscript, 2016: <u>https://ufhealth.org/news/2016/blocking-protein-blood-may-prevent-sepsis-premature-infants</u>
- 3. PNAS manuscript, 2016: <u>http://news.vanderbilt.edu/2016/06/vumc-researchers-seek-to-crack-the-code-of-neonatal-sepsis/</u>
- 4. PLoS One manuscript, 2017: <u>https://news.vanderbilt.edu/2017/06/22/vu-scientists-report-a-way-to-calm-the-sepsis-storm/</u>
- 5. JAMA Pediatrics manuscript, 2018: <u>https://medicalresearch.com/pediatrics/number-of-pediatric-physician-scientists-shrinking-remaining-most-high-ranking-academic-males/39341/</u>
- 6. JAMA Pediatrics manuscript, 2018: <u>https://medicine.wustl.edu/news/pediatric-physician-scientists-</u> <u>struggle-funding/</u>
- 7. Hot Topics in Neonatology, <u>https://www.youtube.com/watch?v=ExG6xUOP5dg</u>
- 8. UF Health 2017 Pediatric Progress Report features Wynn laboratory, 2018: https://indd.adobe.com/view/4251539c-9bf7-49e5-a96d-b26d02a8fa47
- 9. Commentary in Scientific American, 2019: <u>https://www.scientificamerican.com/article/as-scientists-probe-the-mystery-of-how-newborns-develop-immunity-order-rises-from-the-chaos/</u>

Presentations:

Invited Speaker:	Boston Children's Hospital. "Toll-like receptor mediated augmentation of murine
	neonatal sepsis survival", April 2007
Invited Speaker:	6 th annual North Carolina Dialogues in Neonatal-Perinatal Medicine.
	"Developmental immunology" and "The Newborn's immune system", April 2009
Invited Speaker:	NIH/NIAID Special Workshop: "Challenges in Infant Immunity", June 2010

