

## CURRICULUM VITAE

Date updated: 7/3/2017

### PERSONAL INFORMATION:

Name: Matthew L. Stoll  
Citizenship: U.S.A.  
Home address: XXXXX / Birmingham, AL 35226  
Phone: (205) xxx-xxxx

**RANK / TITLE:** Associate Professor, Division of Pediatric Rheumatology  
Department: Pediatrics  
Business address: University of Alabama at Birmingham  
1600 7<sup>th</sup> Ave South / CPP N. Suite G10  
Birmingham, AL 35233  
Phone: (205) 638-9438

### HOSPITAL AND OTHER (NON-ACADEMIC) APPOINTMENTS:

2011 – present Children's of Alabama (Birmingham, AL)  
2007 – 2011 Childrens Medical Center (Dallas, TX)  
2007 – 2011 Texas Scottish Rite Hospital for Children (Dallas, TX)

### EDUCATION:

1994 B.A. (Molec. Biology & Biochem.) Wesleyan University (Middletown, CT)  
[Graduated Phi Beta Kappa]  
2001 M.D., Ph.D. (Immunology) SUNY Upstate Medical University (Syracuse, NY)  
2011 M.S.C.S. UT Southwestern Medical Center (Dallas, TX)

### LICENSURE:

New York (229888), inactive  
Massachusetts (220256), inactive  
Texas (M8363), inactive  
Alabama (30926), active

### BOARD CERTIFICATION:

2014 American Board of Pediatrics: General Pediatrics (through 2024)  
2009 American Board of Pediatrics: Pediatric Rheumatology (through 2019)

### POST-DOCTORAL TRAINING:

2001 – 2004 Residency in Pediatrics, Long Island Jewish Medical Center  
2004 – 2007 Fellowship in Pediatric Rheumatology, Childrens Hospital Boston

### ACADEMIC APPOINTMENTS:

2014 – present Associate Professor, Department of Microbiology, UAB, Birmingham, AL  
2014 – present Associate Professor, Department of Pediatrics, UAB, Birmingham, AL  
2011 – 2014 Assistant Professor, Department of Pediatrics, UAB, Birmingham, AL  
2008 – 2011 Assistant Professor, Department of Pediatrics, UTSW, Dallas, TX

Matthew Stoll MD, PhD, MSCS

2007 – 2008                    Instructor, Department of Pediatrics, UTSW, Dallas, TX

**AWARDS / HONORS:**

4/2015                    Top faculty poster, CARRA annual conference (Austin, TX)  
12/2014                    Nominated, Birmingham Parent’s List of Favorite Doctors  
12/2012                    Selected Member, Society for Pediatric Research  
07/2004                    Farley Fellowship Award (Childrens Hospital Boston; MA)  
09/2000                    Alpha Omega Alpha (SUNY Upstate Medical University; Syracuse, NY)  
04/1994                    Phi Beta Kappa (Wesleyan University; Middletown, CT)

**PROFESSIONAL SOCIETIES:**

2016    Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA)  
2015    SpondyloArthritis Research and Treatment Network (SPARTAN)  
          Member, Scientific Subcommittee 2017 –  
2012    Society for Pediatric Research (SPR)  
          SPR Student Research and House Officer Awards Selection Committee 2016 - 2019  
2012    UAB Comprehensive Arthritis, Musculoskeletal and Autoimmunity Center  
2011    Alabama Society for Rheumatic Diseases (ASRD)  
2010    Pediatric Rheumatology Collaborative Study Group (PRCSG)  
2007    American College of Rheumatology (ACR)  
          At-large member of Abstract Oversight Committee (2018 – 2021)  
2007    Childhood Arthritis and Rheumatology Research Alliance (CARRA)  
          Spondyloarthritis session moderator 2014 – 2017

**MEMBERSHIPS:**

**(University of Alabama at Birmingham)**

Comprehensive Arthritis, Musculoskeletal, Bone and Autoimmunity Center  
Graduate Program in Immunology  
Immunology, Autoimmunity and Transplantation (IAT) Committee  
T Cell Biology Group  
UAB Nutrition Obesity Research Center

**COUNCILS AND COMMITTEES**

1. UAB Immunology, Allergy, and Transplant ad hoc grant reviewer, October 2012
2. UAB Immunology, Allergy, and Transplant ad hoc grant reviewer, October 2013
3. Crohn’s and Colitis Foundation of America, ad hoc grant reviewer for BROAD Research Foundation at CCFA, February 2015
4. Arthritis Research UK ad hoc grant reviewer, July 2015
5. Arthritis Foundation ad hoc grant reviewer, August 2016

**SERVICE TO UNIVERSITY:**

**(UT Southwestern Medical Center)**

1. Rheumatology Epic liaison (2007 – 2011)

**(University of Alabama at Birmingham)**

2. Graduate Student Research Day, judge (2012)

3. Immunology, Allergy, and Transplant (IAT) committee member (2011 – present)
4. Oversight committee for the Sciex 6600+ TripleTOF Shared Instrument Application
5. Pediatric Rheumatology Scientific Review Committee (2016 – present)
6. UAB Search Committee for Pediatric Rheumatologist (2016)

### **Clinical activities**

1. Pediatric rheumatology outpatient clinic: three half-days per week.
2. Pediatric rheumatology inpatient consult service: 10 weeks per year

