

Samuel S. Lake, MD

slake@suburbanortho.com

Orthopaedic Surgery
Joint Reconstructive Hip and Knee Surgery

Current Employment

Suburban Orthopaedics

www.suburbanortho.com

1110 West Schick Rd
Bartlett, IL 60103

Hospital Affiliations:

- Ascension St. Alexius Medical Center, Hoffman Estates, IL
- Ascension Alexian Brothers Medical Center, Elk Grove Village, IL
- Advocate Sherman Hospital, Elgin, IL
- Endeavor Health Northwest Community Hospital, Arlington Heights, IL
- UChicago Medicine AdventHealth Glen Oaks Hospital, Glendale Heights, IL

Education

Bachelor of Science (B.S.)

Received May 2010

University of Wisconsin, Madison

- Major in Biology
- Certificate in Environmental Studies
- Honors Biology Core Curriculum

Master of Science (M.S.)

Received May 2012

Rosalind Franklin University of Medicine and Science

- Master of Science in Biomedical Science
- Certificate in Healthcare Management and Administration

Doctor of Medicine (M.D.)

Received June 2016

Chicago Medical School, Rosalind Franklin University of Medicine and Science

- Alpha Omega Alpha Honor Medical Society (AOA)
- CMS Scholarship Award – Highest Average for Basic Sciences
- CMS Scholarship Award – Highest Average for Junior Clinical Sciences
- CMS Alumni Association Scholastic Achievement Award – Highest Overall Average
- M.D. with Distinction in Research

Postgraduate Training

Orthopaedic Surgery Residency

July 2016 – June 2021

University of Cincinnati Medical Center, Cincinnati, OH

Adult Reconstructive Hip and Knee Fellowship

August 2021 – July 2022

University of Wisconsin Hospital and Clinics, Madison, WI

Medical Licensure and Certifications

American Board of Orthopaedic Surgery (ABOS) – Board Certified
Illinois State Medical License – Current
Illinois State Controlled Substance License – Current
Drug Enforcement Administration Controlled Substance License – Current
Wisconsin State Medical License – Former
Ohio State Medical License – Former
Advanced Cardiac Life Support (ACLS)
Advanced Trauma Life Support (ATLS)

Professional Societies

American Association of Hip and Knee Surgeons (AAHKS)
American Academy of Orthopaedic Surgeons (AAOS)
Alpha Omega Alpha Honor Medical Society (AOA)

Leadership and Committees

The Center for Advanced Joint Replacement – Board Member Saint Alexius Medical Center, Hoffman Estates, IL	2023 – current
President of the Alpha Omega Alpha Honor Medical Society Chicago Medical School at RFUMS, North Chicago, IL	2015 – 2016
Vice President of the Executive Student Council Rosalind Franklin University of Medicine and Science, North Chicago, IL	2012 – 2013
Group Leader for the Taizhou Hospital Internship, Global Health Program Chicago Medical School at RFUMS, North Chicago, IL	2013
Class Representative for the American Medical Student Association Chicago Medical School at RFUMS, North Chicago, IL	2012 – 2013
Class Representative for the Executive Student Council Rosalind Franklin University of Medicine and Science, North Chicago, IL	2011 – 2012

Honors and Awards

The American Academy of Orthopaedic Surgeons (AAOS) Candidate Member of the Month The American Academy of Orthopaedic Surgeons, Rosemont, IL	2025
M.D. with Distinction in Research Chicago Medical School at RFUMS, North Chicago, IL	2016
CMS Alumni Association Scholastic Achievement Award – Highest Overall Average Chicago Medical School at RFUMS, North Chicago, IL	2016

CMS Scholarship Award - Highest Average for Basic Sciences

Chicago Medical School at RFUMS, North Chicago, IL

2016

CMS Scholarship Award – Highest Average for Junior Clinical Sciences

Chicago Medical School at RFUMS, North Chicago, IL

2016

Alpha Omega Alpha Honor Medical Society

Illinois Delta Chapter, Chicago Medical School at RFUMS, North Chicago, IL

2015

1st Place Scientific Talk at All School Research Consortium

Chicago Medical School at RFUMS, North Chicago, IL

2013

4th Place Poster Presentation at Midwest Student Biomedical Research Forum (MSBRF)

Creighton University/University of Nebraska, Omaha, NE

2013

1st Place Poster Presentation at RFU Summer Research Poster Session

Chicago Medical School at RFUMS, North Chicago, IL

2012

Biology Honors Core Curriculum

University of Wisconsin, Madison, WI

2010

Dean's List

University of Wisconsin, Madison, WI

2006, 2010

Research Publications

Lake SS, Rossi D, Martin D, Hennessy D, Mitchell J, Nickel B. Utilizing Virtual Reality for Resident Training in Primary Total Knee Arthroplasty. *Manuscript in progress*.

Martin D, **Lake SS**, Behun M, Krueger D, Binkley N, Hennessy D, Nickel B. Intraoperative Physician Assessment during total hip arthroplasty correlates with DXA parameters. *Journal of Clinical Densitometry*: Volume 26, Issue 3, 2023.

Lake SS, Schumaier AP, Bess L, Wyrick J. Proximal Humerus Fractures Treated with the Proximal Humerus Cage: A Case Series with Functional Outcomes. (2021). *Manuscript in progress*.