1120 04/06/2022	
Visiting Professor:	University of Michigan , Mott Children's Hospital, Ann Arbor MI. <i>"Murine and Human neonatal host response to sepsis"</i> , October 2010
Visiting Professor:	Cincinnati Children's Hospital, Cincinnati OH. Immunology Seminar.
visiting i toressor.	"Neonatal Host Response to Sepsis", April 2011
Invited Chair:	PAS Session Chair 2011 : "Elucidating Host Susceptibility to Infection". Denver
invited chair.	CO. PAS Session Chair 2015 : <i>"Time for a Neonatal-Specific Consensus</i>
	Definition for Sepsis".
Visiting Professor:	
Visiting Professor:	Vanderbilt University, Monroe Carell Jr. Children's Hospital at Vanderbilt
	University, Nashville TN. "Sepsis and the Host Immune Response in Murine
	and Human Neonates", November 2011
Invited Speaker:	Specialty Review in Neonatology/Perinatology. "Neonatal Immunology",
	Annually; 2011-present.
Invited Speaker:	IPOKRaTes, Lisbon, Portugal: Infectious Diseases and Immunologic Disorder in
	the Newborn. Speakers-Richard Polin, Larry Stanberry, Kenneth Alexander and
	James L. Wynn. "Innate Immune Function in Neonates", "Adaptive Immune
	Function in Neonates", "The Neonatal Host Response to Sepsis", "Vaccine
	responses in Neonates", "IVIg in preterm Neonates" October 2012
Visiting Professor:	Columbia University, Morgan Stanley Children's Hospital. Pediatric Research
	Conference/Neonatal grand rounds. "Neonatal Host Immune Response to
	Sepsis: Back to Basic Science." "Interventions Targeting the Neonatal Host
	Immune Response to Sepsis." May 2013
Invited Speaker:	Gerber Foundation, Annual Board of Directors Meeting. "Gene expression
	profiling with neonatal sepsis." August 2013
Visiting Professor:	University of Florida, Research Seminar, July 2014
Visiting Professor:	University of Iowa, Research Seminar, October 2014
Invited Speaker:	North American Saliva Symposium. "Effects of Early Oral Colostrum Priming
	on Salivary Antimicrobial Peptides in Preterm Infants." October 2014
Visiting Professor:	Yale University, Research Seminar, December 18, 2014
Visiting Professor:	University of South Florida, Division of Neonatology Grand Rounds,
	December 17, 2014
Visiting Professor:	Stanford University, Pediatric Grand Rounds, February 13, 2015
Invited Speaker:	IPOKRaTes , Bangalore, India. Infectious Diseases and Immunologic Disorders
	in the Newborn. March 2015
Invited Speaker:	Invited PAS Program Session and speaker 2015. "Time for a Neonatal-Specific
	Consensus Definition for Sepsis".
Invited Speaker:	Shock Society, 38th Annual Conference on Shock, Training Neonatal
	<i>Immunity,</i> June 2015
Visiting Professor:	Johns Hopkins University, High Risk Obstetrical Conference, November 2015.
Invited Speaker:	27 th Annual Florida Association for Neonatal Nurse Practitioners Clinical
	Symposium and Update, 2016.
Invited Speaker:	Advances in Neonatology and Pediatrics. Hyderabad, India, 2017
Invited Speaker:	NeoFest, 2017. Cincinnati Children's Hospital. 2017
Invited Speaker:	PAS Session, 2017. "Neonatal Immunity, Sepsis, and Immunotherapy"
Invited Speaker:	90th Perinatal & Developmental Symposium (AAP Section on Perinatal
·	Pediatrics), 2017
Invited Speaker:	Columbia University , Morgan Stanley Children's Hospital. September 2017
Invited Speaker:	American Academy of Blood Banks meeting, 2017
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Invited Speaker:	Precision Vaccines meeting, 2017
Invited Speaker:	Hot Topics in Neonatology, 2017
Visiting Professor:	Draper, November 2017
Invited Speaker:	AAP NeoPREP [®] . "Bacterial infections" and "Neonatal Immunology", 2018.
Invited Speaker:	Specialty Review in Neonatology/Perinatology . "Neonatal Immunology", "Neonatal Bacterial infections", "Neonatal Viral Infections", 2018
Invited Speaker:	Columbia University, Morgan Stanley Children's Hospital. 2018.
Invited Speaker:	Sepsis: Challenging Dogmas to Forge Healthy Paths. Vancouver, BC, May 3 rd 2018. How Do We Define Sepsis?
Invited Speaker:	PAS Session, 2018. "The Inflammation Superhighway: Tolls, Signals and Pathways"
Visiting Professor:	Boston Children's Hospital, Harvard University, 2018. Research Seminar.
Invited Speaker:	Gordon Research Conference on Lasers in Medicine and Biology, July 11, 2018
Invited Speaker:	St. Louis Children's Hospital, Molecular Medicine Conference, Washington University, September 2018
Invited Speaker:	St. Louis Children's Hospital , Pediatric Grand rounds, Washington University, September 2018
Visiting Professor:	Tufts Floating Hospital for Children, October 18, 2018
Invited Speaker:	Medical University of South Carolina, Neonatal Pharmacology Conference, November 2018
Visiting Professor:	Medical University of South Carolina, Research Seminar, November 2018
Invited Speaker:	Medical University of South Carolina, Pediatric Grand Rounds, November 2018
Invited Speaker:	2 nd World Congress on Maternal, Fetal and Neonatal Medicine, London, UK. 2019
Invited Speaker:	University of Virginia. Seminar. Center for Advanced Medical Analytics, March 2019
Invited Speaker:	University of California, San Diego, Pediatric Grand Rounds, May 2019
Invited Speaker:	Shock Society, 42 nd Annual Conference on Shock, June 2019
Invited Speaker:	James Leon Haywood Memorial Pediatric Grand Rounds, University of Alabama, Birmingham. October 2019
Invited Speaker:	Advances and Controversies in Neonatal-Perinatal Medicine, Nashville, November 2019
Visiting Professor:	Cincinnati Children's Hospital, Neonatal Grand Rounds, 2020
Invited Speaker:	Jerry Elliott Memorial Lecture, 44th Southeastern Conference on Perinatal Research, American Academy of Pediatrics Section on Neonatal-Perinatal Medicine, 2020
Invited Speaker:	AAP NeoPREP[®] "Bacterial and Viral infections", "Neonatal Immunology", 2020
Invited Speaker:	Specialty Review in Neonatology/Perinatology . "Neonatal Immunology", "Neonatal Bacterial infections", "Neonatal Viral Infections", 2022
Invited Speaker:	American Thoracic Society, Trained immunity, 2020
Invited Speaker:	University of California, Los Angeles , Neonatal Research Conference, November 2020
Visiting Professor:	University of Iowa, Pediatric Grand Rounds, December 2020

Visiting Professor:	Emory University, Children's Hospital of Atlanta, Neonatal Research Conference, 2020
Invited Speaker:	Children's Hospital of Philadelphia, Neonatal Research Conference, 2021
Invited Speaker:	NEO: The Conference for Neonatology, 2021, Hematology of Sepsis
Invited Speaker:	4th jENS Congress, Athens, Greece, September 2021
Invited Speaker:	Keystone Symposia , "Maternal-Fetal Newborn Immunity", virtual October 2021
Invited Speaker:	AAP NeoPREP[®] "Bacterial and Viral infections", "Neonatal Immunology", 2022
Invited Speaker:	Specialty Review in Neonatology/Perinatology . "Neonatal Immunology", "Neonatal Bacterial infections", "Neonatal Viral Infections", 2022
Invited Speaker:	5 th Argentine Neonatal Congress, May 2022
Institutional:	Duke University, Pediatric Grand Rounds, 2010
	Vanderbilt University, Pulmonology/Critical Care Grand Rounds, 2013
	Vanderbilt University, Biomedical Photonics Group, 2014
	Vanderbilt University, Department of Pediatrics Research Conference, 2014
	University of Florida, Department of Pathology, Immunology, and Experimental
	Medicine Grand rounds, 2015
	University of Florida, Department of Pediatrics, Fellow's research curriculum, 2016
	University of Florida, Department of Pediatrics, Pediatric Grand Rounds, 2019