### **EDITORIAL BOARD MEMBERSHIPS:**

Ad hoc reviewer for the following journals:

*Arthritis and Rheumatology*

*Arthritis Care and Research*

*Arthritis Research and Therapy*

*Clinical and Experimental Immunology*

*Journal of the American Medical Association*

*Journal of Immunology*

*Journal of Rheumatology*

*Mucosal Immunology*

*New England Journal of Medicine*

*Pediatrics*

### **MAJOR RESEARCH INTERESTS:**

My major research interest is the link between mucosal immunity and spondyloarthritis. Specifically, I am looking at the adaptive (humoral and T cell) immune responses to enteric organisms and the nature of the fecal microbiota in patients with spondyloarthritis. I also am interested in the epidemiology, diagnosis, and treatment of temporomandibular joint (TMJ) arthritis in children with juvenile idiopathic arthritis (JIA).

### **TEACHING EXPERIENCE:**

#### **Mentoring**

- Mentored Jordan Watkins, UAB Community Outreach Research Development Summer Science Institute, Summer of 2017.
- Mentored high school research volunteer Hannah James, April 2015 – March 2016. Project won third prize in the Greater East Alabama Regional Science and Engineering Fair, and she also received a Legacy Environmental Scholarship on the basis of this work.
- Ph.D. review committee member: Miika Arvonon (University of Oulu, Finland) 2013

#### **Classroom instruction**

January 21, 2016: “Conducting studies of the microbiota” -- lecture for MIC741 - Topics in Professional Development: 'OMICS

Fall 2011: Introduction to Clinical Medicine - I

#### **Informal presentations**

5/25/2017: Microbial influences on arthritis, and what we can do about it. CNC Neuroscience Café, Homewood AL.

5/17/2017: Getting started in Bioinformatics: insights for Rheumatologists; the microbiome. Childhood Arthritis and Rheumatology Research Alliance annual meeting 2017, Houston TX.

4/7/2017: Potential mechanisms linking the human intestinal microbiota to juvenile spondyloarthritis. Childrens Hospital Investigator Forum (CHIF), University of Alabama at Birmingham, AL

3/19/2015: Microbiota in spondyloarthritis. Research in Progress, University of Alabama at Birmingham.

2/3/2015: Microbiota in juvenile spondyloarthritis. Microbiology seminar series, University of Alabama at Birmingham, AL.

8/15/2014: Enteric microbiota in juvenile spondyloarthritis. Childrens Hospital Investigator Forum (CHIF), University of Alabama at Birmingham, AL.

1/23/2014: Enteric organisms in spondyloarthritis. Research in Progress, University of Alabama at Birmingham.

9/13/2012: Exploration of the microbiota in Inflammatory Diseases. Research Computing Day 2012, University of Alabama at Birmingham, AL.

06/15/2012: Adaptive immune responses to enteric microbiota in children with spondyloarthritis. Childrens Hospital Investigator Forum (CHIF), University of Alabama at Birmingham, AL.

03/28/2012: Collagen vascular diseases. Pediatric residents board review, University of Alabama at Birmingham, AL.

8/18/2010: Gut inflammation and arthritis. Gastroenterology noon conference, UTSW, Dallas, TX.

4/9/2010: Clinical research in pediatrics. Rheumatology fellow's conference, UTSW, Dallas, TX.

1/14/2010: Pediatric connective tissue diseases. Regional X Medical Conference for School-based PTs and OTs. Texas Scottish Rite Hospital, Dallas, TX.

5/29/2008: The risk of hospitalized infections in patients with rheumatoid arthritis. Rheumatology Journal Club, UT Southwestern Medical Center, Dallas, TX.

1/24/2008: Pain syndromes. Physical therapy in-service, Texas Scottish Rite Hospital for Children's Medical Center, Dallas, TX.

## **MAJOR LECTURES AND VISITING PROFESSORSHIPS:**

Matthew Stoll MD, PhD, MSCS

11/7/2017: The Microbe-Immunity Dance in JIA. Symposium presentation at the American College of Rheumatology annual conference 2017, San Diego CA.

7/14/2017: Clinical aspects of juvenile psoriatic arthritis. 2017 GRAPPA Annual meeting: Amsterdam, The Netherlands.

6/4/2017: The Microbiota in Spondyloarthritis. Invited speaker at the Arizona United Rheumatology Alliance (AURA) annual meeting 2017, Sedona, AZ.

3/23/2016: Fine-tuning the association between pediatric arthritis and Faecalibacterium prausnitzii. Wonderful World of Technology Seminar Series, UAB.

11/13/2016: Defining the normal appearance of the TMJ. American College of Rheumatology 2016, TMJ Workgroup.

10/15/2016: Central and inflammatory pain in arthritis: is it either / or? New Frontiers of Pain Research in the 21<sup>st</sup> Century, UAB.

7/24/2016: The microbiota in juvenile spondyloarthritis. Spondyloarthritis Research and Treatment Network Annual Meeting, Denver CO.

3/12/2016: Antibody testing in the evaluation of rheumatic diseases and treatment. Springing into Pediatric Rheumatology, UAB.

10/15/2015: The microbiota in health and inflammatory disease. Pediatric Grand Rounds, University of Chicago (IL).

