

Zein Barakat, DO, MS
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Education

Doctor of Osteopathic Medicine

Nova Southeastern University
Dr. Kiran C. Patel College of Osteopathic Medicine
Class Rank 11/400, GPA 3.89/4.00

May 2023
Fort Lauderdale, Florida

Masters of Science in Pharmaceutical Nanotechnology

University of South Florida
Graduating GPA 4.0/4.0

May 2019
Tampa, Florida

Bachelor of Science in Biomedical Science

University of South Florida
Graduating GPA 4.0/4.0

May 2016
Tampa, Florida

Clinical Experience

Internal Medicine Resident – PGY2

Lakeland Regional Health Medical Center

July 2023 - Present
Lakeland, Florida

Endocrinology Medical Assistant

Center for Diabetes and Metabolic Disorders

2018 - 2019
Tampa, Florida

Pharmaceutical Consultant

Invite Health Vitamin Store

11/2018 – 01/2019
Tampa, Florida

Academic Experience

Graduate Teacher Assistant

University of South Florida, College of Internal Medicine

12/202016 – 05/2018
Tampa, Florida

- Developed two graduate courses for the MSPN program; tutored 15 graduate students and 30 undergraduate students

Mathematics Middle School Teacher

New English School

08/2016 – 12/2016
Amman, Jordan

- Taught 100+ students Mathematics for O-level International General Certificate of Secondary Education

Student Support Assistant

INTO University of South Florida

01/2016 – 04/2016
Tampa, Florida

- Provided information about international programs, and served as a representative for faculty and students

Executive Student Leader

INTO University of South Florida

04/2015 – 01/2016
Tampa, Florida

Lead 50 students, served as a role model for incoming international students and implemented new orientation programs

Research Experience**Nanotechnology Graduate Research Assistant**

01/2017- 06/2018

University of South Florida, College of Internal Medicine

Tampa, Florida

- Prepared nanocomposites and developed a glucometer assisted nanoimmunoassay for the detection of creatinine in urine and serum

- Thesis submitted and approved

Organic Chemistry Undergraduate Researcher

01/2015 - 04/2015

University of South Florida, Chemistry Department

Tampa, Florida

- Investigated Metalloradical Catalysis (MRC) to develop catalytic systems for stereoselective chemical transformations

Speech and Communication Disorders Undergraduate Researcher

08/2015 - 12/2015

University of South Florida, Psychology Department

Tampa, Florida

- Developed and implemented various tools to enhance the vocabulary and speech abilities of children

Medical Botany Undergraduate Researcher

08/2015 -12/2015

University of South Florida

Tampa, Florida

Department of Cell Biology, Microbiology and Molecular Biology

- Discovered and documented 100+ species of plants used for medical purposes

Research Publications

Chronic Pacemaker Lead Perforation into the Right Ventricle: A Rare Cause of Pericardial Effusion and Chest Pain

Society of Hospital Medicine <https://shmabstracts.org/abstract/chronic-pacemaker-lead-perforation-into-the-right-ventricle-a-rare-cause-of-pericardial-effusion-and-chest-pain/>

Barakat Z, et al.

Unspoken Lessons – Beyond The Stethoscope

SGIM [2024-SGIM-NovemberFINALWeb.pdf](#)

Barakat Z

From Womb to Lung: An astonishing journey – Unraveling Thoracic Endometriosis in a Fascinating Case Report

CHEST, Volume 166, Issue 4, A4452 - A4453 <https://doi.org/10.1016/j.chest.2024.06.2703>

Barakat Z, et al.

Hidden Agony: Severe Pain with a Deceptive Blank Canvas – A rare Case of Posttraumatic Pyomyositis.

Cureus. Published 3 Aug 2024

Barakat Z, et al.

Blisters of Mystery: Shedding Light on Bullous Diabeticorum as a Rare Complication of Long-standing Diabetes Mellitus

Surg Endosc (2024) 38:S104–S353 <https://doi.org/10.1007/s00464-024-10893-w>

Barakat Z

When Cancers Collide – Unveiling Cholangiocarcinoma and Hepatocellular Carcinoma in an Astonishing Collision Carcinoma Case

Surg Endosc (2024) 38:S104–S353 <https://doi.org/10.1007/s00464-024-10893-w>

Barakat Z, et al.

