

Aaron M. Mohs, Ph.D.

Department of Pharmaceutical Sciences
College of Pharmacy
University of Nebraska Medical Center
986120 Nebraska Medical Center
Omaha, NE 68198-6120

EDUCATION

Aug. 2002 – Dec. 2006

Doctor of Philosophy

Pharmaceutics and Pharmaceutical Chemistry
University of Utah
Salt Lake City, UT
Dissertation: Biodegradable Macromolecular Contrast Agents for
Magnetic Resonance Imaging. (*Defended Sept. 28, 2006*)
Mentor: Dr. Zheng-Rong Lu, Ph.D.

Aug. 1998 – May 2002

Bachelor of Arts

Chemistry (Biology concentration)
Saint John's University/College of Saint Benedict
Collegeville, MN
Undergraduate Research: Synthesis of bidentate nitrogenous
molybdenum complexes as catalysts.
Mentor: Dr. Chris Schaller, Ph.D.

POSTDOCTORAL TRAINING

Oct. 2006 – July 2011

Postdoctoral Fellowship

Biomedical Engineering
Emory University–Georgia Institute of Technology
Atlanta, GA
Research Emphasis: Nanotechnology for Biomedical Imaging
Applications
Mentor: Dr. Shuming Nie, Ph.D.

ACADEMIC & ADMINISTRATIVE APPOINTMENTS

2024 – Present	Director, Bachelor of Science in Pharmaceutical Sciences Program, College of Pharmacy, UNMC
2023 – Present	Professor (with Tenure), Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center
2022 – Present	Associate Dean for Research and Graduate Studies, College of Pharmacy, UNMC

2022 – Present	Courtesy Faculty, Department of Chemistry, College of Arts and Sciences, University of Nebraska Omaha
2021 –2022	President, UNMC Faculty Senate
2020 –2021	Vice President/President Elect, UNMC Faculty Senate
2015 – Present	Courtesy Faculty, Biochemistry and Molecular Biology, College of Medicine, University of Nebraska Medical Center
2015 – Present	Member, The Fred and Pamela Buffett Cancer Center, University of Nebraska Medical Center
2015 – Present	Member, Center for Drug Delivery and Nanomedicine, University of Nebraska Medical Center
2018 – 2023	Associate Professor (with Tenure), Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center
2018 – 2020	Director, UNMC Pharmaceutical Sciences Graduate Program
2015 – 2018	Assistant Professor (Tenure-Track), Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center
2015 – 2016	Adjunct Assistant Professor, Biomedical Engineering, Wake Forest University Health Sciences
2011 – 2015	Assistant Professor (Tenure-Track), Biomedical Engineering (primary), Cancer Biology (joint), and Regenerative Medicine (joint), Wake Forest University Health Sciences, Wake Forest University – Virginia Tech School of Biomedical Engineering and Sciences (SBES-WFUHS)

CERTIFICATES AND LICENCES

None.

GRANT/CONTRACT SUPPORT

Current Funding

Title: Preclinical development of a novel antibody conjugate for intraoperative detection of pancreatic cancer

Funding Agency: NIH/NCI

Mechanism: R01 CA259080

Dates: 03/04/2022 – 02/28/2027

Total Dollars: \$1,790,348 (\$1,228,757 direct)

Investigators: PI: **Mohs**; co-I's: Ly, Hollingsworth, Murry, Talmon, Brooks

Title: Molecular Imaging Probe(s) for Optical Surgical Navigation of Pancreatic Cancer

Funding Agency: NIH/NCI

Mechanism: R01 CA256973

Dates: 02/01/2022 – 01/31/2027

Total Dollars: \$2,320,850 (\$1,887,300 direct)

Investigators: co-PIs: Bouvet (UC San Diego), Batra, Kaur; co-I: **Mohs**

Title: **Geranylgeranyl diphosphate synthase inhibitor therapy for multiple myeloma**

Funding Agency: NIH/NCI

Mechanism: R01 CA258621

Dates: 04/01/2021 – 03/31/2026

Total Dollars: \$2,257,205 (\$1,879,910 direct)

Investigators: co-PIs: Holstein, **Mohs**, Wiemer (Iowa)

Title: **A ratiometric fluorescent sensor array for bacterial pathogen investigation**

Funding Agency: NIH/NIBIB

Mechanism: R01 EB027662

Dates: 07/08/2019 – 03/31/2025 (NCE)

Total Dollars: \$1,372,500 (\$900,000 direct)

Investigators: PI: **Mohs**; co-I: Drs. Denis Svechkarev, Marat Sadykov, Ken Bayles

Title: **Targeting B7-H3 for fluorescence-guided surgery of extracranial pediatric tumors**

Funding Agency: Child Health Research Institute – Pediatric Cancer Research Group

Mechanism: Pilot Research Grant

Dates: 10/01/2023 – 09/30/2025

Total Dollars: \$78,000 direct

Investigators: PI: **Mohs**

Completed Funding

Title: **Imaging Agents for Fluorescence-Guided Surgery of Medulloblastoma**

Funding Agency: Child Health Research Institute – Pediatric Cancer Research Group

Mechanism: Pilot Research Grant

Dates: 10/01/2021 – 09/30/2023

Total Dollars: \$50,000 direct

Investigators: PI: **Mohs**; co-I: Mahapatra

Title: **Nebraska Center for Molecular Target Discovery and Development**

Funding Agency: NIH/NIGMS

Mechanism: P20 GM121316

Dates: 03/16/2018 – 02/28/2022

Total Dollars: \$11,102,846 (\$7,562,289 direct)

Investigators: PI: Lewis; co-I: **Mohs**, et al.

Title: **Tunable Fluorescent Organic Nanoparticles for Cancer Imaging Applications**

Funding Agency: NIH/NCI

Mechanism: R21 CA212500

Dates: 02/15/2017 – 01/31/2021

Total Dollars: \$602,000 (\$400,000 direct)

Investigators: PI: **Mohs**; co-I: Dr. Tony Hollingsworth

Title: **Nonclinical development of Nerverlight, an intra-operative peripheral nerve imaging agent.**

Funding Agency: NIH/NCI

Mechanism: R44 CA180745
 Dates: 09/25/2017 – 08/31/2021
 Total Dollars: \$1,972,209; \$509,856 to UNMC (\$336,785 direct)
 Investigators: sub-PI: **Mohs**; PI: Manzanita Pharmaceuticals (Dr. Stephen Kahl)

Title: **Development and application of a porcine model of pancreatic cancer**
 Funding Agency: NIH/NCI
 Mechanism: R01 CA222907
 Dates: 04/01/2018 – 03/31/2021
 Total Dollars: \$2,056,792 (\$1,349,451 direct)
 Investigators: PI: Carlson; co-I: **Mohs**, et al.

Title: **Imaging Wilms Tumor**
 Funding Agency: Department of Urology
 Dates: 06/01/2018 – 05/31/2020
 Total Dollars: \$65,682 direct
 Investigators: Project PI: **Mohs**

Title: **Pancreatic Cancer Detection Consortium**
 Funding Agency: NIH/NCI
 Mechanism: U01 CA210240
 Dates: 04/01/2018 – 03/31/2022
 Total Dollars: \$115,000 (Set-Aside Development Project in 2018)
 Investigators: PI: Hollingsworth; co-I: Mohs

Title: **Multimodal Imaging for Pancreas Cancer Detection**
 Funding Agency: NIH/NCI
 Mechanism: U01 CA217665 Set Aside
 Dates: 8/18/18 – 8/17/19 (currently processing NCE request)
 Total Dollars: \$42,206 to UNMC (\$27,676 direct)
 Investigators: sub-PI: **Mohs**; PI: Dr. Julie Sutcliffe (UC Davis)

Title: **Nanomedicine Approaches to Image-Guided Drug Delivery in Metastatic Cancers.**
 Funding Agency: UNMC College of Pharmacy
 Mechanism: Seed Grant Funds
 Dates: 07/01/2017 – 06/30/2019
 Total Dollars: \$90,000 direct for all PIs combined
 Investigators: co-PIs: Drs. **Mohs**, Jered Garrison, DJ Murry, and David Oupicky

Title: **Hyaluronic Acid Based Nanoparticles for Targeted Image-Guided Tumor Surgery**
 Funding Agency: NIH/NIBIB
 Mechanism: R01 EB019449
 Dates: 09/25/2014 – 06/30/2019
 Total Dollars: \$1,325,018 (\$895,500 direct)
 Investigators: PI: **Mohs**; co-I: Drs. Frank C. Marini and Graca Almeida-Poroda

Title: Nanoparticle Formulations of Orlistat for Treatment of Chemoresistant Cancer
Funding Agency: NIH/NIGMS
Mechanism: Project under P20 GM103480 (COBRE: Nebraska Center for Nanomedicine.)
Dates: 06/01/2016 – 05/31/2019
Total Dollars: \$250,000 direct
Investigators: Project PI: **Mohs**

Title: Positions to Support the National Strategic Research Institute
Funding Agency: Nebraska Research Initiative
Dates: 01/01/2016 – 11/30/2018
Total Dollars: \$375,550 direct
Investigators: PI: **Mohs**

Title: Multimodal Contrast Agents for Integrated Preoperative and Intraoperative Imaging of Pancreatic Cancer
Funding Agency: Cattlemen's Ball Association of Nebraska
Mechanism: UNMC Pancreatic SPOR Developmental Research Project
Dates: 09/01/2016 – 08/31/2018
Total Dollars: \$50,000 direct
Investigators: PI: **Mohs**; co-I: Dr. Yutong Liu (former co-I: Dr. Michael Boska)

Title: Development of contrast agents targeting to lymphangiogenesis in an orthotopic prostate cancer model
Funding Agency: Department of Urology via Davies Philanthropy
Dates: 06/01/2016 – 05/31/2017 (continued under no-cost extension)
Total Dollars: \$50,000 direct
Investigators: PI: **Mohs**; co-PI: Dr. Samikshan Dutta; co-I: Drs. Kaustubh Datta and Chad LaGrange

Title: Nanotechnology for minimally invasive for cancer detection and resection
Funding Agency: NIH/NCI
Mechanism: K99/R00 Pathway to Independence Award in Cancer Nanotechnology Research; K99/R00 CA153916
Dates: 09/03/2010 – 03/31/2017
Total Dollars: \$894,259 (\$654,711 direct) K99 and R00 phases combined
Investigators: PI: **Mohs**

Title: Longitudinal assessments of placental oxygenation and perfusion using ultrasound and photoacoustics
Funding Agency: NIH/NICHD
Mechanism: R21 HD086357
Dates: 09/17/2015 – 8/31/2017
Total Dollars: \$45,690 (\$30,359 direct)
Investigators: PI: Dr. Yamaleyeva (subcontract PI: **Mohs**)

Title: Multimodal contrast agents for preoperative and intraoperative imaging

Funding Agency: Nebraska Department of Health and Human Services
 Mechanism: LB506 2017-41
 Dates: 07/01/2016 – 06/30/2017
 Total Dollars: \$50,000
 Investigators: PI: **Mohs**

Title: Development of Multimodal Imaging Nanoparticles for Integrated Preoperative and Intraoperative Imaging

Funding Agency: Nebraska Center for Nanomedicine
 Mechanism: Imaging Related Pilot Grants
 Dates: 06/01/2015 – 05/31/2017
 Total Dollars: \$10,000
 Investigators: PI: **Mohs**; co-PI: Dr. Michael Boska

Title: Nanoparticle-Based Delivery of Novel Fatty Acid Synthase Inhibitors

Funding Agency: Wake Forest University Health Sciences & Virginia Tech
 Mechanism: WFU Comprehensive Cancer Center - School of Biomedical Engineering and Sciences Joint Pilot Award
 Dates: 09/01/2014 – 08/31/2015
 Total Dollars: \$50,000
 Investigators: PI: Dr. Steven Kridel; co-PI: **Mohs**, Dr. Todd Lowther

Title: Optical Molecular Tomography for Regenerative Medicine

Funding Agency: NIH/NHLBI
 Mechanism: Bioengineering Research Partnership; R01 HL098912
 Dates: 03/01/2010 – 11/30/2014
 Total Dollars: \$2,852,790
 Investigators: PI: Dr. Ge Wang; co-PI: Dr. Shay Soker; co-I: **Mohs**, Dr. Yong Xu, et al.