9/29/2015: Multi-omics studies of gut microbiota in children with spondyloarthritis identify diminished microbial diversity and altered tryptophan metabolism as potential factors in disease pathogenesis. Immunogenomics 2015, Huntsville AL.

4/9/2015: Microbiota in spondyloarthritis. Program in Immunology Seminar Series. University of Alabama at Birmingham, Birmingham AL.

1/26/2015: Microbiome analysis: from concept to completion. UAB Microbiome Resource Workshop: linking sample acquisition, bioinformatics and statistics to investigate the role of complex microbial communities in health and disease. University of Alabama at Birmingham, Birmingham AL.

8/21/2014: Juvenile idiopathic arthritis. Rheumatology Grand Rounds, University of Alabama at Birmingham, AL.

1/20/2014: The spondyloarthropathies. Rheumatology Grand Rounds, University of Alabama at Birmingham, AL.

10/6/2012: Exploration of the Microbiota in Rheumatic Diseases. Lowe Conference 2012, Camp McDowell, AL.

2/2/2012: The Role of Antibodies in the Evaluation of Rheumatic Diseases. Pediatric Grand Rounds, University of Alabama at Birmingham, AL.

10/13/2011: Juvenile Idiopathic Arthritis. Rheumatology Grand Rounds, University of Alabama at Birmingham, AL.

4/29/2011: Antibody Testing in the Evaluation of Rheumatic Diseases. 43<sup>rd</sup> Annual Kenneth C. Haltalin Pediatrics for the Practitioner conference, Richardson, TX.

12/7/2010: Mucosal Immunity In and Outcome of Spondyloarthritis. Rheumatology Grand Rounds, University of Alabama at Birmingham, AL.

9/30/2010: Kids Get Spondyloarthritis, Too! Rheumatology Grand Rounds, UTSW, Dallas, TX.

12/18/2008: Juvenile Spondyloarthritis. Rheumatology Grand Rounds, UT Southwestern Medical Center, Dallas, TX.

4/13/2007: Bone Marrow B-lineage Cells in RA Patients Treated with Rituximab. Pediatric Rheumatology Grand Rounds, Childrens Hospital Boston, MA.

12/15/2006: Role of aspirin in the prevention of thrombotic events in anti-phospholipid antibody-positive patients. Pediatric Rheumatology Grand Rounds, Childrens Hospital Boston, MA.

## **GRANT SUPPORT:**

### **Current**

#### **Division of Clinical Immunology and Rheum, CAMAC, CORT in gout and hyperuricemia**

The Role of the Gut Microbiome in Hyperuricemia and Gout

Award dates: 3/24/2017 – 9/30/2018

\$15,000 Total Direct Costs

Role: Principal investigator

#### **1R21ES024413-01 (Stoll, PI)**

NIH / NIEHS

Interactions between AHR ligands and the gut microbiota in murine arthritis

\$137,500 Annual Direct Costs

Award dates 8/1/2014 – 7/31/2017 (no-cost extension through 7/31/2017)

Role: Principal investigator

**P60 AR064172 (Bridges, PI; Elson, PI, Project 3)**

NIH / NIAMS

UAB Multidisciplinary Clinical Research Center – Project 3

Adaptive immune responses to gut microbiota in juvenile & adult spondyloarthritis

\$191,666 Annual Direct Costs

Award dates: 9/16/13 – 7/31/18

Role: Co-investigator

**Previous**

**Friends of CARRA**

Enteric Flora in newly diagnosed spondyloarthritis: a collaborative study

\$25,000 Annual Direct Costs

Award dates 10/1/13 – 9/30/16

Role: Principal investigator

**American College of Rheumatology – Rheumatology Research Foundation (ACR – RRF)**

Exploration of the gut microbiome in spondyloarthritis

\$115,741 Annual Direct Costs

Award dates: 7/1/2013 – 6/30/2016

Role: Principal investigator

**Kaul Pediatric Research Institute / Children's of Alabama**

Identification of target antigens in children with spondyloarthritis

Award dates: 2/1/2013 – 1/31/2014

\$30,000 Annual Direct Costs

Role: Principal investigator

**UAB School of Medicine: Immunology, Autoimmunity, and Transplant Strategic Effort**

Autoimmunity against enteric antigens in juvenile spondyloarthritis

Award dates: 12/5/2011 – 12/31/2012

\$30,000 Annual Direct Costs

Role: Principal investigator

**NIH/NCRR 1 KL2 RR024983-01**

Principal Investigator: Packer, Milton

Project Title: North and Central Texas Clinical and Translational Science Initiative

Award Dates: 07/01/08 – present

Role: Clinical Sciences Trainee

**NIH/NCRR 5 KL2 RR024983-02**

Principal investigator: Packer, Milton

Award dates: 6/1/08 – 5/31/09

Role: pilot-award recipient PI

Subgroups of juvenile psoriatic arthritis: a clinical and gene expression analysis

**UL1 RR024982-01**

Principal investigator: Packer, Milton

Award dates: 9/17/07 – 6/30/08

North and Central Texas Clinical and Translational Science Initiative

Awardee: UT Southwestern Medical Center

Role: Clinical Sciences Trainee

**T32-AI007512 Raif Geha (PI)**

Award dates: 7/1/05 – 6/30/07

Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grants

Molecular Basis of Allergic and Immunologic Disease

Awardee: Childrens Hospital Boston

Role: Trainee.

