Practice Address:

Integrative Rheumatology, PLLC

10826 Mallard Creek Road, Suite 100

Charlotte, NC 28262

charles.withers@inrheum.org

Site Affiliations:

DJL Clinical Research, PLLC

2017-Present

431 N Wendover Rd

Charlotte, NC 28211

Education:

2011-2013 Duke University Division of Rheumatology

Fellowship

Durham, North Carolina

2008-2011

Duke University Department of Internal Medicine

Internship/Residency Durham, North Carolina

2004-2008

Duke University School of Medicine

MD

Durham, North Carolina

1998-2002

Swarthmore College,

Bachelor of Arts, Biology Swarthmore, Pennsylvania

Professional Experience:

2017-Present

Integrative Rheumatology, PLLC

Owner/MD

2013-2016

Carolinas Medical Center Northeast Rheumatology

Staff Rheumatologist

Publications:

- Withers, C.A., George, R.L., and Keenan, R.T. Diagnosis and management of gout: an update. *JCOM*. 2012. 19(11):519-527.
- Withers, C. The comparative activity of broad spectrum antimicrobial agents against nosocomial isolates. *Journal of the Association for Academic Minority Physicians*. 1999. 10(4): p. 118. (abstract)
 - Presented at Johnson and Johnson Minority Trainee Research Forum, San Diego, CA 1998 (oral and poster)

Presentations/Lectures:

- Duke University Department of Medicine Grand Rounds: It Only Took 50 Years: Benlysta and the Outpatient Management of Lupus. Presented with Megan Clowse, MD, MPH. August 2012.
- North Carolina Rheumatology Association, 2012 Annual Meeting: Fellow's Presentation. Levamisole Vasculitis in Cocaine Abusers. April 2012
- Lupus Foundation of America: Removing the Mask Understanding Lupus. February 2012

Awards/Honors:

- Leonard Tow 2008 Humanism in Medicine Award: presented annually to the graduating medical student and faculty member who best demonstrate the Foundation's ideals of outstanding compassion in the delivery of care, respect for patients, their families, and healthcare colleagues, as well as demonstrated clinical excellence.
- Aspen Health Forum, fellow: 2007
- Duke University School of Medicine Dean's Tuition Scholarship: 2004 2008
- Swarthmore College Black Cultural Center Award: for leadership 2002
- Philadelphia Award: MVP, Men's Varsity Soccer, Swarthmore College 2001 and 2002 seasons
- Acres of Diamonds Award: winner of the Johnson & Johnson National Abstract Competition 1999
- Award of Distinction: oral presentation and poster session, Johnson and Johnson Minority Trainee Research Forum, San Diego, CA – 1998

Clinical Research:

University of Texas Medical Branch, Galveston Texas, Dept. Infectious Disease – Research Intern: investigated the motility of pathogens responsible for urinary tract infections – summer 1996

Temple University School of Medicine, Dept. Infectious Disease – Research Intern: characterized the comparable activity of broad spectrum antimicrobial agents against nosocomial isolates – summers of 1997 and 1998

Hospital for Sick Children, Toronto Ontario – Research Intern: developed assays for the isolation and analysis of various intermembrane proteins and cytoskeletal components – summer 1999

Swarthmore College – Research Internship: investigated the effect of daily ethanol consumption on the preference of Siberian Hamsters for diets enriched with saturated versus unsaturated fatty acids – summer 2001

National Institutes of Health – Research Intern: investigated the role of dendritic cells in HIV infection and characterized the reconstitution of the immune system following sub-lethal irradiation in rhesus monkeys – summer 2002

Thomas Jefferson University, Department of Family Medicine – Research Assistant: development, organization, and management of clinical studies investing: the effect of salmeterol and leukotriene modifiers versus salmeterol and inhaled corticosteroids on pulmonary function; how smoking modulates the outcomes of glucocorticoid therapy; pirfenidone as a novel treatment for diabetic nephropathy; rosuvastatin's ability to modify arterial intima media thickness; and the relationship between capillaroscopy findings and disease status in hypertensive and diabetic patients. – September 2002 – July 2004