Title: Controlled Release Biomaterials for IL-35 Secreting Mesenchymal Stromal Cells for the Treatment of Type I Diabetes

Funding Agency: Wake Forest Institute for Regenerative Medicine
 Mechanism: Promoting Innovative Discoveries Pilot
 Dates: 08/01/2014 – 07/31/2015 (approximate)
 Total Dollars: \$25,000
 Investigators: PI: **Mohs**; co-PIs: Drs. Emmanuel Opara, Chris Porada, Graca Almeida-Porada

Title: New Near Infrared Imaging Method to Detect Genetically Labeled Cells Using a Nerve/Muscle Construct Model

Funding Agency: Wake Forest Institute for Regenerative Medicine
 Mechanism: Pilot Seed Grant
 Dates: 06/01/2012 – 05/31/2013 (approximate)
 Total Dollars: \$25,000
 Investigators: PI: **Mohs**; co-PIs: Drs. Khalil Bitar, Frank Marini, Robert Gilmont

STUDY SECTIONS

National/International

2024	<i>Ad hoc</i> Member, National Cancer Institute Special Emphasis Panel; Advanced Development of Cancer Technologies (ZCA1 TCRB-Q (O2)); July 2024, NIH
2024	<i>Ad hoc</i> Member, Fellowships: Cell Biology, Developmental Biology, and Bioengineering (2024/05 ZRG1 F05-Q 20L); February 2024, NIH
2023	<i>Ad hoc</i> Member, Fibrolamellar Cancer Foundation, grant review committee; August 2023.
2023	<i>Ad hoc</i> Member, National Cancer Institute Program Project (P01), ZCA RPRB-M (01); June 2023, NIH
2023	<i>Ad hoc</i> Member, Fellowships: Cell Biology, Developmental Biology, and Bioengineering (2023/05 ZRG1 F05-Q(20)); February 2023, NIH
2022	<i>Ad hoc</i> Member, Diversity and Health Disparities RFAs Reviews (ZEB1 OSR-H (O2)), National Institute of Biomedical Imaging and Bioengineering; July 2022, NIH
2022	<i>Ad hoc</i> Member, Imaging Probes and Contrast Agents (IPCA) Study Section, NIH Center for Scientific Review, February, June, and October 2022, NIH
2022	Member, Office of the Directors Program Pioneer Award Review, NIH Center for Scientific Review, February 2022, NIH
2021	External reviewer for the NCI Molecular Imaging Branch, Office of the Director, Center for Cancer Research, Virtual Site Visit, December 2021, NIH
2021	SBIR Phase II Reviewer, National Science Foundation, August 2021
2021	<i>Ad hoc</i> Member, Enabling Bioanalytical and Imaging Technologies (EBIT) Study Section, NIH Center for Scientific Review, February 2021, NIH
2021	Reviewer, The Netherlands Organisation for Scientific Research (NWO/ZonMw), January 2021
2020 - 2022	Acting Chair, Member Conflict: Medical Imaging Investigations (ZRG1 SBIB-Q (03) M), March, June, December, NIH Center for Scientific Review
2020	Member, Innovative Molecular and Cellular Analysis Technologies (2021/01 ZCA1 TCRB-J (J1) R), November 2020, NCI/NIH
2020	Member, SARS-CoV-2 Serological Sciences Centers of Excellence (U01), ZCA1 RTRB-C (A1), August 2020, NCI/NIH
2019	<i>Ad hoc</i> Member, Imaging Guided Interventions and Surgery Study Section, NIH Center for Scientific Review, Washington, DC
2019	Member, Special Emphasis Panel (ZCA1 RPRB-L (M2)), Clinical and Translational R21 and Omnibus R03, NCI/NIH
2018	Member, Special Emphasis Panel (ZHL1 CSR-Q (F1)), Bold New Bioengineering Methods and Approaches for Heart, Lung, Blood and Sleep Disorders and Diseases (R21), NHLBI/NIH, Washington, DC
2018	Member, Special Emphasis Panel (ZCA1 TCRB-J (O1)), Innovative Molecular Analysis Technologies, NCI/NIH, Bethesda, MD
2018	Reviewer, Kom op tegen Kanker (stand up to cancer), Flemish Cancer Society

2017,2018	<i>Ad hoc</i> Member, Medical Imaging Study Section (MEDI), NIH Center for Scientific Review
2015	Member, Special Emphasis Panel (2015/05 ZCA1 TCRB-Q (M1)), Centers for Cancer Nanotechnology Excellence (CCNE), NCI/NIH, Bethesda, MD
2015	Reviewer, Applied and Engineering Researches, Ministry of Science and Technology, State of Israel

State

2019	INBRE Review Panel, Omaha, NE
2013 – Present	Scientific Review Panel, Maryland Stem Cell Research Fund, Baltimore MD
2013	Scientific Review Panel, NYSTEM Program, Reston VA

Institutional

2024	Chair, Graduate Student Fellowship
2023	Review, Frohn Scholarship; Chair: Dr. Kate Hyde
2022	Reviewer, Graduate Student Fellowship – Hematopoietic Cancers; Chair: Dr. Matthew Zimmerman
2019	Co-Chair, Graduate Student Fellowship – Cell Bio; Chair: Dr. Carol Pullen
2017 – 2018	Reviewer, Graduate Student Fellowship – Cell Bio; Chair: Dr. Matthew Zimmerman
2016 – 2018	Reviewer, Graduate Student Fellowship – Drug Development; Chair: Dr. Rakesh Singh

PATENTS

Issued Patents

1. **Mohs AM**, Hill TK, Kelkar SS, Kridel S, inventors; Wake Forest University Health Sciences, assignee. Hyaluronic Acid-Based Nanoparticles as Biosensors for Imaging-Guided Surgery and Drug Delivery Vehicles and Methods Associated Therewith. United States patent 11,627,804-B2. 2023 April 4.
2. **Mohs AM**, Kridel SJ, Hill TK, inventors; Wake Forest University Health Sciences, assignee. FAS Inhibitors and methods associated therewith. United States patent US 10,272,088-B2. 2019 Apr 30.
3. Nie S, **Mohs AM**, Mancini MC, inventors; Emory University, assignee. Integrated system and methods for real-time anatomical guidance in a diagnostic or therapeutic procedure. United States patent US 9,451,882. 2016 Sept 27.
4. Nie S, **Mohs AM**, Mancini MC, inventors; Emory University, assignee. Additional systems and methods for providing real-time anatomical guidance in a diagnostic or therapeutic procedure. United States patent US 9,345,389. 2016 May 24.

Disclosures/Provisional Application

1. **Mohs AM**, Olson MT, inventors; Board of Regents to the University of Nebraska, assignee. Targeted Intraoperative Imaging Probe. 62/967,162. 2020 January 29

CONSULTING POSITIONS

2024 – Present	Editorial Board, <i>npj Imaging</i>
2014 – Present	Associate Editor, <i>Frontiers in Pharmacology: Integrative and Regenerative Pharmacology</i>
2011 – 2012	Senior Scientific Consultant, SpectroPath, Inc., Atlanta, GA

Manuscript Ad Hoc Reviewer (Impact Factor)

Acta Biomaterialia (10.633)
ACS Applied Materials and Interfaces (10.383)
ACS Medicinal Chemistry Letters (4.632)
ACS Nano (18.027)
ACS Sensors (9.618)
Advanced Drug Delivery Reviews (17.873)
Advanced Materials (32.086)
Advanced Functional Materials (19.924)
American Journal of Roentgenology (6.582)
Analytical & Bioanalytical Chemistry (4.478)
Analytical Chemistry (8.008)
Angewandte Chemie International Edition (16.823)
Bioconjugate Chemistry (6.069)
Biomacromolecules (6.978)
Biomaterials (15.304)
Biomaterials Science (7.590)
Cancer Research (13.312)
Carbohydrate Polymers (10.723)
Colloids and Surfaces B: Biointerfaces (5.268)
Curr Opin Chem Biol (8.972)
EBioMedicine (11.205)
Endocrine-Related Cancer (5.900)
European Polymer Journal (5.546)
Expert Opin Investig Drugs (6.498)
Front Physiol (4.755)
Front Cardiovascular Medicine (5.846)
IEEE Transactions on Biomedical Engineering (4.756)
Interdiscip Neurosurg (0.361)
Journal of Applied Polymer Science (3.125)
Journal of Controlled Release (11.467)
Journal Biomedical Applications (2.646)
Journal of Medicinal Chemistry (8.039)
Journal of Photochemistry and Photobiology A: Chemistry (5.141)

Medical Physics (4.506)
Mol Imaging Biol (3.341)
Molecular Pharmaceutics (5.346)
Nanomedicine: Nanotechnology, Biology, and Medicine (6.458)
Nanoscale (8.307)
Nature Communications (17.69)
Nature Nanotechnology (43.341)
npj Imaging
Pharmaceutical Research (4.580)
PLOS ONE (3.752)
Scientific Reports (4.996)
Small (15.153)
Surgical Oncology (2.388)
Theranostics (11.600)
Translational Research (10.171)
Wiley Interdiscip Rev Nanomed Nanobiotechnol (9.182)

MILITARY SERVICE

None.