Schumaier AP, Andrews EG, Yue RA, **Lake SS**, Evans HT, Scarberry NW, Kelley TC, Archdeacon MT, Le TT. Hemiarthroplasty for Femoral Neck Fractures: Does Surgeon Subspecialty Affect Perioperative Outcomes? *Journal of Orthopaedic Trauma*: November 2020 - Volume 34 - Issue 11 - p 589-593

McMillan EL, Foate AL, **Lake SS**, Svendsen CN, Bhattacharyya A. Gene expression changes in the MAPK pathway in both Fragile X and Down syndrome human neural progenitor cells. *American Journal of Stem Cells* 2012;1(2):154-162.

Research Posters and Podium Presentations**Intraoperative Physician Assessment of Bone Quality During THA Correlates with DEXA Scan and FRAX Score**

Research Day Presentation

2022

University of Wisconsin, Madison, WI

Proximal Humerus Fractures Treated with the Proximal Humerus Cage: A Case Series with Functional Outcomes

27th Annual D.J. Frank, Jr., M.D. Memorial Lectureship and Thesis Day 2021
University of Cincinnati Medical Center, Cincinnati, OH

Gene expression, differentiation potential, and cell migration differences in hMSC populations isolated from human omentum and subcutaneous fat (4th place)

Midwest Student Biomedical Research Forum (MSBRF) 2013
University of Nebraska, Omaha, NE

Gene expression differences in hMSC populations from human omentum and subcutaneous fat (1st place)

All School Research Consortium 2013
Chicago Medical School, RFUMS, North Chicago, IL

Cell migration potential of hMSCs isolated from human omentum and subcutaneous fat

Advocate Research & Innovation Forum 2013
Advocate Lutheran General Hospital, Park Ridge, IL

Isolation, in vitro expansion, and viability of hMSC populations from human omentum and subcutaneous fat

Chicago Breast Symposium 2013
Chicago Medical School, RFUMS, North Chicago, IL

Differentiation potential of hMSCs isolated from human omentum tissue

FHCC Annual Poster Day 2013
Captain James A. Lovell Federal Health Care Center, North Chicago, IL

Isolation of hMSCs in human omentum tissue (1st place)

RFU Summer Research Poster Session 2012
Chicago Medical School, RFUMS, North Chicago, IL

Educational Lectures and Presentations

Understanding Arthritis

Community Lectures 2022 - current

Arthrofibrosis and Wound Complications

ATI, Team Rehab, Athletico 2022 - current

Robotic Total Joint Arthroplasty

ATI, Team Rehab, Athletico 2022 - current

Outpatient Total Joint Arthroplasty

Grand Rounds Presentation 2022
University of Wisconsin, Madison, WI

Patellofemoral arthroplasty versus total knee arthroplasty in the elderly Freiberg Family Lectureship Series Case Presentation University of Cincinnati Medical Center, Cincinnati, OH	2019
Manifestations of Scleroderma in the Hand Orthopaedic Hand Surgery Lecture University of Cincinnati Medical Center, Cincinnati, OH	2019
Revision superior capsular reconstruction in the setting of failed massive rotator cuff management DJ Frank Lectureship Series Case Presentation University of Cincinnati Medical Center, Cincinnati, OH	2019
The use of OptiMesh allograft for treatment of instability and bone loss in the setting of lumbar osteomyelitis and discitis Orthopaedics Grand Rounds Case Presentation University of Cincinnati Medical Center, Cincinnati, OH	2019
Scapulothoracic fusion for long thoracic nerve palsy Multidisciplinary Sports Conference Case Presentation University of Cincinnati Medical Center, Cincinnati, OH	2019

Specialty Courses and Conferences

AAHKS Annual Meeting Dallas, TX	2019, 2021, 2023, 2024
Miller Review Course II Virtual	2024
Miller Review Course I Denver, CO	2021
Scholarship to AAHKS Resident Arthroplasty Course Dallas, TX	2019
Ohio Hand Symposium Ohio State University, Columbus, OH	2019
Spine MedEd Resident and Fellows Course New Orleans, LA	2018
Essentials of Taylor Spatial Frame – Midwest Resident Course Columbus, OH	2018
William F. Enneking Musculoskeletal Pathology Seminar University of Florida, Gainesville, FL	2018
AAHKS Fundamentals of Arthroplasty Resident Course Rosemont, IL	2018

Orthopaedic Trauma Association Annual Meeting

Vancouver, BC

2017

Orthopaedic Trauma Association Resident Comprehensive Fracture Course

Vancouver, BC

2017

Community Involvement and Quality Improvement**Assistant Team Physician**

Colerain High School Football, Cincinnati, OH

2018 – 2019

Orthopaedic Surgery Video Library

University of Cincinnati Medical Center, Cincinnati, OH

2018

Resident Leader - Orthopaedic Surgery Interest Group

University of Cincinnati College of Medicine, Cincinnati, OH

2018

Group Leader - Taizhou Hospital Internship

Foreign Medical Student Internship Program, Taizhou Hospital, Zhejiang, China

2013

New Life Volunteering Society Free Health Clinic

Chicago, IL

2012 – 2013

International Medical Relief

Port au Prince, Haiti

2010, 2011

American Indian Youth Outreach

Lakota Reservation, Eagle Butte, SD

2009

Habitat for Humanity

Madison, WI

2008

International Environmental Volunteer

Rotorua, New Zealand

2007

Rosewood Care Center

Northbrook, IL

2006

Activities and Interests

Running, hiking, camping, climbing, snowboarding, skiing, SCUBA diving, wakeboarding, waterskiing, traveling, exploring different cultures