**ORGANIZING ROLES IN SCIENTIFIC MEETINGS**

May 2017, Abstract Selection Subcommittee, Spondyloarthritis Research and Treatment Network (SPARTAN) annual conference

Nov 2016, “Pediatric rheumatology – clinical”, Abstract Selection Subcommittee, American College of Rheumatology (ACR), Washington, DC

Apr 2016 “Allergy, Immunology, and Rheumatology”, Abstract Selection Subcommittee, Pediatric Academic Societies (APS / SPR), Baltimore, MD

Apr 2015 “Allergy, Immunology, and Rheumatology”, Abstract Selection Subcommittee, Pediatric Academic Societies (APS / SPR), San Diego, CA

Jan 2015 “UAB Microbiome Resource Workshop,” Organizing Committee, UAB

**BIBLIOGRAPHY:****PEER-REVIEWED MANUSCRIPTS:****Manuscripts already published**

1. **Stoll M**, Gavalchin J. Systemic lupus erythematosus—messages from experimental models. *Rheumatology* 2000; 39:18-27.
2. Price K, Knupp CJ, Tatum AH, Jiang F, **Stoll ML**, Gavalchin J. Molecular identification of pathogenic Id<sup>LN</sup>F<sub>1</sub> autoantibody idiotypes derived from the (NZB x SWR)F<sub>1</sub> model for systemic lupus erythematosus. *Journal of Autoimmunity* 2002; 19: 87-101.
3. **Stoll ML**, Listman JA. Nephrolithiasis in a neonate with transient renal wasting of calcium and magnesium. *Pediatric Nephrology* 2002; 17: 386-389.

4. Brown K, Ratner M, **Stoll M**. Pheochromocytoma unmasked by imipramine in an 8-year old girl. *Pediatric Emergency Care* 2003; 19: 174-177.
5. **Stoll ML**, Gauthier BG, Vergara M, Ramek J, Frank R, Trachtman H. Efficacy of losartan in the treatment of erythrocytosis in a young adult with CRF. *Pediatric Nephrology* 2004; 19: 120-121.
6. **Stoll ML**, Rubin LG. Incidence of occult bacteremia among highly febrile young children presenting to a children's hospital emergency department or urgent care center in the era of the pneumococcal conjugate vaccine. *Archives of Pediatric and Adolescent Medicine* 2004; 158: 671-675.
7. **Stoll ML**, Zurakowski D, Nigrovic LE, Nichols DP, Sundel RP, Nigrovic PA. Patients with juvenile psoriatic arthritis comprise two distinct populations. *Arthritis and Rheumatism* 2006; 54: 3564-3572.
8. **Stoll ML**, Nigrovic PA. Subpopulations within juvenile psoriatic arthritis: a review of the literature. *Clinical and Developmental Immunology* 2006; 13): 377-380.
9. **Stoll ML**, Price KD, Silvin CJ, Jiang F, Gavalchin J. Immunization with peptides derived from the idiotypic region of lupus-associated autoantibodies delays the development of lupus nephritis in the (SWR x NZB)F<sub>1</sub> murine model. *Journal of Autoimmunity* 2007; 29: 30-37.
10. **Stoll ML**, Gotte AC. Biological therapies for the treatment of juvenile idiopathic arthritis: lessons from adult and pediatric experiences. *Biologics: Targets and Therapies* 2008; 2: 229-252.
11. **Stoll ML**, Lio P, Sundel RP, Nigrovic PA. Comparison of Vancouver and International League of Associations for Rheumatology classification criteria for juvenile psoriatic arthritis. *Arthritis Care and Research* 2008; 59: 51-58.
12. **Stoll ML**, Solomon DH, Batra KL, Simard JF, Karlson EW, Dellaripa PF, Weinblatt ME, Glass R, Shadick NA. TNF $\alpha$  inhibitors may improve asthma symptoms: a case series of 12 patients with rheumatoid arthritis and asthma. *Journal of Clinical Rheumatology* 2009; 15: 198-200.
13. Simard JF, **Stoll ML**, Shadick NA, Karlson EW, Solomon DH. Validity of self-report of infections in a longitudinal cohort of patients with rheumatoid arthritis differs by source of report and infection severity. *Journal of Clinical Epidemiology* 2010; 63: 1358-1362.
14. **Stoll ML**, Bhore R, Dempsey-Robertson M, Punaro M. Spondyloarthritis in a pediatric population: risk factors for sacroiliitis. *Journal of Rheumatology* 2010; 37: 2402-2408.
15. **Stoll ML**, Nigrovic PA, Gotte AC, Punaro M. Clinical comparison of early-onset psoriatic and non-psoriatic oligoarticular juvenile idiopathic arthritis. *Clinical and Experimental Rheumatology* 2011; 29: 582-588.
16. **Stoll ML**. Interactions of the innate and adaptive arms of the immune system in the pathogenesis of spondyloarthritis. *Clinical and Experimental Rheumatology* 2011; 29: 322-330.
17. **Stoll ML**, Li Q, Zhou J, Punaro M, Olsen N. Elevated IgG autoantibody production in oligoarticular juvenile idiopathic arthritis may predict a refractory course. *Clinical and Experimental Rheumatology* 2011; 29: 736-742.
18. **Stoll ML**, Patel AS, Punaro M. Fecal calprotectin in children with the enthesitis-related arthritis subtype of juvenile idiopathic arthritis. *Journal of Rheumatology* 2011; 38: 2274-2275.

