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**Name:**

**James Lawrence Wynn, MD**



**Office Address:**

Division of Neonatal-Perinatal Medicine,  
Department of Pediatrics  
Department of Pathology, Immunology,  
and Experimental Medicine

1600 SW Archer Road  
PO Box 100296  
Gainesville, FL 32610-0296

**Office Phone number:**

352.273.8980

[james.wynn@peds.ufl.edu](mailto:james.wynn@peds.ufl.edu)

[james.l.wynn@gmail.com](mailto: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:**

0000-0001-7052-4836

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**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, Shands Hospital, University of Florida, 2002-2005

**Fellowship:**

Neonatal-Perinatal Medicine, Shands Hospital, University of Florida, 2005-2008

**Research:**

Post-doctoral research mentor Lyle L. Moldawer, PhD University of Florida, 2005-2008

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**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

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**Academic Appointments:**

Medical Instructor, Department of Pediatrics, **Duke University**, July 2008-October 2010

Assistant Professor of Pediatrics, Department of Pediatrics, **Duke University**, October 2010-June 2012

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-

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Associate Professor of Experimental Medicine, Department of Pathology, Immunology, and Laboratory Medicine, **University of Florida**, September 2015-

Associate Director, Neonatal-Perinatal Medicine Fellowship Program, (website: <http://neonatology.pediatrics.med.ufl.edu/fellowship-program/>), **University of Florida**, July 2015-2017

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**Current Hospital Appointments:**

UF Health, Shands Teaching Hospital, July 2015-

**Professional Organizations:**

**Elected:**

Shock Society, 2014-present  
Society for Pediatric Research, 2011-present  
Perinatal Research Society, 2012-present  
American Association of Immunologists, 2015-present

**Invited:**

Vanderbilt Research Advisory Committee, Department of Pediatrics, 2012-2014  
  
American Heart Association's Immunology Basic Science III Peer Review Committee Member, 2014-2016  
  
Council of Faculty and Academic Societies, Association of American Medical Colleges, Junior Faculty representative. Appointed 2015-2018

The Vanderbilt Pre<sup>3</sup> Initiative: **Pre**venting adverse **P**regnancy outcomes and **P**rematurity: 2014

<https://medschool.vanderbilt.edu/pre3-initiative/>

Precision Vaccines Program: 2016-

<http://www.childrenshospital.org/research-and-innovation/research/departments/medicine/precision-vaccines-program>

**Other:**

American Academy of Pediatrics, 2008-2014  
Section on Perinatal Pediatrics, 2008-2014

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**Professional Activities:**

**National Institutes of Health:**

Loan Repayment Program, Ad hoc reviewer: 2013-

NIAID, Ad hoc reviewer: 2013

NICHD, Ad hoc reviewer: 2014

Chair: 2014/05 ZHD1 DSR-A (51) 1 - Pediatric Critical Care and Trauma Scientist Development Program (PCCTSDP)

2017/05 ZHL1 CSR-R (M2) 1

ZRG1 SBIB-H (82) Study Section, Ad hoc reviewer:

2016/08 ZRG1 SBIB-V (55) R

2017/01 ZRG1 SBIB-H (82) S

**Associate Editor:**

***Pediatric Research***. Neonatology Section: 2016-present

**Guest Editor:**

***Frontiers Journals***. Special Issue: *The Neonatal Immune System: A Unique Host-Microbial Interface*.

**Referee:**

Acta Paediatrica

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Ad hoc reviewer, National Children's Research Centre Grants  
American Heart Association, Immunology Basic Science III peer review  
committee member: 2014-2016  
American Journal of Perinatology Reports  
American Journal of Respiratory and Critical Care Medicine  
Arch of Disease in Childhood; Fetal/Neonatal  
BMC Genomics  
BMC Pediatrics  
BMJ Epocrates  
BMJ Open  
Clinical and Vaccine Immunology  
Eastern Journal of Medicine  
European Journal of Immunology  
Expert Review of Clinical Immunology  
Expert Review of Molecular Diagnostics  
Human Immunology  
Infection and Immunity  
JAMA Pediatrics  
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  
King's Health Partners R&D Challenge Fund  
Laboratory Investigation  
Neonatology  
Pediatric Critical Care Medicine  
Pediatric Research  
**Pediatric Academic Societies**, 2013-, abstract reviewer  
Pediatrics  
PLoS ONE  
Regulatory Peptides  
Scandinavian Journal of Clinical & Laboratory Investigation  
Science Translational Medicine  
World Journal of Pediatrics