Healing hearts: Physician's Ode to Humanity

Annals of Internal Medicine. Published on 15 Nov 2023

Barakat Z

Granulomatosis with Polyangiitis Presenting with Bilateral Apical Cavitating Lung Masses

CHEST, Volume 166, Issue 4, A5387 - A5388 DOI: <https://doi.org/10.1016/j.chest.2024.06.3205>

Sabina M, **Barakat Z**, et al.

A Migratory Mystery: Diagnosing Disseminated Blastomycosis and Histoplasmosis in a Patient Traveling From South America to Florida

CHEST, Volume 166, Issue 4, A1373 - A1374 DOI: <https://doi.org/10.1016/j.chest.2024.06.882>

Sabina M, **Barakat Z**, et al.

Pick Your Poison – To Clot or To Bleed? A Case Report On Heydes Syndrome With Mechanical Valve Replacement; J Am Coll Cardiol. 2024 Apr, 83 (13_Supplement) 4239. [https://doi.org/10.1016/S0735-1097\(24\)06229-6](https://doi.org/10.1016/S0735-1097(24)06229-6)

Sabina, M, **Barakat Z**, Bizanti, A, Jost, J.

Unlocking the Potential of Acetazolamide: A Literature Review of an Adjunctive Approach in Heart Failure Management. *J Clin Med*. 2024;13(1):288. Published 2024 Jan 4.

doi:10.3390/jcm13010288

Sabina M, **Barakat Z**, Feliciano A, Lamb A, Alsamman MM.

Vintage Victory: Warfarin Versus Apixaban in the Antiphospholipid Arena.

Cureus. 2024;16(3):e57040. Published 2024 Mar 27.

doi:10.7759/cureus.57040

Sabina M, **Barakat Z**, Costa Guerra B, Lurie A, Khan Z.

Vaso-Occlusive Crises in Sickle Cell Trait Patients with Blood Loss Anemia: A Report of Two Cases.

Cureus. 2024;16(3):e56589. Published 2024 Mar 20.

doi:10.7759/cureus.56589

Sabina M, **Barakat Z**, Jost JM, Tatro R, Sai W.

Unmasking the Origin of Cutaneous Metastasis: A Case Report

Cureus 16(10): e72156.

doi:10.7759/cureus.72156

Campillo P, **Barakat Z**, et al.

The Hidden Danger: Extra-adrenal Pheochromocytoma in a Case of Resistant Hypertension and Intracranial Hemorrhage

Society of Hospital Medicine <https://shmabstracts.org/abstract/the-hidden-danger-extra-adrenal-pheochromocytoma-in-a-case-of-resistant-hypertension-and-intracranial-hemorrhage/>.

Vilacreses C, **Barakat Z**, et al.

Coughing Spells and the Carotids: Exploring the Role of Respiratory Mechanics and Carotid Plaque Rupture

Society of Hospital Medicine <https://shmabstracts.org/abstract/coughing-spells-and-the-carotids-exploring-the-role-of-respiratory-mechanics-in-carotid-plaque-rupture/>.

Ramirez Ramos C, **Barakat Z**, et al.

A Case of Colorectal Adenocarcinoma and the Importance of Diagnostic Paracentesis

Society of Hospital Medicine <https://shmabstracts.org/abstract/a-case-of-colorectal-adenocarcinoma-and-the-importance-of-diagnostic-paracentesis/>.

Igabonagwam C, Zuhdi O, Campillo P, Morales-Rivera A, **Barakat Z**, et al.

Hidden Culprit: Hypothyroidism as a Reversible Cause of Acute Kidney Injury

Society of Hospital Medicine <https://shmabstracts.org/abstract/hidden-culprit-hypothyroidism-as-a-reversible-cause-of-acute-kidney-injury/>.

Khan Z, Shah S, Molhotra V, **Barakat Z**, et al.

Poster Presentations

Chronic Pacemaker Lead Perforation into the Right Ventricle: A Rare Cause of Pericardial Effusion and Chest Pain

To be Presented at:

- Society of Hospital Medicine

The Hidden Danger: Extra-adrenal Pheochromocytoma in a Case of Resistant Hypertension and Intracranial Hemorrhage

To be Presented at:

- Society of Hospital Medicine

From Womb to Lung: An astonishing journey – Unraveling Thoracic Endometriosis in a Fascinating Case Report

Presented at:

- Florida Chapter American College of Physicians 2024; Awarded poster during the ACP finalist competition
- CHEST 2024 Annual Meeting
- FMA 2024 Poster Board
- SGIM 2024 Annual Meeting
- ACP national

Blisters of Mystery: Shedding Light on Bullous Diabeticorum as a Rare Complication of Long-standing Diabetes Mellitus

Presented at:

- SAGES 2024 Poster Competition - ePoster presentation

When Cancers Collide - Unveiling Cholangiocarcinoma and Hepatocellular Carcinoma in Astonishing Collision Carcinoma Case Report.