HONORS AND AWARDS

2022	Impact Award, College of Pharmacy, University of Nebraska Medical Center
2021 - current	Fellow of the University of Nebraska National Strategic Research Institute (NSRI)
2019	Distinguished Scientist Award, University of Nebraska Medical Center
2017	New Investigator Award, University of Nebraska Medical Center
2014	Wake Forest Comprehensive Cancer Center Nominee, Pew-Stewart Scholars Program for Cancer Research
2010	Innovation of the Year (Integrated Imaging and Spectroscopy System for Image-Guided Surgery) – awarded by the Emory Office of Technology Transfer
2006 – 2011	Emory – Georgia Tech Center for Cancer Nanotechnology Excellence Distinguished Fellowship
2006	Wolf Prize – awarded to a University of Utah College of Pharmacy graduate student for excellence in teaching, highest award given by the College of Pharmacy
2006	Jeffrey A. Fox Award – awarded to University of Utah, Pharmaceutics graduate student for dedication and service to department
2005	PhRMA Foundation Predoctoral Fellowship awarded by the PhRMA Foundation, Washington, DC
2005	Vice-Chair, Student Advisory Committee, Pharmaceutics and Pharmaceutical Chemistry, University of Utah
2002	Enzon Fellowship awarded by Enzon Inc., Piscataway, NJ

2001	Summer Undergraduate Research Fellow, Pharmaceutical Chemistry, University of Kansas
2000	St. John's University Study Abroad Program at the University of Salzburg
1999 – 2000	Siehl Scholarship – awarded by St. John's University for academic excellence and leadership
1998 – 2002	President's Scholarship – awarded by St. John's University, based on academic achievement, service, and leadership
1998 – 2002	Recognition Scholarship for Students in Science – awarded by St. John's University, based on academic achievement in science

MEMBERSHIPS/OFFICES IN PROFESSIONAL SOCIETIES

Memberships

American Association for Cancer Research (AACR)
 American Association of Colleges of Pharmacy (AAPC)
 American Association of Pharmaceutical Scientists (AAPS)
 American Chemical Society (ACS)
 Controlled Release Society (CRS)
 International Society for Fluorescence Guided Surgery (ISFGS)
 Society of Photographic Instrumentation Engineers (SPIE)
 World Molecular Imaging Society (WMIS)

Society, Conference/Symposium, and National Organization Service Contributions

2024	Pharmacy Deans Research Group, Associate Dean for Research Participant (Clearwater, FL)
2022	Nebraska Drug Discovery & Development Pipeline (ND3P) Symposium, Discussion Leader
2022	52 nd Annual Pharmaceutics Graduate Students Research Meeting, Podia Judge (Omaha, NE)
2019	World Molecular Imaging Congress, Oncology Category co-Chair
2018	World Molecular Imaging Congress, Oncology Category co-Chair, Session Moderator at Annual Meeting (Seattle, WA)
2017	Abstract Reviewer, World Molecular Imaging Congress, World Molecular Imaging Society
2016	UNMC AAPS Student Chapter Early-stage Career Development Panelist
2014	Vice-Chair, Regenerative Imaging and Sensing Working Group; Tissue Engineering and Regenerative Medicine International Society
2012	Session Chair, Cancer Imaging, Biomedical Engineering Society Annual Meeting

2013 – 2014	Selection Committee Chair, Wake Forest Institute of Regenerative Medicine Young Investigator Award; Tissue Engineering and Regenerative Medicine International Society
2013 – 2014	Abstract Reviewer, Cancer Technologies, Biomedical Engineering Society Annual Meeting
2013	Invited Faculty Panelist on Career Development at the Biomaterials Gordon Research Seminar; Holderness, NH
2013	Abstract Reviewer, Imaging Technologies, Tissue Engineering and Regenerative Medicine International Society
2011 – 2012	Chair, Nanomaterials/Nanoformulations Working Group, NCI Alliance for Nanotechnology in Cancer
2008	Participant, NIST-ASTM sponsored interlaboratory study (ILS) on nanotechnology standardization
2007 – 2010	Participant, NCI Working Group to set standards for nanotechnology as a chemical and biological technology for cancer informatics, detection, and treatment

COMMITTEE/ADMINISTRATIVE ASSIGNMENTS

University of Nebraska Medical Center

Aug. 2024 – Present	Member, BS in Pharmaceutical Sciences Steering Committee
Aug. 2024 – Nov. 2024	Chair, Department of Pharmacy Practice and Science Department Chair Search Committee
May 2024 – July 2024	Member, Associate Dean for Kearney Campus College of Pharmacy Search
April 2024 – Present	Member, UNMC Research Governance Council; co-Chairs: Drs. Russell McCulloh and Tess Kuentstling
Nov. 2023 – Present	Member, UNMC Academic Governance Council; Chair: Anne Barnes, Associate Vice Chancellor of Finance and Business Development
July 2023 – Present	Member, Nebraska Center for Molecular Target Discovery and Development (CMTDD) COBRE Internal Advisory Committee
June 2023 – Present	Member, UNMC Center for Drug Design and Innovation Internal Advisory Board
June 2023 – Sept 2023	Chair, UNMC College of Pharmacy Masters Tuition Strategic Budget Working Group
July 2022 – Present	Member, UNMC Research Advisory Board
June 2022 – May 2023	Member, Dean of the College of Nursing Search Committee
Dec. 2021 – Aug. 2022	Member, Vice Chancellor of Research Search Committee

Oct. 2021 – Present	Member, Fred & Pamela Buffett Cancer Center Training and Education Core Advisory Board
June 2021 – May 2022	Council of Senate Presidents, University of Nebraska System
June 2021 – Present	UNMC/UNO BS in Pharmaceutical Sciences Oversight Committee
July 2020 – June 2022	Vice Chair, College of Pharmacy Curriculum Committee (Chair: Dr. Kristen Cook); Member since 2019
July 2020 – June 2022	College of Pharmacy Promotion & Tenure Committee
Nov. 2020 – June 2022	Chair, Pharmaceutical Sciences Graduate Program Curriculum Committee
May 2020 – Present	College of Pharmacy Reopening Task Force (COVID-19 Response for courses)
May 2020 – May 2021	Ad hoc committee to establish BS in Pharmaceutical Sciences at UNO
Aug 2019 – Present	Co-Chair (Administrative sub-committee) College of Pharmacy ACPE Accreditation (Chair: Dr. Don Klepser)
March 2019 – June 2022	Workshop on Pharmaceutical Development Technologies, co-Chair; 2020 Cancelled due to COVID-19
Sept. 2018 – Present	Member, Flow Cytometry Research Facility
June 2018 – June 2022	Member (chair 2021-2022), UNMC Faculty Senate Executive Committee Member
June 2018 – June 2022	Member, UNMC Faculty Senate, College of Pharmacy Representative
July 2018 – June 2020	Member, UNMC Graduate Council
Jan. 2018 – Present	Director, Optical Surgical Navigation Shared Resource, Fred & Pamela Buffett Cancer Center
Jan. 2018 – Present	Director, University of Nebraska at Omaha – UNMC COP Internship Program
Nov. 2017 – Present	Member, Bioimaging Core Advisory Committee (Chair. Dr. Yutong Liu)
July 2016 – Present	Pharmaceutical Sciences Graduate Program Committee (Chair: July 2018 – June 2020; ex officio since 2022)
Jan. 2016 – Present	Cancer Research Graduate Program Committee (Chair: Dr. Joyce Solheim)
June 2016 – Sept. 2016	College of Pharmacy Business Manager Search Committee (Chair: Dr. Christopher Shaffer)
July 2015 – June 2020	Member, Admissions Committee, UNMC College of Pharmacy (co-Chairs: Drs. Christopher Shaffer and Charles Krobot)

Wake Forest University Health Sciences

July 2013 – Mar. 2015	Biomedical Engineering Society (BMES) Wake Forest Student Chapter Faculty Advisor
July 2012 – Mar. 2015	Wake Forest Institute for Regenerative Medicine Departmental Animal Care and Use Committee Reviewer
Sept. 2011 – Mar. 2015	Wake Forest – Virginia Tech School of Biomedical Engineering and Sciences faculty search committee

Doctor of Philosophy Graduate Student Committees

1. Sept. 2024 – Present	Member, Graduate Committee for Nusrat Ahmed (UNMC-PSGP); Chair: Dr. DJ Murry
2. Sept. 2024 – Present	Member, Graduate Committee for Prachi Agrawal (UNMC-PSGP); Chair: Dr. DJ Murry
3. Aug. 2024 – Present	Member, Graduate Committee for Vineet Joshi (UNMC-PSGP); Chair: Dr. DJ Murry
4. Aug. 2024 – Present	Member, Graduate Committee for William Taylor (UNMC-PSGP); Chair: Dr. Paul Trippier
5. June 2024 – Present	Member, Graduate Committee for Erika Cone (UNMC-CRGP); Chair: Dr. Jered Garrison
6. Feb. 2024 – Present	Member, Graduate Committee for Ahmed Mancy (UNMC-PSGP); Chair: Dr. Benson Edgwa
7. Feb. 2024 – Present	Member, Graduate Committee for Kimia Hirbod (UNMC-PSGP); Chair: Dr. Howard Gendelman
8. Jan. 2024 – Present	Member, Graduate Committee for Sadia Ether (UNMC-IGPBS); Chair: Dr. DJ Murry
9. Aug. 2023 – Present	Member, Graduate Committee for Kiana Sherkatsadi (UNMC-PSGP); Chair: Dr. Jered Garrison
10. July 2023 – Present	Member, Graduate Committee for Benjamin Gephart (UNMC-CRGP); Chair: Dr. Joyce Solheim
11. May 2023 – Present	Member, Graduate Committee for Saeedeh Saeedi (UNMC-PSGP); Chair: Dr. Corey Hopkins
12. Oct. 2022 – Present	Chair, Graduate Committee for Sumbal Talib (UNMC-PSGP); Chair: Dr. Aaron Mohs
13. Aug. 2022 – Present	Member, Graduate Committee for Yashwardhan Ghanwatkar; Chair: Dr. Ram Mahato

14. Aug. 2022 – Present Member, Graduate Committee for Pedram Rikhtechi (UNMC-PSGP);
Chair: Dr. Jered Garrison
15. March 2022 – Present Member, Graduate Committee for Molly Muehlbach (UNMC-IGPBS);
Chair: Dr. Sarah Holstein
16. Jan. 2022 – Present Member, Graduate Committee for Farhana Islam (UNMC-BMB); Chair:
Dr. Howard Gendelman
17. Oct. 2021 – Present Chair, Graduate Committee for Evie Ehrhorn (UNMC-CRGP); Chair: **Dr.
Aaron Mohs**
18. Aug. 2021 – Present Member, Graduate Committee for Christabelle Rajesh (UNMC-CRGP);
Chair: Dr. Prakash Radhakrishnan
19. June 2021 – Present Chair, Graduate Committee for Ashruti Pant (UNMC-PSGP); **Chair: Dr.
Aaron Mohs**
20. May 2021 – Present Member, Graduate Committee for Sadie Allen (UNMC-CRGP); Chair: Dr.
Jered Garrison
21. Aug. 2020 – Present Member, Graduate Committee for Rajashree Chakraborty (UNMC
BMB); Chair: Dr. Howard Gendelman
22. Apr. 2020 – Sept. 2024 Chair, Graduate Committee for Kathryn Muilenburg (UNMC-PSGP);
Chair: Dr. Aaron Mohs
23. Sept. 2019 – June 2024 Member, Graduate Committee for Abdullah Alshehri (UNMC-PSGP);
Chair: Dr. Darryl J. Murry
24. Aug. 2019 – Present Member, Graduate Committee for Jingyi Ma (UNMC-PGSP); Chair: Dr.
Ram Mahato
25. July 2021 – June 2024 Member, Graduate Committee for Hunter Miller (UNL-BSE); Chair: Dr.
Forrest Kievit
26. Oct. 2021 – Dec. 2023 Member, Graduate Committee for Suyash Deodhar (UNMC-PEN); Chair:
Dr. Howard Gendelman
27. Aug. 2019 – Dec. 2023 Chair, Graduate Committee for Aayushi Laliwala (UNMC-PSGP); **Chair:
Dr. Aaron Mohs**
28. Feb. 2020 – June 2023 Member, Graduate Committee for Md Shafikur Rahman (UNMC-PSGP);
Chair: Dr. Paul Trippier
29. Aug. 2018 – July 2022 Member, Graduate Committee for Aria Tarudji (UNL-BSEN); Chair: Dr.
Forrest Kievit.