**Special Awards or Recognition for Professional Activities:**

**Research Awards:**

|      |   |
|------|---|
| 2007 | <i>Children's Miracle Network (CMN) Travel Award</i> for travel to Trauma, Shock, and Inflammation Society (TSIS) meeting 2007 in Munich, Germany |
| 2007 | <i>Douglas J. Barrett Academic Fellowship Physician Award</i> (\$50,000 salary)   |
| 2007 | <i>Pediatric Academic Society Young Investigator's Travel Award</i> for travel to PAS meeting 2007 Toronto, Canada                                |

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- 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 Renewal 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".**

**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*

**Teaching Activities:**

**Continuing Medical Education:**

Program Director 2015-2017: University of Florida Department of Pediatrics Neonatal Grand Rounds. This is a cyclically updated, 90-lecture, 2-year physiology and pathophysiology didactic lecture series that offers AMA category 1 CME credit created to offer our neonatology providers (including our fellows) a structured learning experience. My responsibilities include arrange presentations and speakers, organization of materials, and assessment of participants' performance.

<http://neonatology.pediatrics.med.ufl.edu/fellowship-program/education/neonatal-grand-rounds-talks/>

Pediatric and Neonatal Point-Of-Care UltraSound (POCUS) Planning Committee Member:

Point-of-care ultrasonography is becoming increasingly more used over the last 10 years, both in adult and pediatric medicine, with multiple clinical authorities calling for its increased use in pediatric and neonatal critical care medicine. However, education in neonatal and pediatric point-of-care ultrasound has been limited by the lack of pediatricians adequately trained in its use. This annual course led by Dr. Michael Tsifansky aims to fill this gap.

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

Invited Lecturer. 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.

Mentor: Mentor a team of three students enrolled in Integrative Biomedical Science (Course #: ISC3523) with the goal to develop and present a scientific manuscript. (Fall semester 2016)  
*Course Description:* An introduction to biomedical science as the application of the natural sciences to medicine. Course content focuses on integration of biological and biochemical sciences, chemical and physical sciences, and social and behavioral sciences in the context of health. Course activities promote skills in problem-solving, critical analysis, and quantitative reasoning.

#### **Research Supervision/Mentoring:**

Dr. Carla Sandler-Wilson (Vanderbilt University, Washington University) and Dr. Bandi Mahaffey (Vanderbilt University, University of Texas)  
Project title: “*Prognostic Value of C-Reactive Protein in Hypoxic-ischemic Encephalopathy.*”

Vanderbilt University, Department of Pediatrics

My Role: Mentor, Direct supervision of trainee in hypothesis, data handling, and manuscript preparation

Dr. Kevin Dufendach (Vanderbilt University)

Project title: “*Virulence Determinants of an Aggressive Escherichia coli isolate causing lethal neonatal meningoencephalitis.*”

Vanderbilt University, Department of Pediatrics

My Role: Mentor, Direct supervision of trainee in hypothesis, data handling, and manuscript preparation

Cheryl Lin (Duke University, MD 2012, Pediatrics, Tufts University)

Project title: “*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.*

My Role: Mentor, Direct supervision of trainee in hypothesis, data handling, and manuscript preparation

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Jillian Crouchley, MD (Duke University, Neonatal-Perinatal Medicine, Medical Instructor).

Project title: "The effects of low dose dopamine on urine output in oliguric preterm infants." PAS abstract 2012, Manuscript submitted November 2012, accepted January 2013.

My Role: Mentor, Direct supervision of trainee in hypothesis, data handling, and manuscript preparation

Taryn Tolle, University of Florida undergraduate, Major: Chemistry, Volunteer in Wynn Laboratory, May 2016-present

My Role: 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

**Clinical Service Awards:**

|      |  |
|------|--|
| 2007 | <i>UF Health Shands Distinguished Customer Service</i> by Physicians-nominated by patients, families, and peers                  |
| 2008 | <i>UF Health Shands Distinguished Customer Service</i> by Physicians-nominated by patients, families, and peers                  |
| 2008 | Induction into <i>Gold Humanism Honor Society</i>  |
| 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  |