Presented at:

- SAGES 2024 Poster Competition - Accepted ePoster presentation

Hidden Agony: Severe Pain with a Deceptive Blank Canvas – A rare Case of Posttraumatic Pyomyositis.

Presented at:

- FOMA poster competition: selected Finalist; Awarded Second Place Winner
- American College of Physicians 2024
- SGIM 2024 Annual Meeting

Pick Your Poison - To Clot or to Bleed? A Case Report on Heydes Syndrome with Mechanical Valve Replacement.

Presented at:

- American College of Cardiology 2024 and Society of Hospital Medicine Converge 2024.

Therapeutic Tightrope: Recurrent Gastrointestinal Bleeding Amidst Dual Mechanical Valve Anticoagulation.

Presented at:

- Society of Hospital Medicine Converge 2024.

An Immigrant's Infectious Journey Through Brazil, Mexico, Haiti, and Florida.

Presented at:

- 2nd Annual Central Florida Research Symposium.
- CHEST 2024

Unlocking the Potential of Acetazolamide: A Literature Review of an Adjunctive Approach in Heart Failure Management. Presented at:

- 2nd Annual Central Florida Research Symposium 2024

Vintage Victory: Warfarin Versus Apixaban in the Antiphospholipid Arena.

Presented at:

- Society of General Internal Medicine Annual Meeting 2024.

Hidden Storm: Acalculous Cholecystitis Unmasking Thyroid Storm.

Presented at:

- Florida Chapter American College of Physicians 2024.
- Second Annual Central Florida Research Symposium; April 2024; Lakeland, FL.

Calcium Chaos: Deciphering Severe Hypercalcemia with an Ectopic PTH Adenoma in Geriatric Multimorbidity.

Presented at:

- 2nd Annual Central Florida Research Symposium 2024.

Navigating Uncharted waters: A Case of Recurrent Idiopathic Renal Infarcts and Insights for Future management.

Presented at:

- Florida Chapter American College of Physicians 2023.

An Intriguing Encounter: A Complex Case of Concurrent Liver and Pancreatic Neuroendocrine Tumors

Presented at:

- Second Annual Central Florida Research Symposium; April 2024; Lakeland, FL

Rooster's Revenge: Unmasking Mycobacterium Fortuitum in a Challenging Case of Septic Arthritis.

Presented at:

- Second Annual Central Florida Research Symposium; April 2024; Lakeland, FL

Adrenal Insufficiency Induced by Pembrolizumab (Keytruda) in a Patient with Metastatic Breast Cancer

Presented at:

- Second Annual Central Florida Research Symposium; April 2024; Lakeland, FL.

A Silent Threat: Adult Aseptic Epiglottitis

Presented at:

- Second Annual Central Florida Research Symposium; April 2024; Lakeland, FL

The impact of Helicobacter Pylori on development of Bronchopulmonary Cancer

Presented at:

- 7th International Cancer Research & Drug Development Conference, October 24-26th, 2022

Cytomegalovirus Infection and its Relationship to Leukemia Incidence

Presented at:

- Student Osteopathic Medical Association, National SOMA Research Symposium, October 14th 2023

Incidence of Leukemia in Patients with CMV: A Retrospective Case Control Analysis of the National Database

Presented at:

- 2023 HCA Research Day, November 8th 2023

Exploring the Link Between Comorbidities, Tobacco Usage, and Surgical Intervention in Medial Epicondylitis

Presented at:

- Student Osteopathic Medical Association, National SOMA Research Symposium, October 14th 2023

Book Publications

[1] Intern Mastery: PGY-1 Excellence: A Roadmap from Med School to PGY-1 Internal Medicine Excellence (Intern Mastery: Internal Medicine Excellence)

Independently Published.

Lugo, D., MD, & **Barakat, Z.**, DO. (2025).

[2] Intern Mastery: Top 10 Internal Medicine Diagnoses at the Busiest Hospitals in the Nation.

Independently Published.

Khanani, A., DO, & **Barakat, Z.**, DO. (2024).