30. Aug. 2018 – May 2022 Member, Graduate Committee for Mai Mustafa (UNMC-PSGP); Chair: Dr. Joseph Vetro, Dr. Howard Gendelman
31. Apr. 2018 – May 2022 Chair, Graduate Committee for Paul Lovell (UNMC-PSGP); **Chair: Dr. Aaron Mohs**
32. Apr. 2018 – Jan. 2022 Chair, Graduate Committee for Aishwarya Bapat (UNMC-PSGP); **Chair: Dr. Aaron Mohs**
33. Nov. 2018 – Jan. 2022 Member, Graduate Committee for Zhifeng Zhao (UNMC-PSGP); Chair: Dr. Dong Wang
34. Oct. 2017 – Sept. 2021 Chair, Graduate Committee for Madeline Olson (UNMC-CRGP); **Chair: Dr. Aaron Mohs**
35. Dec. 2018 – Dec. 2020 Member, Graduate Committee for Insaya Mukadam (UNMC-PSGP); Chair: Dr. Howard Gendelman
36. May 2016 – May 2020 Chair, Graduate Committee for Nick Wojtynek (UNMC-CRGP); **Chair: Dr. Aaron Mohs**
37. Aug. 2015 – May 2020 Chair, Graduate Committee for William Payne (UNMC-PSGP); **Chair: Dr. Aaron Mohs**
38. Aug. 2016 – July 2020 Member, Graduate Committee for Yu Hang (UNMC-PSGP); Chair: Dr. David Oupicky
39. Aug. 2015 – Nov. 2019 Chair, Graduate Committee for Deep Bhattacharya (UNMC-PSGP); **Chair: Dr. Aaron Mohs**
40. June 2016 – Nov. 2019 Chair, Graduate Committee for Bowen Qi (UNMC-PSGP); **Chair: Dr. Aaron Mohs**
41. May 2015 – May 2018 Member, Graduate Committee for Yi Chen (UNMC-PSGP); Chair: Dr. David Oupicky
42. Aug. 2014 – Apr. 2018 Member, Graduate Committee for Ellie McCabe (WFUHS-Molecular Medicine); Chair: Dr. Nicole Levi-Polyachenko (WFUHS)
43. Aug. 2011 – June 2017 Member, Graduate Committee for Etai Sapoznik (WFUHS-Biomedical Engineering); Chair: Dr. Shay Soker
44. Feb. 2017 – May 2017 Member, Graduate Committee for Yinnong Jai (UNMC-PSGP); Chair: Dr. Jered Garrison
45. Aug. 2012 – Dec. 2015 Member, Graduate Committee for Benjamin Rowe (WFUHS Physiology/Pharmacology); Chair: Dr. George Christ (WFUHS)

46. Aug. 2012 – Aug. 2015 Member, Graduate Committee for Hannah Baker (WFUHS-Biomedical Engineering); Chair: Dr. George Christ (WFUHS)
47. June 2012 – July 2015 Member, Graduate Committee for Riu Wang (WFUHS-Biomedical Engineering); Chair: Dr. William Wagner (WFUHS)
48. Aug. 2011 – May 2015 Member, Graduate Committee for John P. McQuelling (WFUHS Biomedical Engineering); Chair: Dr. Emmanuel Opara (WFUHS)
49. Jan. 2012 – Apr. 2015 Chair, Graduate Committee for Tanner Hill (WFUHS-Biomedical Engineering); **Chair: Dr. Aaron Mohs (WFUHS)**
50. Jun. 2012 – Apr. 2015 Co-Chair, Graduate Committee Elizabeth (Graham) Gurysh (WFUHS Biomedical Engineering); Chair: Dr. Nicole Levi-Polyachenko (WFUHS), **Co-Chair: Dr. Aaron Mohs (WFUHS)**
51. Aug. 2011 – Jan. 2015 Member, Graduate Committee for John Scott (WFUHS-Biomedical Engineering); Chair: Dr. George Christ (WFUHS)

Master of Science Graduate Student Committees

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| Jan. 2024 – Present | Member, Graduate Committee for Amit Kolhe (UNMC-PSGP); Chair: Dr. DJ Murry |
| Jan. 2023 – July 2024 | Member, Graduate Committee for Bhoomika Gowda (UNMC-PSGP); Chair: Dr. Howard Gendelman |
| Oct. 2022 – June 2024 | Chair, Graduate Committee for Shweta Wani (UNMC-PSGP); Chair: Dr. Aaron Mohs |
| Aug. 2017 – Aug. 2019 | Member, Graduate Committee for Yuanyuan Sun (UNMC-PSGP); Chair: Dr. Dong Wang (UNMC) |
| Aug. 2014 – Jun. 2015 | Chair, Graduate Committee for William Payne (WFUHS-Biomedical Engineering); Chair: Aaron Mohs (WFUHS) |
| Aug. 2011 – May. 2012 | Member, Graduate Committee for Riu Wang (WFUHS-Biomedical Engineering); Chair: Dr. William Wagner (WFUHS) |

PRESENTATIONS

International, National, and Regional Meetings

1. **Mohs AM (Invited).** Ratiometric fluorescent sensor arrays for the identification of pathogenic bacteria. American Chemical Society Midwest Regional Meeting; Omaha, NE, October 2024
2. **Mohs AM (Invited).** Targeting mucins for fluorescence-guided surgery of pancreatic cancer. Photonics West BIOS Conference; San Francisco, CA, January 2024.

3. **Mohs AM (Invited).** Preclinical development of NIRF-AR9.6: A MUC16 targeting agent for intraoperative imaging of pancreatic cancer. 2024 Stanford Symposium on Optical Surgical Navigation; Palo Alto, CA, January 2024.
4. **Mohs AM (Invited Keynote).** Pathogenic bacteria identification using ratiometric fluorophores: An experience at the interface of chemistry, microbiology, and computing. 17th IEEE International Symposium on Medical Information and Communication Technology (ISMICT); Lincoln, NE, May 2023.
5. **Mohs AM (Invited).** Targeting Mucins for the Optical Surgical Navigation of Pancreatic Cancer. World Molecular Imaging Congress; Miami, FL, September 2022.
6. **Mohs AM (Invited).** Ratiometric Dyes for Fluorescent Sensor Array-Enabled Bacterial Pathogen Identification and Classification. 28th International Biodetection Technologies; Bethesda, MD, Given virtually due to COVID-19, June 2021.
7. **Mohs AM (Invited).** MUC16 as a potential target for the surgical detection of pancreatic cancer. Photonics West BIOS Conference; San Francisco, CA, February 2020.
8. **Mohs AM.** Tunable Fluorescent Organic Nanoparticles for Cancer Imaging Applications: Project Update. NCI Innovative Molecular Analysis Technologies PI Meeting; Los Angeles, CA November 2019.
9. **Mohs AM (Invited).** Optimized Delivery of Near Infrared Fluorophores for Fluorescence-Guided Surgery. 6th Annual International Congress for Fluorescence Guided Surgery; Fort Lauderdale, FL, February 2019.
10. **Mohs AM.** Surgical imaging of pancreatic cancer using polysaccharide-delivered near infrared fluorophores. Photonics West BIOS Conference; San Francisco, CA, February 2019.
11. **Mohs AM (Invited).** Targeting fatty acid synthase to inhibit tumor growth and overcome taxane resistance. Photonics West BIOS Conference; San Francisco, CA, February 2019.
12. **Mohs AM.** Tunable Fluorescent Organic Nanoparticles for Cancer Imaging Applications. NCI Innovative Molecular Analysis Technologies PI Meeting; Rockville, MD, December 2018.
13. **Mohs AM.** Fluorescent hyaluronic acid nanoparticles enhance pancreatic cancer in mice for surgical navigation. Contrast Media Research; Durango, CO, October 2017.
14. **Mohs AM (Invited).** Image-guided surgery using near infrared fluorescent nanoparticles. NanoBio China 2016 the 1st Symposium on Minimally Invasive and Image Guided Surgery; Nanjing, China, October 2016.
15. **Mohs AM.** Image-guided surgery for tumor removal using hyaluronic acid-derived near infrared fluorescent nanoparticles. 10th World Biomaterials Congress; Montreal, Canada, May 2016.
16. **Mohs AM.** Intraoperative Imaging Using Near Infrared Fluorescent Hyaluronic Acid. 7th Annual Sino-U.S. Joint Research Forum; Omaha, NE, May 2016.

17. Kelkar SS, Hill TK, Payne WM, **Mohs AM**. Near Infrared Fluorescent Self-Assembled Nanoparticles for Image-Guided Surgery; Materials Research Society Fall Meeting & Exhibit; Boston, MA, December 2015.
18. **Mohs AM**, Hill TK, Kelkar SS, Marini FC, Levine, E. Hyaluronic Acid Derived Nanoparticles with Activatable Fluorescence for Image-Guided Tumor Surgery; Biomedical Engineering Society Annual Meeting; San Antonio, TX, October 2014.
19. **Mohs AM**, Raghavan S, Gilmont R, Somara S, Marini FC, Bitar KN. Near Infrared Fluorescent Neural Progenitor Cells to Track Differentiation and Tissue Innervation; Biomedical Engineering Society Annual Meeting; San Antonio, TX, October 2014.
20. **Mohs AM**. Nanotechnology for Minimally Invasive Cancer Detection and Resection; NCI Alliance for Nanotechnology in Cancer Investigators Meeting; Rockville, MD, October 2014.
21. **Mohs AM**. Near Infrared Fluorescent Protein Labeling of Enteric Nerve Cells: Development and Initial Characterization of IM-FEN-iRFP Cells, North Carolina Tissue Engineering and Regenerative Medicine Society Annual Meeting; Winston-Salem, NC, October 2013.
22. **Mohs AM**. Nanotechnology for Image-Guided Intervention: Potential for Prostate Cancer?, Prostate Cancer Research and Translation Symposium; Winston-Salem, NC, March 2013.
23. **Mohs AM**, Mancini MC, Qian X, Wang Y, Provenzale JM, Nie S. Nanotechnology for Guided Tumor Resection, NCI Alliance for Nanotechnology in Cancer Investigators Meeting; Houston, TX, November 2012.
24. **Mohs AM**, Wang Y, Qian X, Mancini MC, Provenzale J, Nie S. Nanotechnology for Spectroscopic and Image-Guided Tumor Resection, Biomedical Engineering Society Annual Meeting; Atlanta, GA, October 2012.
25. **Mohs AM**. Tumor cell marker imaging: searching for the micrometastases that change the game, RSNA/ASTRO Cancer Imaging and Radiation Therapy Symposium; Atlanta, GA, April 2011 (co-presenters Provenzale JM and Mancini MC).
26. **Mohs AM**. Laser-guided widefield imaging and spectroscopy for guidance during surgical resection of tumors, Fitzpatrick Institute for Photonics Annual Meeting; Duke University, Durham, NC, October 2010 (co presenters Mancini MC, Provenzale JM).
27. **Mohs AM**, Mancini MC, Provenzale JM, Singhal S, Wang MD, Nie S. A hand-held imaging and spectroscopy device for intraoperative, contrast-enhanced tumor detection, Biomedical Engineering Society Annual Meeting; Austin, TX, October 2010.
28. **Mohs AM**, Raza SH, White, WB, Kaddi C, Mancini MC, Nie S, Wang MD, Singhal S. The development of a novel endoscope to visualize residual tumor cells following cancer surgery, American College of Surgeons 95th Annual Clinical Congress; Chicago, IL, October 2009.
29. **Mohs AM**, Smith AM, Mancini MC, Wen MM, Nie S. Investigating the Interactions, Consequences, and Applications of Nanoparticles at Biological Interfaces, NCI Alliance for Nanotechnology in Cancer Investigators Meeting; Chicago, IL, September 2008.