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**Research Program:**

**Submitted:**

National Institutes of Health, NIGMS R35GM124744

*Mechanisms of Inflammatory Injury in Neonatal Sepsis*

James L. Wynn, PI

National Institutes of Health, NICHD R01HD092506

*Modifiable Determinants of mortality in Neonatal Sepsis*

James L. Wynn, PI

National Institutes of Health, NIGMS R35 GM122540

*Unrelieved inflammation in trauma, sepsis and chronic critical illness*

Lyle L. Moldawer, Philip Efron, James L. Wynn; PIs

National Institutes of Health, NIGMS R01HD089939

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*Microfluidic Assessment of Clinical Outcomes in Preterm Newborns*

Lyle L. Moldawer, Daniel Irima, James L. Wynn; PIs

National Institutes of Health, NICHD

*Efficacy of Oropharyngeal Mother's Milk: Late-Onset Sepsis in ELBW infants.*

Co-PI

**Active:**

National Institutes of Health, NIGMS K08GM106143

*The Role of the Inflammasome in Neonatal Sepsis*

James L. Wynn, PI

4/2013-4/2018

**Completed:**

Children's Miracle Network

Evaluation and Characterization of Immunological Changes in Murine Neonatal Sepsis.

James L. Wynn, PI

1/2005-12/2006

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 PI

3/2009-5/2011

HHSN-201000003I-TO3

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

James L. Wynn, Site PI

12/6/2012-9/5/2012

Major goals: Determination of pharmacokinetics of metronidazole in preterm infants.

NIH-NICHD 2U10HD040492-11

Cooperative Multicenter Neonatal Research Network

Ronald Goldberg, PI

James L. Wynn, Significant Contributor

4/1/2011-6/31/2012

National Institutes of Health, Loan Repayment Award-Pediatric Research

*Evaluation of Peripheral Blood Neutrophil Gene Expression During Neonatal Sepsis*

James L. Wynn, PI

7/2011-7/2015

Gerber Foundation

Evaluation of Peripheral Blood Neutrophil Gene Expression During Neonatal Sepsis

James L. Wynn, PI

1/2011-12/2013

Vanderbilt Pediatrics, Turner-Hazinski Research Award

*The Role of the Inflammasome in Neonatal Sepsis*

James L. Wynn, PI

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 Preterm Infants*

James L. Wynn, PI

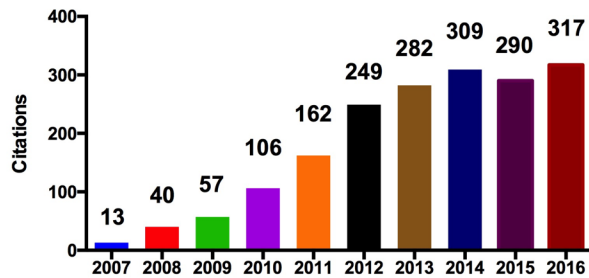
2/2013-11/2015

**Publications and presentations:**

>1880 citations since 2007 per Google Scholar

h-index: 19

i10 index: 29



**Articles:**

1. 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<sup>+</sup>CD25<sup>+</sup> 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 G1TR agonistic antibody corrects adaptive immune dysfunction in sepsis. *Blood*. 2007 Nov 15;110(10):3673-81. *PMCID: PMC2077315*
3. 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<sup>+</sup>CD11b<sup>+</sup> population induces T-cell suppression and T<sub>H</sub>2 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*
7. 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



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- response of children with septic shock. *Mol Med.* 2011;17(11-12):1146-56. PMID: 21738952, PMCID: PMC3321808
9. 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-Wolkowicz 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
  12. 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-Wolkowicz 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, Lupton 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
  16. Crouchley JL, Smith PB, Cotten CM, Hornik CD, Goldberg RN, and Wynn JL. The effects of low dose dopamine on urine output in oliguric preterm infants. *J Perinatol.* 2013 Aug;33(8):619-21. PMID: 23448938.
  17. Cohen-Wolkowicz M, Sampson M, Bloom BT, Arrieta A, Wynn JL, Martz K, Harper B, Kearns GL, Capparelli E, Benjamin Jr. DK, Smith PB, on behalf of the Pediatric Trials Network. Population and Developmental Pharmacokinetics of Metronidazole Using Plasma and Dried Blood Spot Samples from Premature Infants. *Pediatr Infect Dis J.* 2013 Sep;32(9):956-961. PMID: 23587979. PMCID: PMC3769518.
  18. Seigel J, Smith PB, Ashley P, Cotten CM, Herbert C, King B, Maynor A, Neill S, Wynn JL, Bidegain M. Early Administration of Oropharyngeal Colostrum to Extremely Low Birth Weight Infants. *Breastfeed Med.* 2013 Dec;8(6):491-5. PMID: 23805944. PMCID: PMC3868273