19. **Stoll ML**, Punaro M. Psoriatic juvenile idiopathic arthritis: a tale of two subgroups. *Current Opinion in Rheumatology* 2011; 23: 437-443.
20. **Stoll ML**, Patel AS, Punaro M, Dempsey-Robertson M. MR enterography to evaluate sub-clinical intestinal inflammation in children with spondyloarthritis. *Pediatric Rheumatology* 2012; 10: 6.
21. Feng F, Silvin C, Fiore N, **Stoll M**, Shanley P, Silverstone AE, and Gavalchin J. 17 $\beta$ -Estradiol (E-2) administration to male (NZB x SWR)F1 mice results in increased IdLNF<sub>1</sub>-reactive memory T-lymphocytes and accelerated glomerulonephritis. *Lupus*, 2012; 21: 288-301.
22. **Stoll ML**, Patel AS, Christadoss ML, Punaro M, Olsen NJ. IgA transglutaminase levels in children with juvenile idiopathic arthritis. *Annals of Paediatric Rheumatology* 2012; 1: 31-35.
23. DeWitt EM, Kimura Y, Beukelman T, Nigrovic PA, Onel K, Prahalad S, Schneider, R, **Stoll ML**, Angeles-Han S, Milojevic D, Schikler KN, Vehe R, Weiss J, Weiss P, Ilowite N, Wallace C. Consensus treatment plans for new-onset systemic juvenile idiopathic arthritis. *Arthritis Care and Research* 2012; 64: 1001-1010.
24. **Stoll ML**, Good J, Sharpe T, Beukelman T, Young D, Waite PW, Cron RQ. Intraarticular corticosteroid injections to the temporomandibular joints are safe and appear to be effective therapy in children with juvenile idiopathic arthritis. *Journal of Oral and Maxillofacial Surgery* 2012; 70: 1802-1807.
25. **Stoll ML**, Sharpe T, Beukelman T, Good J, Young D, Cron RQ. Risk factors for temporomandibular joint arthritis in children with juvenile idiopathic arthritis. *Journal of Rheumatology* 2012; 39: 1880-1887.
26. Nyland JF, **Stoll ML**, Jiang F, Feng F, Gavalchin J. Mechanisms involved in the p62-73 idiotopeptide-modulated delay of lupus nephritis in SNF(1) mice. *Lupus* 2012; 21:1552-1564.
27. **Stoll ML**, Morlandt A, Teerawattanapong S, Young D, Waite PD, Cron RQ. Safety and efficacy of intra-articular infliximab therapy for treatment resistant temporomandibular joint arthritis in children: a retrospective study. *Rheumatology* 2013; 52: 554-559.
28. Henderson LA, Loring SL, Gill RR, Liao KP, Ishizawar R, Kim S, Perlmutter-Goldenson R, Rothman D, Son MB, **Stoll ML**, Zemel LS, Sandborg C, Dellaripa PF, Nigrovic PA. Shrinking lung syndrome as a manifestation of pleuritis: a new model based on pulmonary physiological studies. *Journal of Rheumatology* 2013; 40: 273-281.
29. Tambralli A, Beukelman T, Weiser P, Atkinson TP, Cron RQ, **Stoll ML**. High doses of infliximab in the management of juvenile idiopathic arthritis. *Journal of Rheumatology* 2013; 40: 1749-1755.
30. **Stoll ML**, Cron RQ. Treatment of juvenile idiopathic arthritis in the biologic age. *Rheumatic Disease Clinics of North America* 2013; 39: 751-766.
31. Vaid YN, Dunnivant DF, Royal SA, Beukelman T, **Stoll ML**, Cron RQ. Imaging of the temporomandibular joint in juvenile idiopathic arthritis. *Arthritis Care and Research* 2014; 66: 47-54.
32. **Stoll ML**, Cron RQ. Treatment of juvenile idiopathic arthritis: a revolution in care. *Pediatric Rheumatology* 2014; 12:13.
33. Kimura Y, Morgan Dewitt E, Beukelman T, **Stoll ML**, Nigrovic PA, Onel K, Prahalad S, et al. Adding canakinumab to the childhood arthritis and rheumatology research alliance consensus treatment plans for systemic juvenile idiopathic arthritis. *Arthritis Care and Research* 2014; 66: 1430-1431.