30. **Mohs AM**, Zong Y, Goodrich KC, Parker DL, Lu ZR. PEG-*g*-(GdDTPA-co-L-cystine): effect of PEG chain length on in vivo contrast enhancement in MRI, Utah Center for Advanced Imaging Research 17th Annual Symposium; Salt Lake City, UT, October 2005.
31. **Mohs AM**, Wang X, Zong Y, Goodrich KC, Parker DL, Lu ZR. PEG-*g*-(GdDTPA-co-L-cystine): a biodegradable macromolecular contrast agent for blood pool MR imaging, Utah Center for Advanced Imaging Research 16th Annual Symposium; Park City, UT, November 2004.

Invited External Institution Presentations

1. **Mohs AM**. Fluorescent Technologies in Surgical Oncology and Infectious Disease – A Bright Future. Biomedical Engineering Seminar Series, Case Western Reserve University; Cleveland, OH, November 2024.
2. **Mohs AM**. Illuminating the Potential for Fluorescent Sensors in Oncology and Infectious Disease. Jones Seminars on Science, Technology, and Science. Thayer School of Engineering, Dartmouth University; Hanover, NH, May 2024.
3. **Mohs AM**. The development of fluorescent probes for surgical oncology and pathogen biosensing. Kansas State University; Manhattan, KS, October 2023.
4. **Mohs AM**. Antibody-Dye Conjugates for Fluorescence Guided Surgery. Chemistry Club Series, University of Nebraska at Omaha; Omaha, NE, March 2023.
5. **Mohs AM**. Fluorescence-Guided Surgery of Pancreatic Cancer. Cancer Imaging Program, National Cancer Institute (Virtual). April 2023.
6. **Mohs AM**. Fluorescence applications, from surgical oncology to pathogen detection, Biomedical Engineering Seminar Series, University of Nebraska, November 2022.
7. **Mohs AM**. Development of a near infrared fluorescent MUC16 targeted antibody for intraoperative imaging of pancreatic cancer. Center for Precision Surgery, University of Pennsylvania (Virtual). May 2022.
8. **Mohs AM**. Macromolecular approaches for fluorescence-guided surgery of pancreatic cancer. Berthiaume Institute for Precision Health, University of Notre Dame (Virtual). May 2022.
9. **Mohs AM**. Development of Ratiometric and Near Infrared Fluorophores for Diverse Biomedical Applications. Department of Chemistry, University of Iowa (Virtual). March 2022.
10. **Mohs AM**. Targeted Contrast Agents for Fluorescence-Guided Surgery of Pancreatic Cancer. University of Illinois Urbana-Champaign; Virtual Guest Lecture BIOE 598/698 – Surgical Technologies. November 2021.
11. **Mohs AM**. Targeted, image-guided removal of lethal malignancies. Augustana University; Sioux Falls, SD, April 2020. Cancelled due to COVID-19.
12. **Mohs AM**. Surgical imaging using near infrared fluorescence. South Dakota State University; Brookings, SD, December 2017.
13. **Mohs AM**. Biomedical imaging and nanotechnology: An example of how clinical challenges guide scientific innovation, Glen Arth Seminar Series, College of St. Benedict/St. John's University; St. Joseph, MN, November 2016.
14. **Mohs AM**. Contrast-enhanced fluorescence for intraoperative imaging. Frank Reidy Research Center for Bioelectronics (FRRCEB), Old Dominion University; Norfolk, VA, October 2016.

15. **Mohs AM.** Hyaluronan-derived nanoparticles for biomedical applications: Experiences in imaging and drug delivery. China Pharmaceutical University; Nanjing, China, October 2016.
16. **Mohs AM.** The Role of Cancer Nanotechnology for Intraoperative Imaging, College of Engineering, University of Nebraska at Lincoln; Lincoln, NE, April 2016.
17. **Mohs AM.** Cancer Nanotechnology: Applications for Image-Guided Surgery; Department of Chemistry, University of Nebraska at Omaha; Omaha, NE, April 2016.
18. **Mohs AM.** Nanotechnology for Contrast-Enhanced Fluorescence-Guided Surgery; LI-COR Biosciences; Lincoln, NE, December 2015.
19. **Mohs AM.** Nanotechnology for Image-Guided Tumor Surgery; Biomedical Engineering, University of South Dakota; Sioux Falls, SD, September 2014.
20. **Mohs AM.** Hyaluronic Acid Derived Nanoparticles for Image-Guided Surgery and Drug Delivery; Chemistry, Wake Forest University; Winston-Salem, NC, September 2014.
21. **Mohs AM.** Nanotechnology for Emerging Biomedical Applications, Joint School for Nanoscience and Nanoengineering at UNC Greensboro and NC A&T, Greensboro, NC, November 2012.
22. **Mohs AM.** Nanotechnology for medical and surgical imaging: current status and future possibilities, Duke Radiology Grand Rounds; Durham, NC, January 2011 (co-presenter Provenzale JM).
23. **Mohs AM.** Wide-field optical imaging with interactive excitation and spectroscopy to resect contrast-enhanced tumors, Northeastern University; Boston, MA, January 2011.
24. **Mohs AM.** Wide-field optical imaging using point excitation and spectroscopy for image-guided resection of contrast-enhanced tumors, UT Southwestern Medical Center; Dallas, TX, November 2010.
25. **Mohs AM.** Quantum dots for cellular and molecular imaging: unusual optical properties and cellular toxicity, UT Dallas; Richardson, TX, November 2010.
26. **Mohs AM.** Integrated Spectroscopy and Imaging for Intraoperative Cancer Detection and Surgical Oncology, Case Western Reserve University; Cleveland, OH, January 2010.

Invited Internal Presentations (most recent)

1. **Mohs AM.** Targeting B7-H3 (CD276) for fluorescence-guided surgery of pediatric cancers. 2024 Pediatric Cancer Research Symposium, Child Health Research Institute; Omaha, NE, August 2024.
2. **Mohs AM.** Intraoperative Molecular Imaging: An emerging translational field. MD-PhD Lunch Lecture Series, University of Nebraska Medical Center; Omaha, NE, October 2023.
3. **Mohs AM.** Recent advances in fluorescence-guided surgery. Pharmaceutical Sciences Graduate Program Symposium, University of Nebraska Medical Center; Omaha, NE, November 2022.
4. **Mohs AM.** Immunotargeted fluorophores as contrast agents for fluorescence-guided surgery 2022 Pediatric Cancer Research Symposium, Child Health Research Institute; Omaha, NE, August 2022.

5. **Mohs AM.** Fluorescence-guided Surgery for Improved Intraoperative Tumor Detection and Resection. 2021 Pediatric Cancer Research Symposium, Child Health Research Institute; Omaha, NE, September 2021.
6. **Mohs AM.** Preclinical development of a novel contrast agent for fluorescence-guided surgery of pancreatic cancer. Surgery Research Forum; Omaha, NE, July 2021.
7. **Mohs AM.** Preclinical development of a novel antibody conjugate for intraoperative detection of pancreatic cancer - A1 Preparation. Targets, Modulators and Delivery Program (TMDP), Buffett Cancer Center; Omaha, NE, December 2020.
8. **Mohs AM.** Image-guidance in surgical oncology: Integration of Science, Engineering, & Medicine. UNMC MD-PhD Seminar Series; Omaha, NE, December 2020.
9. **Mohs AM.** Preclinical development: Fluorescence-Guided Surgery for Pancreatic Cancer. GI Research Seminar Series, Buffett Cancer Center, Omaha, NE, October 2020
10. **Mohs AM.** Fluorescence-Guided Surgery of Tumors Using Near Infrared Fluorescent Macromolecules. UNMC Biochemistry and Molecular Biology Seminar Series; Omaha, NE, August 2020.
11. **Mohs AM.** Development of Molecular Probes for Pancreatic and GI Cancer Imaging. Gastrointestinal Cancer Program, Buffett Cancer Center; Omaha, NE, May 2019.
12. **Mohs AM.** Fluorescence-Guided Intraoperative Imaging for Surgical Oncology. Eppley Institute Seminar Series; Omaha, NE, December 2018.
13. **Mohs AM.** Image-Guidance in Surgical Oncology: Hyaluronic Acid Formulations of Near Infrared Fluorophores. Surgery Research Forum; Omaha, NE, September 2018.
14. **Mohs AM.** Multimodal contrast agents for integrated preoperative and intraoperative imaging of pancreatic cancer. Pancreatic SPORE External Advisory Board Meeting; Omaha, NE, November 2017.
15. **Mohs AM.** The versatility of hyaluronic acid as a therapeutic and imaging agent delivery vehicle. Cancer Genes & Molecular Regulation Program (CGMRP), Buffett Cancer Center; Omaha, NE, September 2017.
16. **Mohs AM.** Nanoparticle formulations of Orlistat for treatment of chemoresistant cancer: an update. COBRE External Advisory Board Meeting; Omaha, NE, July 2017.
17. **Mohs AM.** Nanoparticle-based detection technology. Air Force Surgeon General Acquisition Staff; Omaha, NE, July 2017
18. **Mohs AM.** Applications of modified polysaccharides: Experiences in intraoperative imaging and drug discovery, Biochemistry and Molecular Biology Seminar Series, UNMC; Omaha, NE, February 2017.
19. **Mohs AM.** Multimodality contrast agent development: Potential for pancreatic cancer. UNMC Pancreatic SPORE Meeting; Omaha, NE, August 2016.
20. **Mohs AM.** Image-guided surgery: Investigations at the interface of science, medicine, and engineering. MD-PhD Scholars Program Invited Seminar; Omaha, NE, June 2016.
21. **Mohs AM.** Nanoparticle formulations of Orlistat for treatment of chemoresistant cancer. COBRE Retreat; Nebraska City, NE, June 2016.

22. **Mohs AM.** Surgical Guidance Using Near Infrared Fluorescence; Invited Seminar; Genitourinary Oncology Focus Group, University of Nebraska Medical Center; Omaha, NE, April 2016.
23. **Mohs AM.** Nanoparticle Formulations of near infrared dyes for image-guided surgery. Surgery Research Forum, Omaha, NE, March 2016.