19. Coggins SA\*, [Wynn JL\\*](#), Hill ML, Slaughter JC, Ozdas-Weitkamp A, L. Waitman LR, Carnevale RJ, Matta A, Weitkamp JH. Use of a computerized C-reactive protein based sepsis evaluation in the NICU: A five-year experience. *PLoS One*. 2013 Nov 11;8(11):e78602. PMID: 24244325, PMCID: PMC3823853  
*\*co-first authors*
20. Vucovich M, Cotton R, Shelton E, Goettel J, Ehinger N, Poole S, Brown N, [Wynn JL](#), Paria B, Slaughter J, Clark R, Rojas M, and Reese J. *Amnioglycoside-Mediated Relaxation of the Ductus Arteriosus in Sepsis-Associated PDA*. *Am J Physiol Heart Circ Physiol*. 2014 Sep 1;307(5):H732-40. PMID: 24993047
21. Cuenca AG, Joiner DN, Gentile LF, Cuenca AL, [Wynn JL](#), Kelly-Scumpia KM, Scumpia PO, Behrns KE, Efron PA, Nacionales D, Wallet SM, Reeves WH, Mathews CE, Moldawer LL. *TRIF-Dependent Innate Immune Activation Is Critical for Survival to Neonatal Gram-Negative Sepsis*. *J Immunol*. 2015 Feb 1;194(3):1169-77. PMID: 25548220
22. [Wynn JL](#), Guthrie SO, Wong HR, Lahni P, Ungaro R, Lopez MC, Baker HV, Moldawer LL. *Post-natal age is a critical determinant of the human neonatal host response to sepsis*. *Mol Med*. 2015 Jun 2;21(1):496-504. PMID: 26052715
23. [Wynn JL](#), Scumpia PO, Stocks BT, Romano-Keeler J, Alrifai MW, Liu JH, Kim AS, Alford CE, Matta P, Weitkamp JH, Moore DJ. Immunosuppressive CD71<sup>+</sup> cells do not modify neonatal polymicrobial sepsis mortality. *J Immunol*. 2015 Aug 1;195(3):1064-70. PMID: 26101326. **Featured in "In This Issue" by Editor.**
24. Coggins SA, Weitkamp JH, Grunswald L, Reese J, Walsh W, [Wynn JL](#). *Heart Rate Characteristic index monitoring for blood stream infection in the NICU: A 3-year experience*. *Arch Dis Child Fetal Neonatal Ed*. 2015 Oct 30. PMID: 26518312
25. Iqbal J, Dufendach K, Wellons JC, Kuba MG, Nickols HH, Gomez OG, [Wynn JL](#). *Virulence Determinants of an Aggressive Escherichia coli isolate causing lethal neonatal meningitis*. *Infect Dis (Lond)*. 2016 Jun;48(6):461-6. PMID: 27030919
26. [Wynn JL](#), Wilson CS, Scumpia PO, Liu J, Zharkikh I, Wong HR, Lahni P, Benjamin JT, Plosa EJ, Weitkamp JH, Hawiger J, Sherwood ER, Moldawer LL, Ungaro R, Baker HV, Lopez MC, McElroy SJ, Colliou N, Mohamadzadeh M, Moore DJ. *Targeting IL-17A attenuates neonatal sepsis mortality induced by IL-18*. *Proc Natl Acad Sci U S A*. 2016 May 10;113(19):E2627-35. PMID: 27114524. PMCID PMC4868456. **Featured in Nature Immunology.**
27. Weitkamp JH, Guthrie SO, Wong HR, Moldawer LL, Baker HV, [Wynn JL](#). *Histological chorioamnionitis shapes the neonatal transcriptomic immune response*. *Early Hum Dev*. 2016 Jul;98:1-6. PMID: 27318328.
28. Atkinson SJ, Varisco BM, Sandquist M, Daly MN, Klingbeil L, Kuethe JW, Midura EF, Caldwell CC, Harmon K, Lahni P, Piraino G, Hake P, Zingarelli B, Mortensen JE, [Wynn JL](#), Wong HR. *Matrix metalloproteinase-8 (MMP-8) augments bacterial clearance in juvenile mice*. *Mol Med*. 2016 Aug 8;22. PMID: 27506554.