[2] Nanoscale Drug-Delivery Systems: Chapter 13 - Nanoscale Drug-Delivery Systems: In Vitro and In Vivo Characterization

<https://doi.org/10.1016/B978-0-12-814033-8.00013-8>

Anthony Singer, **Zein Barakat**, Subhra Mohapatra, Shyam S. Mohapatra

Quality Improvement Projects

Curriculum Vitae	Zein Barakat
“Be My Eyes” Initiative Implemented Blind Precautions Order Set Lakeland Regional Health	2023- 2024 Lakeland, Florida
“Weight Loss Program” at Morrel Clinic Lakeland Regional Health	In Progress Lakeland, Florida

Honorary Awards

<i>Program Ambassador - Lakeland Regional Health Award Ceremony</i>	May 2024
<i>FOMA Second Place Poster Competition Winner</i>	February 2024
<i>Florida ACP Poster Competition Winner</i>	October 2023
<i>Gold Honors Award Top 10% – Nova Southeastern University</i>	May 2023
<i>Summa Cum Laude – University of South Florida</i>	May 2019
<i>Summa Cum Laude – University of South Florida</i>	May 2016
<i>King O’Neal Scholar Award Recipient</i>	May 2016
<i>Chemistry Honors Award</i>	March 2016
<i>USF Green & Gold Directors Scholarship</i>	May 2013
<i>Recipient of Queen Rania Award, Top in Information Technology (Computing) Nationwide</i>	March 2013

Leadership Roles

Founder and Co-Chair of Community Service and Advocacy Committee Lakeland Regional Health, Lakeland, FL	2024 – Current
Member of the Networking and Collaboration Committee Lakeland Regional Health, Lakeland, FL	2024 – Current
ACP Florida Co-Chair of the Council of Residents and Medical Students American College of Physicians, Florida Chapter	2024 – Current
GME Committee Member Internal Medicine Representative Lakeland Regional Health, Lakeland, FL	2024 – Current
Clinical Improvement Committee Member Lakeland Regional Health, Lakeland, FL	2024 – Current
Networking & Communication Committee Member Lakeland Regional Health, Lakeland, FL	2024 – Current
Residents Selection & Recruitment Committee Member Lakeland Regional Health, Lakeland, FL	2023 – Current
Secretary, Student Association of the American College of Osteopathic Family Physicians Nova Southeastern University, Davie, FL	2019 – 2023

Curriculum Vitae	Zein Barakat
Health Professions Divisions Ambassador, Inter-professional Exposure Subcommittee Nova Southeastern University, Davie, FL	2020 – 2021
M2 Society Representative, Terry Society Nova Southeastern University, Davie, FL	2019 – 2020
President and founder of The New Advancements in Nanotechnology Organization University of South Florida, Tampa, FL	2017 – 2018
Senator of the College of Arts and Sciences University of South Florida, Tampa, Florida	2015 – 2016

Presentations and Guest Speaker

73rd ESCVS Congress – Oral presentation, Athens, Greece	May 2025
ACP Annual Meeting Speaker – Wellness Session	October 2024
ACP Building a Strong Residency Application Host – Live Webinar	September 2024
ACP Fellowship Applications Hematology/ Oncology – Live Webinar	August 2024
How to Write A Case Report – Lakeland Regional Health	July 2024
ACP Module – General Internal Medicine at Lakeland Regional Health	October 2023
Journal Club Presentation – Pulmonary Hypertension at Lakeland Regional Health	October 2023

Community Service

Free Bookshelf Installation – Morrell Clinic	10/2024 – current
SAMS – Volunteered at a Medical Mission Trip, Jordan	01/2023 – 01/2023
Shadowed and volunteered with Dr. Alaa AlKhateeb, Obstetrician – Gynecologist in Jordan	01/2023 – 02/2023
Project Downtown Tampa	01/2013 – 05/2017
Best Buddies with Intellectual and Developmental Disabilities	01/2013 – 05/2017
Volunteered at USF Pediatrics with Reach Out Read Organization	01/2013 – 04/2013

Certification and Licensure

Basic Life Support (BLS) Certification
Advanced Cardiovascular Life Support (ACLS) Certification
Pediatric Advanced Life Support (PALS)
EHS - Safety Certificates Bloodborne Pathogens

Languages

English – Native Proficiency
Arabic – Native Proficiency
French – Intermediate Proficiency
Spanish – Medical Proficiency

Hobbies

Writing poetry, swimming, refurbishing furniture, and painting.