34. **Stoll ML**, Kumar R, Morrow CD, Lefkowitz EJ, Cui X, Genin A, Cron RQ, Elson CO. Altered microbiota associated with abnormal humoral immune responses to commensal organisms in enthesitis-related arthritis. *Arthritis Research and Therapy* 2014; 16:486.
35. Tambralli A, Beukelman T, Cron RQ, and **Stoll ML**. Safety and efficacy of rituximab in childhood-onset lupus and other rheumatic diseases. *Journal of Rheumatology* 2015;42:541-546.
36. Ringold S, Hendrickson A, Abramson L, Beukelman T, Blier PR, Bohnsack J, Chalom EC, Gewanter HL, Gottlieb B, Hollister R, Hsu J, Hudgins A, Ilowite NT, Klein-Gitelman M, Lindsley C, Lopez Benitez J, Lovell DJ, Mason T, Milojevic D, Moorthy LN, Nanda K, Onel K, Prahalad S, Rabinovich CE, Ray L, Rouster-Stevens K, Ruth N, Shishov M, Spalding S, Syed R, **Stoll M**, Vehe RK, Weiss JE, White AJ, Wallace CA, Sobel RE. Novel method to collect medication adverse events in juvenile arthritis: Results from the Childhood Arthritis and Rheumatology Research Alliance Enhanced Drug Safety Surveillance Project. *Arthritis Care and Research* 2015; 67: 529-537.
37. **Stoll ML**, Cron RQ, and Saurenmann RT. Systemic and intra-articular anti-inflammatory therapy of temporomandibular joint arthritis in children with juvenile idiopathic arthritis. *Seminars in Orthodontics*, 2015; 21:125-133.
38. **Stoll ML**. Gut microbes, immunity, and spondyloarthritis. *Clinical Immunology*, 2015;159:134-142.
39. **Stoll ML**, Vaid Y, Gurash S, Beukelman T, Waite PD, Cron RQ. Magnetic resonance imaging findings following intra-articular infliximab therapy for refractory temporomandibular joint arthritis among children with juvenile idiopathic arthritis. *Journal of Rheumatology* 2015; 42:2155 - 2159.
40. **Stoll ML** and Cron RQ. Temporomandibular Joint Arthritis in Juvenile Idiopathic Arthritis: The Last Frontier. *International Journal of Clinical Rheumatology* 2015; 10:273-286.
41. Arvonen M, Berntson L, Pokka T, Karttunen TJ, Vähäsalo P, **Stoll ML**. Gut Microbiota-Host Interactions and Juvenile Idiopathic Arthritis. *Pediatric Rheumatology* 2016; 14:44.
42. Mannion M, McAllister L, Cron RQ, **Stoll ML**. Ustekinumab as a therapeutic option for children with refractory enthesitis-related arthritis. *Journal Clinical Rheumatology* 2016; 22:282.
43. **Stoll ML**, Cron RQ. The microbiota in pediatric rheumatic disease: epiphenomenon or therapeutic target? *Current Opinion in Rheumatology* 2016; 28:537.
44. **Stoll ML**, Kumar R, Lefkowitz EJ, Cron RQ, Morrow CD, Barnes S. Fecal metabolomics in pediatric spondyloarthritis implicate decreased metabolic diversity and altered tryptophan metabolism as pathogenic factors. *Genes and Immunity* 2016; 17:400 – 405.
45. Spencer CH, Rouster-Stevens K, Gewanter H, Syverson G, Modica R, Schmidt K, Emery H, Wallace C, Grevich S, Nanda K, Zhao YD, Shenoi S, Tarvin S, Hong S, Lindsley C, Weiss JE, Passo M, Ede K, Brown A, Ardan K, Bernal W, **Stoll ML**, Lang B, Carrasco R, Agaiar C, Feller L, Bukulmez H, Vehe R, Kim H, Schmeling H, Gerstbacher D, Hoeltzel M, Eberhard B, Sundel R, Kim S, Huber AM, Patwardhan A and Pediatric Rheumatology Collaborators. Biologic therapies for refractory juvenile dermatomyositis: five years of experience of the Childhood Arthritis and Rheumatology Research Alliance in North America. *Pediatric Rheumatology* 2017; 15:50.

### Manuscripts in press

46. Zisman D, Gladman DD, **Stoll ML**, Stand V, Lavi I, Hsu JJ, Mellins ED. The juvenile psoriatic cohort in the CARRA registry: clinical characteristics, classification, and outcomes. *Journal of Rheumatology* 2017, in press.

### Manuscripts submitted, but not yet in press

47. Avant L, Tambralli A, Jester T, Beukelman T, Dimmitt RA, Cron RQ, **Stoll ML**. High dose infliximab for pediatric inflammatory bowel disease. Provisionally accepted by *Pediatric Rheumatology*.
48. Hugel B, Spiegel L, Hotte J, Wiens S, Herlin T, Cron RQ, **Stoll ML**, Vinod S, Stoustrup P, Pedersen TK, Twilt M. Isolated Arthritis of the Temporomandibular Joint as the Initial Manifestation of Juvenile Idiopathic Arthritis, accepted by *Journal of Rheumatology*.
49. **Stoll ML**, Weiss PF, Weiss JE, Peter A Nigrovic, Edelheit B, Spencer C, Punaro M, Schikler K, Reiff A, Kumar R, Morrow CD, Lefkowitz EF. Age and Fecal Microbial Strain Specific Differences in Patients with Spondyloarthritis. Submitted to *Arthritis and Rheumatology*.