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29. Romano-Keeler J, Azcarate-Peril MA, Weitkamp JH, Slaughter JC, McDonald WH, Meng S, Latuga MS, [Wynn JL](#). *Oral colostrum priming shortens hospitalization without changing the immune-microbial milieu. J Perinatol. 2017 Jan;37(1):36-41. PMID: 27684425, PMCID: PMC5215726.*
30. [Wynn JL](#), Kelly M, Benjamin DK, Clark R, Greenberg R, Benjamin DK Jr, Smith PB. *Timing of Multi-Organ Dysfunction Among Premature Infants with Fatal Sepsis. Am J Perinatol. 2016 Dec 6. Epub ahead of print. PMID: 27923248*
31. Srinivasan L, Page G, Kirpalani H, Murray JC, Das A, Higgins RD, [Wynn JL](#), Cotten CM, Carlo WA, Bell EF, Goldberg RN, Schibler K, Sood BG, Stevenson DK, Stoll BJ, Van Meurs KP, Johnson KJ, McDonald SA, Zaterka-Baxter KM, Kennedy KA, Sánchez PJ, Duara S, Walsh MC, Shankaran S, Korones SB, Finer NN, for the Eunice Kennedy Shriver National Institute of Child Health and Human Development Neonatal Research Network. *Genome Wide Association Study of Sepsis in Extremely Premature Infants*. Revision under review 2017.
32. Sweeney, TE\*, [Wynn JL\\*](#), Cernada M, Serna E, Wong HR, Moldawer LL, Vento M, Khatri P. *Validation of the Sepsis MetaScore for Diagnosis of Neonatal Sepsis*. Revision under review 2017.  
\*co-first authors
33. Raymond SL, Lopez C, Baker HV, Larson SD, Sweeney TE, Moldawer LL, [Wynn JL](#). Multi-Cohort Analysis of Age-Specific Genomic Response to Sepsis. Under review, 2017.
34. Rincon JC, Cuenca AL, Mathias, B, Nacionales DC, Ungaro R, Efron PA, [Wynn JL](#), Moldawer LL, Larson SD. Adjuvant pretreatment with alum protects neonatal mice in sepsis via inflammasome-dependent mechanism. Under review, Journal of Immunology, January 2017.
35. Guthrie SO, Wadley SD, [Wynn JL](#). Antibiotic stewardship in the NICU: mitigating overuse through a simple intervention. Under review, Neonatology 2017.
36. Veach RA, Liu Y, Zienkiewicz J, Wylezinski LS, Boyd K, [Wynn JL](#), Hawiger J. Survival, Bacterial Clearance and Thrombocytopenia are Improved in Polymicrobial Sepsis by Targeting Nuclear Transport Shuttles Importins  $\alpha 5$  and  $\beta 1$ . Under review, PLoS One 2017

## Invited Reviews (peer reviewed):

1. [Wynn JL](#), Neu J, Moldawer LL, Levy O. Potential of Immunomodulatory Agents for Prevention and Treatment of Neonatal Sepsis. *J Perinatol. 2009 Feb;29(2):79-88. PMID: 18769381. PMCID: PMC3974913.*
2. Kataria, J, Li, N, [Wynn, JL](#), Neu, J. Probiotic Microbes: Do They Need To Be Alive To Be Beneficial? *Nutr Rev. 2009 Sep;67(9):546-50. Nutrition Reviews, 2009. PMID: 19703261*
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10. Romano-Keeler J, Wynn JL, Maron JL. Great Expectorations: The Potential of Salivary "Omic" Approaches in Neonatal Intensive Care. *J Perinatol*. 2014 Jan 9. *PMID: 24406743, PMCID: PMC3962691.*
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12. Wynn JL, Wong HR, Shanley TP, Bizzarro M, Saiman L, Polin RA. Time for a neonatal-specific consensus definition for sepsis. *Pediatr Crit Care Med*. 2014 Jul;15(6):523-8. *PMID: 24751791, PMCID: PMC4087075.*
13. Coggins SA, Wynn JL, Weitkamp JH. Infectious causes of necrotizing enterocolitis. *Clin Perinatol*. 2015 Mar;42(1):133-54. *PMID: 25678001, PMCID pending.*
14. Benitz WE, Wynn JL, Polin RA. Reappraisal of Guidelines for Management of Neonates with Suspected Early-Onset Sepsis. *J Pediatr*. 2015 Apr;166(4):1070-4. *PMID: 25641240*
15. Wynn JL. *Defining Neonatal Sepsis*. Current Opinion in Pediatrics. *Curr Opin Pediatr*. 2016 Apr;28(2):135-40. *PMID: 26766602.*
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## Book Chapters:

1. Wynn JL, Saxonhouse MA, Sleasman JW. *Immunodeficiency Diseases of the Neonate. Neonatal Hematology*. 2<sup>nd</sup> Edition, De Alarcon, Werner & Christensen: Editors. Cambridge University, 2012.
2. Wynn JL, Neu J. *The Neonatal Gastrointestinal Tract as a Conduit to Systemic Inflammation and Developmental Delays. Gastroenterology and Nutrition: Neonatology Questions and Controversies*, 2<sup>nd</sup> Edition: Neu: Editor, 2012.

