Samuel S. Lake, MD

Orthopaedic Surgery Joint Reconstructive Hip and Knee Surgery

Current Employment

Suburban Orthopaedics

www.suburbanortho.com

1110 West Schick Rd Bartlett, IL 60103

Hospital Affiliations:

- St. Alexius Medical Center, Hoffman Estates, IL
- Alexian Brothers Medical Center, Elk Grove Village, IL
- Advocate Sherman Hospital, Elgin, IL

Education

Bachelor of Science (B.S.)

- University of Wisconsin, Madison
- Major in Biology
- Certificate in Environmental Studies
- Honors Biology Core Curriculum

Master of Science (M.S.)

Rosalind Franklin University of Medicine and Science

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

Doctor of Medicine (M.D.)

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

University of Cincinnati Medical Center, Cincinnati, OH

Adult Reconstructive Hip and Knee Fellowship

University of Wisconsin Hospital and Clinics, Madison, WI

Received May 2010

Received May 2012

Received June 2016

July 2016 – June 2021

August 2021 – July 2022

Medical Licensure and Certifications

American Board of Orthopaedic Surgery (ABOS) – Board Eligible 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

| President of the Alpha Omega Alpha Honor Medical Society Chicago Medical School at RFUMS, North Chicago, IL | 2015 - 2016 |
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| 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 | |
| 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 |
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| Alpha Omega Alpha Honor Medical Society Illinois Delta Chapter, Chicago Medical School at RFUMS, North Chicago, IL | 2015 |
| 1 st 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 |
| 1 st 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 20 | 006, 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. (2022). Manuscript in progress.

Lake SS, Martin D, Behun M, Nickel B, Binkley N, Hennessy D. Intraoperative Physician Assessment of Bone Quality During THA Correlates with DEXA Scan and FRAX Score. (2022). Manuscript in progress.

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.

Intraoperative Physician Assessment of Bone Quality During THA Correlates with DEXA Scan

Research Posters and Podium Presentations

| and FRAX Score | | |
|---|------|--|
| Research Day Presentation | 2022 | |
| University of Wisconsin, Madison, WI | | |
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| 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

| isolated from human omentum and subcutaneous fat (4 th place) | |
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| Midwest Student Biomedical Research Forum (MSBRF) | 201 |
| University of Nebraska, Omaha, NE | |
| Gene expression differences in hMSC populations from human omentum and subcutar (1st place) | neous fat |
| All School Research Consortium | 201 |
| Chicago Medical School, RFUMS, North Chicago, IL | |
| Cell migration potential of hMSCs isolated from human omentum and subcutaneous fa | at |
| Advocate Research & Innovation Forum | 201 |
| Advocate Lutheran General Hospital, Park Ridge, IL | |
| Isolation, in vitro expansion, and viability of hMSC populations from human omentum subcutaneous fat | and |
| Chicago Breast Symposium | 201 |
| Chicago Medical School, RFUMS, North Chicago, IL | |
| Differentiation potential of hMSCs isolated from human omentum tissue | |
| FHCC Annual Poster Day | 20 |
| 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 | 20 |
| Chicago Medical School, RFUMS, North Chicago, IL | |
| lucational Lectures and Presentations | |
| | |
| Outpatient Total Joint Arthroplasty | |
| Outpatient Total Joint Arthroplasty Grand Rounds Presentation | 20 |
| | 202 |
| Grand Rounds Presentation | 20 |
| Grand Rounds Presentation University of Wisconsin, Madison, WI Patellofemoral arthroplasty versus total knee arthroplasty in the elderly Freiberg Family Lectureship Series Case Presentation | 20 20 |
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| Scapulothoracic fusion for long thoracic nerve palsy Multidisciplinary Sports Conference Case Presentation University of Cincinnati Medical Center, Cincinnati, OH | 2019 |
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| Specialty Courses and Conferences | |
| AAHKS Annual Meeting Dallas, TX | 2019, 2021 |
| 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 | |
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| Foreign Medical Student Internship Program, Taizhou Hospital, Zhejiang, China | 2013 |
| New Life Volunteering Society Free Health Clinic | 2012 2012 |
| 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 |
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Activities and Interests

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