COMMUNITY SERVICE/OUTREACH

- 2024 Volunteer, Nebraska HOSA-Future Health Professions – Invited Speaker, Elkhorn South High School, Elkhorn, NE
- 2023 Volunteer, Central City High School – Science Project Advising – Central City, NE
- 2022 Volunteer, Christian Outreach Program – Elkhorn, Elkhorn, NE
- 2018 Marshal, Pinnacle Bank Championship, Golf Course at Indian Creek, Elkhorn, NE
- 2012 Science fair evaluator, Sherwood Forest Elementary, Winston-Salem, NC

PUBLICATIONS

A) Published Journal Articles

1. Laliwala A, Pant A, Svechkarev D*, Sadykov MR*, **Mohs AM***. Paper-based sensors: A state-of-the-art platform for antibiotic-resistant bacterial species identification. *npj Biosensing*, Accepted Nov. 22, 2024. *co-corresponding authors.
2. Jaiswal S, Cox KE, Amirfakhri S, Saleh ADP, Kobayashi L, Lwin TM, Talib S, Aithal A, Mallya K, Jain M, **Mohs AM**, Hoffman RM, Batra SK, Bouvet M. Targeting Human Pancreatic Cancer with a Fluorophore-conjugated Mucin 4 (MUC4) Antibody: Initial Characterization in Orthotopic Cell Line Mouse Models. *J. Clin. Med.* **2024**; 13(20):6211. PMID: 39458160
3. Muilenburg KM, Ehrhorn EG, Olson MT, Isder CC, Klute KA, Talmon GA, Carlson MA, Ly QP, **Mohs AM**. MUC16 retention after neoadjuvant chemotherapy in pancreatic ductal adenocarcinoma. *Cancers*. **2024**; 16(20):3439. PMID: 39456534
4. Pant A, Laliwala A, Holstein SA, **Mohs AM**. Recent Advances in Targeted Drug Delivery Systems for Multiple Myeloma. *J Control Release*. **2024**; 376:215-230. PMID: 39384153
5. Laliwala A*, Gupta R*, Svechkarev D, Bayles KW, Sadykov MR*, **Mohs AM***. Identification of antibiotic-resistant *Staphylococcus aureus* strains using a paper-based ratiometric sensor array. *Microchemical J.* **2024**; 206:111395. <https://doi.org/10.1016/j.microc.2024.111395> *Denotes equal contribution; *co-corresponding authors.
6. Ehrhorn EG, Lovell P, Svechkarev D, Romanova S, **Mohs AM**. Optimizing the performance of silica nanoparticles functionalized with a near-infrared fluorescent dye for bioimaging applications. *Nanotechnology*. **2024**; 35:305605. PMID: 38631329
7. Soucek JJ*, Laliwala A*, Houser L, Muraskin L, Vu Q, **Mohs AM**. Fatty Acid Synthase Inhibitors Enhance Microtubule-Stabilizing and Microtubule-Destabilizing Drugs in Taxane-Resistant Prostate Cancer Cells. Second revision submitted to *ACS Pharmacol Transl Sci*. **2023**;6(12):1859-1869. *Denotes equal contribution. PMID: 38093839

8. Turner MA, Cox KE, Neel N, Amirfakhri S, Nishino H, Clary BM, Hosseini M, Natarajan G, Mallya K, **Mohs AM**, Hoffman RM, Batra SK, Bouvet M. Highly selective targeting of pancreatic cancer in the liver with a near-infrared anti-MUC5AC probe in a PDOX mouse model: A proof-of-concept study. *J Pers Med*. **2023**; 13(5):857. PMID: 37241027
9. Muilenburg KM, Isder CC, Radhakrishnan P, Batra SK, Ly QP, Carlson MA, Bouvet M, Hollingsworth MA, **Mohs AM**. Mucins as contrast agent targets for fluorescence-guided surgery of pancreatic cancer. *Cancer Lett*. **2023**; 561:216150. PMID: 36997106
10. Chhonker YS, Wojtynek NE, Agrawal P, **Mohs AM**, Murry DJ. A simple and sensitive LC-MS/MS for quantitation of ICG in rat plasma: application to a pre-clinical pharmacokinetic study. *Separations*. **2023**; 10, 66. <https://doi.org/10.3390/separations10020066>.
11. Olson MT, Agular EN Brooks CL, Isder CC, Muilenburg KM, Carlson MA, Talmon GA, Ly QP, Hollingsworth MA, **Mohs AM**. Preclinical evaluation of a humanized, near infrared fluorescent antibody for fluorescence-guided surgery of MUC16-expressing pancreatic cancer. *Mol Pharm*. **2022**; 19(10):3586-3599. PMID: 35640060
12. Laliwala A, Svechkarev D, Sadykov MR, Endres J, Bayles KW, **Mohs AM**. Simpler procedure and improved performance for pathogenic bacteria analysis with a paper-based ratiometric fluorescent sensor array. *Anal Chem*. **2022**; 94(5):2615-2624. PMID: 35073053
13. Shi W, Fang F, Kong Y, Greer SE, Kuss M, Liu B, Xue W, Jiang X, Lovell P, **Mohs AM**, Dudley AT, Li T, Duan B. Dynamic hyaluronic acid hydrogel with covalent linked gelatin as an anti-oxidative bioink for cartilage tissue engineering. *Biofabrication*. **2021**; 14(1): doi: 10.1088/1758-5090/ac42de. PMID: 34905737
14. Ahmad R, Kumar B, Tamang RL, Xu W, Talmon GA, **Mohs AM**, Dhawan P, Singh AB. Colonoscopy-based intramucosal transplantation of cancer cells for mouse modeling of colon cancer and lung metastasis. *Biotechniques*. **2021**;71(3):456. PMID: 34392706
15. Bhattacharya D, Bapat A, Svechkarev D, **Mohs AM**. Water-soluble blue fluorescent non-conjugated polymer dots from hyaluronic acid and hydrophobic amino acids. *ACS Omega*. **2021**;6(28):17890-17901. PMID: 34308024; corrected PMID: 34693181
16. Sarkar S, Graham-Gurysh E, MacNeill C, Kelkar SS, McCarthy B, **Mohs A**. Levi-Polyachenko N. Variable Molecular Weight Nanoparticles for Near Infra-Red Fluorescence Imaging and Photothermal Ablation. *ACS Appl Polym Mater*. **2020**;2(10):4162-4170.
17. Poelaert BJ, Romanova S, Knoche SM, Olson MT, Sliker BH, Smits K, Dickey BL, Moffitt-Holida A, Goetz BT, Khan N, Smith L, Band H, **Mohs AM**, Coulter DW, Bronich TK, Solheim J. Nanoformulation of CCL21 Greatly Increases Its Effectiveness as an Immunotherapy for Neuroblastoma. *J Control Release*. **2020**;327:266-283. PMID: 32711026
18. Olson MT, Wojtynek NE, Talmon GA, Caffrey TC, Radhakrishnan P, Ly QP, Hollingsworth MA, **Mohs AM**. Development of a MUC16-targeted near infrared fluorescent antibody conjugate for intraoperative imaging of pancreatic cancer. *Mol Cancer Ther*. **2020**;19(8):1670-1681. PMID: 32404409

19. Bhattacharya DS, Svechkarev D, Bapat A, Patil P, Hollingsworth MA, **Mohs AM**. Sulfation modulates the targeting properties of hyaluronic acid to P-selectin and CD44. *ACS Biomater Sci Eng*. **2020**; 6(6):3585-3598. PMID: 32617404
20. Dereka B, Svechkarev D, Rosspeintner A, Aster A, Lunzer M, Liska R, **Mohs AM**, Vauthey E. Solvent tuning of photochemistry upon excited-state symmetry breaking. *Nat Commun*, **2020**; 11(1):1925. PMID: 32317631
21. Wojtynek NE, **Mohs AM**. Image-guided tumor surgery: the emerging role of nanotechnology. *WIREs Nanomed Nanobiotechnol*. **2020**; 12:e1624. PMID: 32162485
22. Qi B, Crawford AJ, Wojtynek NE, Talmon G, Ly QP, Hollingsworth MA, **Mohs AM**. Tuning hyaluronic acid for delivery to pancreatic cancer for optimized intraoperative imaging. *Theranostics*. **2020**; 10(8):3413-3429. PMID: 32206099
23. Svechkarev D*, Sadykov MR, Houser L, Bayles KW, **Mohs AM***. Fluorescent sensor arrays can predict and quantify the compositions of multicomponent bacterial samples. *Front. Chem*. **2020**; 7:916. DOI: 10.3389/fchem.2019.00916. PMID: 32010667 *co-corresponding author
24. Mukadam IZ, Machhi J, Herskovitz J, Hasan M, Oleynikov MD, Blomberg WR, Svechkarev D, **Mohs AM**, Zhou Y, Dash Prasanta, McMillan J, Garrison J, Gendelman HE, Bhavesh KD. Rilpivirine-associated aggregation-induced emission enables cell-based nanoparticle tracking. *Biomaterials*. **2020**; 231:119669. PMID: 31865227
25. Wojtynek NE, Olson MT, Bielecki TA, An W, Bhat AM, Band H, Lauer SR, Silva-Lopez E, **Mohs AM**. Nanoparticle formulation of indocyanine green improves image-guided surgery in a murine model of breast cancer. *Mol Imaging Biol*. **2020**; 22:891-903. PMID 31820350
26. Bhuiyan NH, Varney ML, Bhattacharya DS, Payne WM, **Mohs AM**, Holstein SA, Wiemer D. ω -hydroxy isoprenoid bisphosphonates as linkable GGDPS inhibitors. *Bioorg Med Chem Lett*. **2019**; 29(19):126633. PMID: 31474482
27. Olson MT, Ly QP, **Mohs AM**. Fluorescence Image-Guided Surgery in Surgical Oncology. *Mol Imaging Biol*. **2019**; 21:200-218. PMID: 29942988
28. Sutpathy M, Wang L, Zelinski R, Qian W, Wang YA, Kuang M, **Mohs AM**, Kairdolf BA, Capala J, Lipowska M, Nie S, Mao H, Yang L. Targeted Drug Delivery and Image-guided Cancer Therapy Using Theranostic Nanoparticles for Effective Treatment of Heterogeneous Ovarian Cancer. *Theranostics*. **2019**; 9(3):778-795. PMID: 30809308
29. Soucek JJ, Wojtynek NE, Payne WM, Holmes MB, Dutta S, Qi B, Datta K, LaGrange CA, **Mohs AM**. Optimized hyaluronic acid formulation of near infrared fluorophores for surgical detection of a prostate tumor xenograft. *Acta Biomater*. **2018**; 75:323-333. PMID: 29890268
30. Svechkarev D, Kyrychenko A, Payne WM, **Mohs AM**. Probing the self-assembly dynamics and internal structure of amphiphilic hyaluronic acid conjugates by fluorescence spectroscopy and molecular dynamics simulations. *Soft Matter* **2018**; 14(23):4762-4771. PMID: 29799600

31. Svechkarev D, Sadykov MR, Bayles KW, **Mohs AM**. A ratiometric fluorescent sensor array as a versatile tool for bacterial pathogen identification and analysis. *ACS Sens.* **2018**; 3(3):700-708. PMID: 29504753
32. Svechkarev D, **Mohs AM**. Organic fluorescent dye-based nanomaterials: Advances in the rational design for imaging and sensing applications. *Curr Med Chem.* **2018**; 26(21):4042-4064. PMID: 29484973
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B) Chapters in Books

1. Kelkar SS, **Mohs AM**. Translational Imaging for Regenerative Medicine. In *Translational Regenerative Medicine*; Atala A, Allickson J, Eds.; Academic Press: Elsevier: Waltham, MA, 2015; pp 257-265.