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3. Wynn JL, Hazelzet JA, Shanley TP, Wong HR, Wheeler DS. Sepsis. **Pediatric Critical Care Medicine: Basic Science and Clinical Evidence**. 2<sup>nd</sup> Edition. *Wheeler, Shanley, & Wong*: Editors. Release in 2014.
4. Wynn JL, Wong HR. *Pathophysiology of Neonatal Sepsis*. **Fetal and Neonatal Physiology, 5<sup>th</sup> Edition**. *Polin, Abman, Benitz, and Rowitch*: Editors. 2016.
5. Ruoss JL, Wynn JL. Biomarkers in the Diagnosis of Neonatal Sepsis. **Infectious Disease and Pharmacology: Neonatology Questions and Controversies**. 3<sup>rd</sup> Edition: Benitz, Smith, Polin: Editors, 2016.

#### Invited Editorials:

1. Wynn JL. *TLRs, SNPs, and VLBWs: Oh My! J Perinatol*. 2013 Oct;33(10):745-7. PMID: 24071961, PMCID: PMC3974913.
2. Bastarache JA, Wynn JL, Ware LB. *Fanning the fire: Can methemoglobin enhance neutrophil activation? EBioMedicine*. 2015 Feb 2;2(3):184-185. PMID: 26137557, PMCID: PMC4485487.

#### Provisional Patents:

1. "Optical device for non-invasive, early monitoring of blood profiles in neonates." February 10, 2015. EFS ID#: 21452894.

#### Podcasts:

1. Time for a neonatal-specific consensus definition for sepsis. *Pediatr Crit Care Med*. 2014. <http://www.sccm.org/Communications/iCritical-Care/Pages/iCritical-Care.aspx>  
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. PNAS manuscript, 2016: <https://ufhealth.org/news/2016/blocking-protein-blood-may-prevent-sepsis-premature-infants>
2. PNAS manuscript, 2016: <http://news.vanderbilt.edu/2016/06/vumc-researchers-seek-to-crack-the-code-of-neonatal-sepsis/>

#### Presentations:

- Invited Speaker: **Boston Children's Hospital**. "Toll-like receptor mediated augmentation of murine neonatal sepsis survival", April 2007.
- Invited Speaker: **6<sup>th</sup> 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.
- Visiting Professor: **University of Michigan**, Mott Children's Hospital, Ann Arbor MI. "Murine and Human neonatal host response to sepsis", October 2010.
- Visiting Professor: **Cincinnati Children's Hospital**, Cincinnati OH. Immunology Seminar. "Neonatal Host Response to Sepsis", April 2011.
- Invited Chair: **PAS Session Chair 2011: "Elucidating Host Susceptibility to Infection"**. Denver CO. **PAS Session Chair 2015: "Time for a Neonatal-Specific Consensus Definition for Sepsis"**.

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- 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 2.0**, Orlando Florida. "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 Immunity**, June 2015.
- Visiting Professor: **Johns Hopkins University**, High Risk Obstetrical Conference, November 2015.
- Invited Speaker: **27<sup>th</sup> Annual Florida Association for Neonatal Nurse Practitioners Clinical Symposium and Update**, 2016.
- Invited Speaker: **NeoFest 2017.** Cincinnati Children's Hospital. 2017
- Invited Speaker: **PAS Session presenter 2017.** "Neonatal Immunity, Sepsis, and Immunotherapy"
- Invited Speaker: **90th Perinatal & Developmental Symposium (AAP Section on Perinatal Pediatrics), 2017.**
- Invited Speaker:
- Institutional: **Duke University**, Pediatric Grand Rounds, November 2010.  
**Vanderbilt University**, Pulmonology/Critical Care Grand Rounds, December 2013  
**Vanderbilt University**, Biomedical Photonics Group, January 2014.  
**Vanderbilt University**, Department of Pediatrics Research Conference, November 2014.  
**University of Florida**, Department of Pathology, Immunology, and Experimental Medicine Grand rounds, September 2015.