### Manuscripts in preparation

50. **Stoll ML**, Guleria S, Young DW, Mannion ML, Young DW, Royal SA, Cron RQ, and Vaid YN. Defining the normal appearance of the temporomandibular joints by magnetic resonance imaging with contrast: a prospective study in non-inflamed children, *Clinical and Experimental Rheumatology*, in preparation.
51. **Stoll ML**, Amin D, Poholek CH, Harvey RJ, Al-Ruwaily S, Brandwein-Gensler MS, Young D, Vaid YN, Guleria S, Cron RQ, and Waite PD. Risk factors for heterotopic bone of the temporomandibular joint in children with chronic arthritis treated with intraarticular therapy. *J. Oral Maxillofac. Surg.*, in preparation.
52. **Stoll ML**, Waite PD, and Cron RQ. TMJ Arthritis in JIA, Now What? *Pediatric Rheumatology* 2017, invited review
53. **Stoll ML**, Grubbs JA, Beukelman T, Mannion ML, Jester JW, Cron RQ, Crain MJ. Risk of Tuberculosis among pediatric subjects taking tumor necrosis factor inhibitors in Alabama. In preparation for *Pediatric Rheumatology*.
54. **Stoll ML**, Morrow CD, Weiss PF, Weiss JE, Elson CO, Cron RQ, Lefkowitz EJ, Schoeb TR. Fecal microbial transplant studies indicate that *Akkermansia muciniphila* may predispose to arthritis in the K/BxN mouse model in concert with normal human microbiota. In preparation for *Arthritis and Rheumatology*.

55. Samad A, **Stoll ML**, Lavi I, Hsu JJ, Strand V, Robinson TN, Mellins ED, Zisman D. Adiposity in children with juvenile psoriatic arthritis. In preparation for *Jrnl of Rheumatology*.
56. Paul B, Royston K, Yuanyuan L, **Stoll ML**, Skibola C., Barnes S, Morrow CD, Tollesbol TO. Impact of genistein on the gut microbiome of humanized mice and its role in breast tumor inhibition. In preparation for *PLOS ONE*.
57. Stoll ML, Maynard CL, van der Pol W, Pierce MK, Elson CO, Lorenz R. Perinatal exposure to dioxins affects the contents of the microbiota and development of arthritis in the (KRN/B6 x NOD)F1 model of rheumatoid arthritis, in preparation.

## OTHER PUBLICATIONS:

### Collaborative and study group contributions

1. Kishi T, Rider LG, Pak K, Barillas-Arias L, Henrickson M, McCarthy PL, Shaham B, Weiss PF, Horkayne-Szakaly I, Targoff IN, Miller FW, Mammen AL for the **Childhood Myositis Heterogeneity Study Group**. *Arthritis Care and Research* 2017, in press.

### Non-peer reviewed

2. **Stoll ML**, The microbiome in pediatric rheumatic diseases. *The rheumatologist* 2016;10:4 (April, 2016).

## BOOKS:

### Book Chapters:

3. **Stoll ML**, Cron RQ (2014). Juvenile idiopathic arthritis. IN: *Pathobiology of Human Disease: A Dynamic Encyclopedia of Disease Mechanisms* (1st edition), p. 1950 – 1963. L.McManus, R Mitchell Eds. Elsevier (San Diego).
4. Elewaut D, Cypers H, **Stoll ML**, Elson CO (2016). Extra-articular manifestations: inflammatory bowel disease. IN: *Oxford Textbook of Axial Spondyloarthritis*. Oxford University Press.

## CONFERENCE PRESENTATIONS

### Poster exhibits

1. **Stoll ML**, Price K, Silvin CJ, Gavalchin J. Idiotypic-induced tolerance in a murine model of SLE. SLE Conference. November 5-8, 1997, National Institutes of Health, Washington, DC: Oral presentation
2. **Stoll ML**, Christadoss ML, Punaro M, Olsen NJ. MMP-3 and DKK-1 levels in juvenile idiopathic arthritis. *Arthritis and Rheumatism* 2010; 62: S621-622.