C) Media Features

Related to manuscript Laliwala, et al. *Anal Chem* 2022;94(5):2615-2624. PMID: 35073053.

[Phys.Org, April 29, 2022](#)

[NIBIB Science Highlights, April 28, 2022](#)

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Related to manuscript Mohs AM, et al. *Anal Chem*. 2010;82(21):9058–65. PMID: 20925393.

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[Optics & Photonics News, January 1, 2011](#)

Related to manuscript Mohs AM, et al. *IEEE Trans Biomed Eng*. 2015;62(5):1416–1424. PMID: 25585410.

IEEE Trans Biomed Eng [Cover](#) and [Feature](#) article.

[ScienceDaily, January 20, 2015.](#)

[Photonic Online, January 20, 2015.](#)

[WSJS Mohs Radio Interview.](#)

D) Abstracts and Preliminary Communications (Presenter underlined)

1. Pant A, Holstein SA, **Mohs AM**. Combination therapy of Geranylgeranyl Diphosphate Synthase Inhibitor and Fatty Acid Synthase Inhibitor in Multiple Myeloma. American Association of Pharmaceutical Scientists PharmSci 360, Orlando, FL, October 2023. *Poster*.
2. Muilenburg KM, Ehrhorn EG, Olson MT, Isder CC, Klute KA, Talmon GA, Carlson MA, Ly QP, **Mohs AM**. MUC16 expression in pancreatic ductal adenocarcinoma patient samples after neoadjuvant chemotherapy. American Association for Cancer Research (AACR) Special Conference on Pancreatic Cancer; Boston, MA, September 2023. *Poster*.
3. Laliwala A, Svechkarev D, Sadykov M, Endres J, Bayles K, **Mohs AM**. Paper-based Fluorescent Sensors: A Point-of-Care Tool for Identification of Antimicrobial Resistant Bacterial Species. University of Nebraska Medical Center College of Pharmacy Day, Omaha, NE, May 2023. Podium Presentation, *selected best presenter award*.
4. Pant A, Holstein SA, **Mohs AM**. Combination Therapy Targeting the Isoprenoid Biosynthetic Pathway and Fatty Acid Synthesis Pathway in Multiple Myeloma. 2023 College of Pharmacy Research Day, University of Nebraska Medical Center, Omaha, Nebraska. May 2023. *Podium Presentation*.
5. Ehrhorn EG, Lovell P, Svechkarev D, Romanova S, **Mohs AM**. Characterization and Evaluation of Fluorescent Silica Nanoparticles. COP Research Day. Omaha, NE, May 2023. *Podium Presentation*.

6. Pant A, Holstein SA, **Mohs AM**. Combination therapy of Geranylgeranyl Diphosphate Synthase Inhibitor and Fatty Acid Synthase Inhibitor in Multiple Myeloma. Midwest Student Biomedical Research Forum, Creighton University, Omaha, Nebraska. March 2023. *Poster*.
7. Muilenburg KM, Olson MT, Isder CC, Ehrhorn EG, Grandgenett GA, Talmon GA, Ly QP, **Mohs AM**. Retention of MUC16 expression in PDAC patient samples after chemotherapy. Midwest Student Biomedical Research Forum (MSBRF); Omaha, NE, March 2023. *Podium presentation*.
8. Pant A, Holstein SA, **Mohs AM**. Combination therapy of Geranylgeranyl Diphosphate Synthase Inhibitor and Fatty Acid Synthase Inhibitor in Multiple Myeloma. Pharmaceutical Technologies in Drug Discover & Drug Development Workshop, University of Nebraska Medical Center, Omaha NE, March 2023. *Poster*.
9. Zhang H, Ganguly T, Harris R, Davis RA, Hausner SH, **Mohs AM**, Sutcliffe JL. Modification of Hyaluronic Acid for CD44 and Integrin $\alpha_v\beta_6$ Dual Targeting and Radiolabeling. World Molecular Imaging Congress; Miami, FL, September 2022. *Poster*.
10. Laliwala A, Svechkarev D, Sadykov M, Lama R, Singh A, Bayles K, **Mohs AM**. Paper-based technology for diagnosis of infectious diseases. The Globalization of Pharmaceuticals Education Network (GPEN); Minneapolis, MN, October 2022. *Poster, selected best poster award*.
11. Laliwala A, Svechkarev D, Sadykov M, Lama R, Singh A, Bayles K, **Mohs AM**. Paper-based fluorophores and machine learning: A versatile tool for accurate identification of pathogenic bacteria. AAPS PharmSci360; Boston, MA, October 2022. *Poster, selected machine learning special session*.
12. Svechkarev D, Laliwala A, Sadykov MR, Endres J, Bayles KW, **Mohs AM**. Bacterial pathogens identification with multichannel fluorescent sensor arrays. Gordon Research Conference on Bioanalytical Sensors; Newport, RI, June 2022. *Poster*.
13. Laliwala A*, Svechkarev D, Sadykov M, Endres J, Bayles K, Mohs AM. Paper-based ratiometric fluorophores for rapid, economical, and accurate identification of bacterial species. Pharmaceuticals Graduate Student Research Meeting (PGSRM); Omaha, Nebraska, June 2022, *Podium Presentation. *Second place for best oral talk*
14. Laliwala A, Svechkarev D, Sadykov M, Endres J, Bayles K, Mohs AM. Paper-based fluorescent sensor array and machine learning for identification of bacteria. Midwest Student Biomedical Research Forum; Omaha, Nebraska, March 2022. *Podium Presentation*.
15. Muilenburg KM, Olson MT, Isder CC, Talmon GA, Ly QP, **Mohs AM**. Evaluating MUC16 antigen stability after chemotherapy treatment. Midwest Student Biomedical Research Forum; Omaha, Nebraska, March 2022. *Podium Presentation*.
16. Muilenburg KM, Olson MT, Isder CC, Ehrhorn EG, Talmon GA, Ly QP, **Mohs AM**. Investigating MUC16 expression after chemotherapy treatment. Pharmaceuticals Graduate Students Research Meeting; Omaha, Nebraska, June 2022. *Podium Presentation*.
17. Svechkarev D, Sadykov MR, Houser LJ, Bayles KW, **Mohs AM**. Identification and Quantification of Bacterial Pathogens with a Ratiometric Fluorescent Sensor Array. International Chemical Congress

of Pacific Basin Societies (Pacifichem 2021), Honolulu, Hawaii (virtual due to COVID), December 2021. *Podium Presentation*.

18. Bapat A*, Bhattacharya D, **Mohs AM**. Synthesis and *in vitro* evaluation of novel indocyanine green loaded hyaluronic acid nanoparticles for bioimaging of pancreatic cancer. AAPS PharmSci360; Philadelphia, Pennsylvania (Virtual due to COVID), October 2021. *Poster*. ***AAiPS (American Association of Indian Pharmaceutical Scientists) Graduate Student Award**.
19. Olson MT*, Brooks C, Isder C, Muilenburg K, Talmon, G, Ly Q, Hollingsworth MA, **Mohs AM**. Investigating the Translational Potential of a Humanized MUC16-Targeted Antibody Conjugate for Fluorescence-Guided Surgery of Pancreatic Cancer. World Molecular Imaging Congress; Miami, FL (Virtual due to COVID), October 2021. *Podium Presentation*. ***Scholar Award by Women in Molecular Imaging Network**.
20. Laliwala A, Svechkarev D, Sadykov M, Lama R, Singh AB, Bayles KW, **Mohs AM**. Paper-Based Ratiometric Fluorescent Sensor Array: A Sensitive Tool for Identification of Bacteria. Biomedical Engineering Society Annual Meeting; Orlando, FL (Virtual due to COVID-19), October 2021. *Poster*.
21. Svechkarev D, Laliwala A, Sadykov MR, Bayles KW, **Mohs AM**. Environment-sensitive fluorescent dye-based sensor array for identification of bacterial pathogens. International Conference on Photochemistry; Geneva, Switzerland (virtual), July 2021. *Podium Presentation*.
22. Bapat A, Bhattacharya DS, **Mohs AM**. Synthesis and in vitro evaluation of novel indocyanine green loaded hyaluronic acid nanoparticles for bioimaging of pancreatic cancer. 2020 AAPS PharmSci 360; Virtual, October 2020. *Poster*.
23. Bapat A, Bhattacharya DS, **Mohs AM**. Synthesis and in vitro development of novel hydrophobically tuned fluorescent nanoparticles for bioimaging of pancreatic cancer. 51st Annual Midwest Student Biomedical Research Forum; Omaha, Nebraska, February 2020. *Podium Presentation*.
24. Liu X, Lovell P, Cruz DR, Houser L, LaGrange CA, **Mohs AM**. Novel Intra-Operative Peripheral Nerve Agent for Fluorescence Guided Imaging. Photonics West BIOS Conference; San Francisco, CA, February 2020. *Poster*.
25. Olson MT*, Wojtynek NE, Caffrey T, Radhakrishnan P, Ly Q, Talmon G, Hollingsworth MA, **Mohs AM**. Development of a MUC16 Targeted Antibody Probe for Intraoperative Imaging of Pancreatic Cancer. World Molecular Imaging Congress; Montreal, Canada, September 2019. *Podium Presentation*. ***Scholar Award by Women in Molecular Imaging Network**.
26. Wojtynek NE, Holmes MB, Olson MT, Baher F, Silva E, **Mohs AM**. Efficacy of indocyanine green-loaded hyaluronic acid nanoparticles for the surgical resection of orthotopic breast tumors. Photonics West BIOS Conference; San Francisco, CA, February 2019. *Poster*.
27. Qi B*, Crawford AJ, Wojtynek NE, Ly QP, Hollingsworth MA, **Mohs AM**. Intraoperative Pancreatic Cancer Imaging using Hyaluronic Acid Conjugates Tuned for Minimized Background Signal. World Molecular Imaging Congress; Seattle, WA, September 2018. *Podium Presentation*. ***Scholar Award by Women in Molecular Imaging Network**.