Duke University Medical Center, Dept of Radiation Oncology: the effect of involuntary exercise on 4T1 tumor progression and metastasis rates in BALB/C mice using *in vivo* bioluminescent imaging and histology to compare outcomes – September 2006 through September 2007

Duke University Medical Center, Division of Rheumatology: the effect of exercise on lupus disease activity – October 2012 through June 2013

Sub-Investigator – Abbvie: A Phase 3, Randomized, Double-Blind, Study Comparing ABT-494 to Placebo and to Adalimumab in Subjects with Active Psoriatic Arthritis Who Have a History of Inadequate Response to at Least One Non-Biologic Disease Modifying Anti-Rheumatic Drug (DMARD) – SELECT – PsA 1 (2017)

Sub-Investigator – Aurinia: A Randomized, Controlled Double-blind Study Comparing the Efficacy and Safety of Orelvo (voclosporin) (23.7 mg Twice Daily) with Placebo in Achieving Renal Response in Subjects with Active Lupus Nephritis.

Sub-Investigator – Janssen: A Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel-group Study of Ustekinumab in Subjects with Active Systemic Lupus Erythematosus (SLE). 2018

Sub-Investigator – Eli Lilly: A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Phase 3 Study of Baricitinib in Patients with Systemic Lupus Erythematosus. 2018

Sub-Investigator – Abbvie: A Phase 2 Proof of Concept Study to Investigate the Safety and Efficacy of ABBV-105 given alone or in combination with upadacitinib (ABBV-599) with a Background of csDMARDs in Subjects with Active Rheumatoid Arthritis with Inadequate Response or Intolerance to Biologic DMARDs (bDMARDs). 2018

Sub-Investigator– Bristol Myers Squibb: A Randomized, Placebo-Controlled, Double-blind, Multicenter Study to Assess the Efficacy and Safety of Multiple Doses of BMS-986165 in Subjects with Active Psoriatic Arthritis (PsA) 2019

Sub-Investigator – Sandoz: A randomized, double-blind, multicenter integrated phase I/III study in postmenopausal women with osteoporosis to compare the pharmacokinetics, pharmacodynamics, efficacy, safety and immunogenicity of GP2411 (proposed biosimilar denosumab) and Prolia® (EU-authorized) 2019

Principal Investigator – Scipher: Prospective Trial to Assess Clinical Utility of PrismRA to Predict Non-Responders to anti-TNF Therapies (NETWORK-001)

Sub-Investigator – UCB: A Phase 3, Multi-center, randomized, double-blind, placebo-controlled, active-reference study evaluating the efficacy and safety of Bimekizumab in the treatment of subjects with active Psoriatic Arthritis.

Sub-Investigator – UCB: A Multi-Center, Phase 3, randomized, double-blind, placebo-controlled study evaluating the efficacy and safety of Bimekizumab in the treatment of subjects with active Psoriatic Arthritis.

Sub-Investigator – Amgen: A Phase 2 Dose Ranging Study to Evaluate the Efficacy and Safety of AMG 570 in Subjects With Active Systemic Lupus Erythematosus (SLE) With Inadequate Response to Standard of Care (SOC) Therapy

Sub-Investigator – Eli Lilly: A Phase 1, Randomized, Placebo-controlled, Ascending Multiple-dose Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of LY3361237 in Patients with Systemic Lupus Erythematosus

Sub-Investigator – Eli Lilly: A Phase 3, Double-Blind, Multicenter Study to Evaluate the Long-Term Safety and Efficacy of Baricitinib in Patients with Systemic Lupus Erythematosus (SLE). 2019

Principal Investigator – Dr Reddys Laboratories: A randomized, double-blind, parallel group, multicenter study to assess the immunogenicity and safety of transitioning subjects with rheumatoid arthritis to biosimilar rituximab (DRL_RI) or continued treatment with Rituxan® or MabThera® 2020

Sub-Investigator – Setpoint: A Randomized, Sham-Controlled, Double-Blind Study of Vagus Nerve Stimulation for Moderate-to-Severe Rheumatoid Arthritis: The RESET-RA Study

My signature verifies the information in this document is accurate and updated appropriately.

Signature

1/5/23

Date