3. **Stoll M**, Punaro M, Dempsey-Robertson M. Gut inflammation in pediatric spondyloarthritis. *Arthritis and Rheumatism* 2010; 62: S94-95.
4. Dunnavant, F.D., Guleria, S., Vaid, Y.N., Young, D.W., Royal, S.A., Cron, R.Q., and **Stoll, M.L.** 2013. Magnetic resonance imaging of the temporomandibular joint in juvenile idiopathic arthritis and other pediatric rheumatic diseases (abstract). *Pediatr. Radiol.*, *accepted*. [Society for Pediatric Radiology Annual Meeting 2013, San Antonio, TX] – Cum Laude award
5. Cron RQ, Tambralli A, Beukelman T, Weiser P, Atkinson TP, **Stoll ML**. High doses of infliximab in the management of juvenile idiopathic arthritis. European League Against Rheumatism annual scientific meeting, Madrid, Spain. June 15, 2013. Abstract 13-3220.
6. **Stoll ML**, Weiss PF, Nigrovic PA, Punaro L, Spencer C, Weiss JE, Schikler K, Morrow C. Enteric flora in newly diagnosed spondyloarthritis: a collaborative study. Childhood Arthritis and Rheumatology Research Alliance annual conference. April 16 – 19, 2015, Austin, TX.
7. **Stoll ML**, Weiss PF, Weiss JE, Nigrovic PA, Punaro MG, Spencer CH, Schikler KN, Morrow CD, Lefkowitz EJ. Enteric flora in newly diagnosed spondyloarthritis: a collaborative study [abstract]. *Arthritis Rheum.* 67:S10. (American College of Rheumatology 2015 annual conference, San Francisco CA, Nov 7 – 11, 2015.)
8. **Stoll ML**, Wilson L, Barnes S, Kumar R, Genin A, Cron RQ, Elson CO, Morrow C, Lefkowitz E. Multi-omics study of gut microbiota in enthesitis-related arthritis identify diminished microbial diversity and altered typtophan metabolism as potential factors in disease pathogenesis [abstract]. *Arthritis Rheum.* 67:S10. (American College of Rheumatology 2015 annual conference, San Francisco CA, Nov 7 – 11, 2015.)
9. Samad A, **Stoll ML**, Lavi I, Gupta K, Hsu J, Strand V, Mellins ED, Zisman D. Adiposity in children with juvenile psoriatic arthritis [abstract]. *Arthritis Rheum.* 67:S10. (American College of Rheumatology 2015 annual conference, San Francisco CA, Nov 7 – 11, 2015.)
10. Zisman D, **Stoll ML**, Gladman DD, Strand V, Lavi I, Hsu J, Mellins ED. Juvenile psoriatic arthritis manifestations in a cohort of 361 patients from US and Canada [abstract]. *Arthritis Rheum.* 67:S10. (American College of Rheumatology 2015 annual conference, San Francisco CA, Nov 7 – 11, 2015.)
11. **Stoll ML**, Weiss PF, Weiss JE, Cron RQ, Elson CO, Morrow CD, Lefkowitz EJ, Schoeb TR. Human Gut Microbial Species Correlate with Arthritis in the K/BxN Mouse Model [abstract]. *Arthritis Rheumatol.* 2016; 68 (suppl 10). (American College of Rheumatology 2016 annual conference, Washington, DC, Nov 15, 2016.)
12. **Stoll ML**, Duck LW, Cron RQ, Elson CO. Identification of a Potential Commensal Immunologic Target in Enthesitis-Related Arthritis [abstract]. *Arthritis Rheumatol.* 2016; 68 (suppl 10). (American College of Rheumatology 2016 annual conference, Washington, DC, Nov 15, 2016.)
13. **Stoll ML**, Morrow CD, Weiss P, Weiss JE, Duck LW, Elson CO, Cron RQ, Lefkowitz EJ, Kumar R, Schoeb TR. Akkermansia Muciniphila May Be Permissive to Arthritis in the K/BxN Mouse Model of Arthritis. Pediatric Rheumatology Symposium. May 17 – 20, 2017, Houston, TX.

## Oral presentations

1. **Stoll ML**, Price K, Silvin CJ, Jiang F, Gavalchin J. Treatment of female (SWR x NZB)<sub>F1</sub> mice with peptides derived from pathogenic autoantibodies delays the onset of murine lupus. Alpha Omega Alpha Research Conference. March 23, 1999, Upstate Medical University, Syracuse, NY: Oral presentation
2. **Stoll ML**, Rubin L. Are the CBC and blood culture necessary in the evaluation of febrile children 2-36 months of age in the Prevnar era? Nassau Pediatric Society, June 9, 2003, Carle Place, NY: Oral presentation
3. **Stoll ML**, Zurakowski D, Nigrovic LE, Nichols DP, Sundel RP, Nigrovic PA. Patients with juvenile psoriatic arthritis comprise two distinct populations. Clinical Immunology Society, March 17, 2006. Santa Fe, NM: Oral presentation (Matthew Stoll, presenter)
4. ILAR Criteria for juvenile psoriatic arthritis restrict inclusion without achieving clinical homogeneity. **Stoll ML**, Nigrovic PA, Sundel RP. American College of Rheumatology, November 14, 2006. Abstract # 2051. Washington, D.C.: Oral presentation (Matthew Stoll, presenter)
5. **Stoll ML**, Morlandt AB, Teerawattanaoing S, Young D, Waite PD, Cron RQ. Safety and efficacy of intraarticular infliximab therapy for treatment resistant temporomandibular joint arthritis in children. American College of Rheumatology, November 12, 2012. Abstract # 1677. Washington, D.C.: Oral presentation (Matthew Stoll, presenter)
6. **Stoll ML**, Kumar R, Morrow CD, Lefkowitz EJ. Dysbiosis of the enteric microbiota in pediatric spondyloarthritis. Pediatric Rheumatology Symposium, Apr 5, 2014. Abstract # 175, Orlando FL. Accepted for oral presentation (Matthew Stoll, presenter).

#### **VOLUNTEER WORK / COMMUNITY SERVICE:**

10/13/2012: Lecturer, Juvenile Idiopathic Arthritis. JA Saturdays: Arthritis Foundation, Mobile, AL.

06/2013: Camp Physician, Camp MASH for children with rheumatic diseases, Camp Grace, Mobile, AL.

10/12/2013. Lecturer, Juvenile Idiopathic Arthritis. JA Saturdays: Arthritis Foundation, Birmingham, AL

#### **LAY PRESS**

[Covering the article **Stoll ML**, Kumar R, Morrow CD, Lefkowitz EJ, Cui X, Genin A, Cron RQ, Elson CO. Altered microbiota associated with abnormal humoral immune responses to commensal organisms in enthesitis-related arthritis. *Arthritis Research and Therapy* 2014; 16:486.]

1. Walsh, N. 2015. The Gut and arthritis: the evidence grows. *MedPage Today*: <http://www.medpagetoday.com/Rheumatology/Arthritis/49074>. Cited as among the top 5 stories of December 2014 by the *Rheumatology Morning Wire* (January 24, 2015.)