28. Qi B, Crawford AJ, Cohen SM, Ly QP, Hollingsworth HA, **Mohs AM**. Surgical imaging of pancreatic cancer using near infrared fluorescent hyaluronic acid nanomaterials. American Association for Cancer Research Annual Meeting; Chicago, IL, April 2018. *Poster*.
29. Svechkarev D, Kyrychenko A, Payne WM, **Mohs AM**. Self-assembly dynamics and inner morphology of hydrophobically modified hyaluronic acid nanoparticles: towards design of optimized drug nanocarriers. 255th ACS National Meeting and Expo; New Orleans, LA, March 2018. *Podium Presentation*.
30. Svechkarev D, **Mohs AM**. Tunable Fluorescent Organic Nanoparticles for Cancer Imaging Applications. NCI Innovative Molecular Analysis Technologies PI Meeting; Rockville, MD, December 2017. *Poster*.
31. Qi B, Hill TK, Crawford AJ, Wojtynek NE, Hollingsworth MA, **Mohs AM**. Tumor enhancement for fluorescent surgical navigation by near infrared hyaluronic acid conjugates. NanoDDS 2017, Ann Arbor, MI, September 2017. *Poster*.
32. Soucheck JJ, Davis AL, Hill TK, Qi B, Holmes MB, Wojtynek NE, Payne SM, Dutta S, Datta K, LaGrange CA, Singh PK, Kridel SJ, **Mohs AM**. Hyaluronic acid-based nanoparticles for drug delivery and imaging of taxane-resistant prostate cancer. NanoDDS 2017, Ann Arbor, MI, September 2017. *Poster*.
33. Qi B, Crawford AJ, Holmes MB, Wojtynek NE, Soucek JJ, Almeida-Porada G, Hollingsworth MA, **Mohs AM**. Indocyanine green loaded hyaluronan-derived nanoparticles for fluorescence-enhanced surgical imaging of an orthotopic pancreatic cancer model. World Molecular Imaging Congress; Philadelphia, PA, September 2017. *Podium Presentation*.
34. Wojtynek NE, Payne WM, Svechkarev D, Holmes MB, Sajja BA, **Mohs AM**. Multimodal imaging nanoparticle based on hyaluronic acid for integrated preoperative and intraoperative cancer imaging. World Molecular Imaging Congress; Philadelphia, PA, September 2017. *Poster*.
35. Soucek JJ, Wojtynek NE, Holmes MB, Dutta S, Qi B, Datta K, LaGrange CA, **Mohs AM**. Surgical navigation in a prostate tumor xenograft model by tuning the structural properties of near infrared fluorescent hyaluronan-derived nanoparticles. World Molecular Imaging Congress; Philadelphia, PA, September 2017. *Poster*.
36. Svechkarev D, Payne WM, **Mohs AM**. Colloidal stability and spectral properties of carbazole-based fluorescent nanoaggregates. 17th IEEE International Conference on Nanotechnology; Pittsburgh, PA, July 2017. *Poster*.
37. Payne WM, Svechkarev D, Kyrychenko A, **Mohs AM**. Computational models of polymeric nanoparticles for rational design in drug delivery. Gordon Research Conference on Cancer Nanomedicine; Mount Snow, VT, June 2017. *Poster*. ***Selected for Podium Presentation**.
38. Soucek JJ, Davis AL, Hill TK, Holmes MB, Qi B, Singh PK, Kridel SJ, **Mohs AM**. Quantification and mechanism of synergy between orlistat-loaded nanoparticles and taxanes in taxane-resistant prostate cancer cells. 49th Annual Pharmaceuticals Graduate Student Research Meeting (PGSRM); Ann Arbor, MI, June 2017. *Podium Presentation*. ***Third Place Podium Presentation**.
39. Bhattacharya DS, Svechkarev D, Soucek JJ, Hill TK, Taylor M, Natarajan A, **Mohs AM**. Tuning hyaluronic acid binding properties to CD44 using synthetic, in vitro and in silico approaches. 253rd

American Chemical Society National Meeting and Exposition; San Francisco, CA, April 2017. *Poster*.

40. Bhattacharya DS, Soucek JJ, Hill TK, Svehkarev D, Natarajan AM, **Mohs AM**. Altering hyaluronic acid binding properties to CD44 using synthetic, in vitro, and in silico approaches. 48th Annual Midwest Student Biomedical Research Forum; Omaha NE, March 2017. *Podium Presentation*.
41. **Mohs AM**. Surgical guidance using hyaluronic acid derived contrast agents combined with an integrated widefield and spectroscopy imaging system. 2016 NCI Alliance for Nanotechnology in Cancer Principal Investigators Meeting; Bethesda, MD, November 2016. *Poster*.
42. Payne WM, Svehkarev D, Boska MD, **Mohs AM**. Multimodal contrast agents for integrated preoperative and intraoperative imaging of cancer. American Chemical Society Midwest Regional Meeting, Special Section on Nanomedicine; Manhattan, KS, October 2016. *Podium Presentation*.
43. Hill TK, Kelkar SS, Soucek JJ, Payne WM, Marini FC, **Mohs AM**. Near infrared hyaluronan-derived nanoparticles for fluorescence image-guided tumor surgery. Imaging in 2020; Jackson Hole, WY, September 2016. *Poster*.
44. Soucek JJ, Hill TK, Davis AL, Qi B, Holmes MB, Singh PK, Kridel SJ, **Mohs AM**. Combination treatment with Nano-Orlistat and taxanes is synergistic and enhances microtubule stability in taxane-resistant prostate cancer cells. 14th International Nanomedicine & Drug Delivery Symposium (NanoDDS); Baltimore, MD, September 2016. *Poster*. ***Selected for "Rapid Fire Presentation" and awarded Society for Biomaterials-Drug Delivery Special Interest Group Research Award**
45. Payne WM, Svehkarev D, Boska MD, **Mohs AM**. Optimization of hyaluronic-acid based nanoparticles for magnetic resonance imaging. UNMC Biopharmaceutical Research Symposium; Omaha, NE, September 2016. *Poster*.
46. Bhattacharya DS, Soucek JJ, Hill TK, Svehkarev D, Natarajan AM, **Mohs AM**. Re-engineering Hyaluronic acid targetability using synthetic, in vitro and molecular modeling approaches. UNMC 3rd Biopharmaceutical Research Development Symposium; Omaha, NE, September 2016. *Poster*.
47. Soucek JJ, Hill TK, Davis AL, Qi B, Holmes MB, Singh PK, Kridel SJ, **Mohs AM**. Combination treatment with Nano-Orlistat and taxanes is synergistic and enhances microtubule stability in taxane-resistant prostate cancer cells. UNMC Biopharmaceutical Research & Development Symposium, September 2016, Omaha, NE. *Podium Presentation*. ***Excellence in Podium Presentation**.
48. Payne WM, Svehkarev DA, Boska MD, **Mohs AM**. Multimodal contrast agents for integrated preoperative and intraoperative cancer imaging. AACR Engineering and Physical Sciences in Oncology; Boston, MA, June 2016. *Poster*.
49. Soucek JJ, Hill TK, Davis L, Qi B, Singh PK, Kridel SJ, **Mohs AM**. Free and nanoparticle-formulated orlistat synergize with taxanes in taxane-resistant prostate cancer. 48th Annual Pharmaceutics Graduate Student Research Meeting; Kansas City, KS, June 2016. *Poster*.
50. Hill TK, Kelkar SS, Soucek JJ, Payne WM, Marini FC, **Mohs AM**. Hyaluronic acid nanoparticles for image-guided surgery improve contrast in two triple negative breast cancer models. 7th Annual Sino-U.S. Joint Research Forum; Omaha, NE, May 2016. *Poster*.

51. Souчек JJ, Hill TK, Davis AL, Qi B, Singh PK, Kridel SJ, **Mohs AM**. Nano-orlistat synergizes with taxanes in taxane-resistant prostate cancer cells. 7th Annual Sino-U.S. Joint Research Symposium, May 2016, UNMC, Omaha, NE. *Poster*. ***First Place Poster**
52. Hill TK, Abdulahad A, Kelkar SS, Marini FC, Long TE, Provenzale JM, **Mohs AM**. Indocyanine green-loaded nanoparticles improve tumor contrast for image-guided surgery. NanoDDS; Seattle, WA, September 2015. *Poster*.
53. Hill TK, Davis AL, Wheeler FB, Kelkar SS, Freund EC, Lowther WT, Kridel SJ, **Mohs AM**. Nanoparticle formulation of orlistat improves drug stability and cytotoxicity against human cancer cell lines. NanoDDS; Seattle, WA, September 2015. *Poster*.
54. Payne WM, Kelkar S, Hall AR, **Mohs AM**. Detection of Liver Organoid Biomarkers by SERS-Immunolabeled Gold Nanoparticles. Virginia Tech-Wake Forest School of Biomedical Engineering and Sciences Research Symposium; Blacksburg, VA, May 2015. *Oral Presentation* ***Awarded 3rd place presentation**.
55. Kelkar SS, Hill TK, **Mohs AM**. Hyaluronic Acid Derived Fluorescent Imaging Agents with Tunable NIR Emission. Biomedical Engineering Society Annual Meeting; San Antonio, TX, October 2014. *Poster*.
56. Hill TK, Wheeler FB, Davis AL, Kelkar SS, Kridel SE, **Mohs AM**. Development of a Nanoparticle Formulation of Orlistat: Solubility, Stability, and Cytotoxicity. Biomedical Engineering Society Annual Meeting; San Antonio, TX, October 2014. *Poster*.
57. Kelkar SS, Hill TK, Gao X, **Mohs AM**. CD-44 Targeted Biodegradable Nanoparticles for Image-Guided Surgery. NanoDDS, 12th International Nanomedicine & Drug Delivery Symposium, Chapel Hill, NC, October 2014. *Poster*.
58. **Mohs AM**, Hill TK, Long TE, Marini FC, Levine EA. Targeted Near Infrared Fluorescent Nanoparticles for Image-Guided Tumor Surgery, Drug Carriers in Medicine and Biology Gordon Research Conference; Waterville Valley, NH, August 2014. *Poster*.
59. **Mohs AM**, Hill TK, Kelkar S, Marini FC, Levine EA. Hyaluronic acid derived fluorescent nanoparticles for image-guided tumor surgery, 41st Controlled Release Society Annual Meeting & Exposition; Chicago, IL, July 2014. *Poster*.
60. Hill TK, Kelkar S, Marini FC, Levine EA, Provenzale JM, **Mohs AM**. Synthesis, Characterization, and Pre-Clinical Evaluation of Hyaluronan Based Nanoparticles for Image-Guided Surgery. Duke University Fitzpatrick Institute for Photonics Annual Symposium, Durham, NC, March 2014. *Poster*.
61. **Mohs AM**, Raghavan S, Gilmont RR, Somara S, Marini FC, Bitar KN. Near infrared labeling and detection of enteric nerve cells: tracking differentiating neural progenitor cells and tissue innervation, Tissue Engineering and Regenerative Medicine International Society - Americas; Atlanta, GA, November 2013. *Poster*.
62. **Mohs AM**, Zarifpour M, Kelkar S, Kahlson MA, Marini FC, Christ GJ. Magnetic Resonance Imaging Characterization of Regenerating Bladder in a Murine Subtotal Cystectomy Model, Tissue Engineering and Regenerative Medicine International Society - Americas; Atlanta, GA, November 2013. *Poster*.

63. Rowe B, **Mohs AM**, Christ GJ, Harrison BS. Functional Recovery and Tissue Salvage in Ischemic Injury Using Non-Invasive MRI as a Tool to Quantify the Extent of Tissue Damage in a Rodent Ischemic Injury Model. North Carolina Tissue Engineering and Regenerative Medicine Society Annual Meeting; Winston-Salem, NC, October 2013. *Poster*.
64. Hill TK, Kelkar S, Marini FC, **Mohs AM**. Near Infrared Fluorescent Polysaccharide-Based Nanoparticles for Image-Guided Tumor Surgery. NCI Alliance for Nanotechnology in Cancer Annual Principal Investigators Meeting; Bethesda, MD, September 2013. *Podium Presentation*.
65. Hill TK, Marini FC, **Mohs AM**. Near infrared image-guided tumor removal: epidermal growth factor receptor as a target, Biomedical Engineering Society Annual Meeting; Atlanta, GA, October 2012. *Podium Presentation*.
66. **Mohs AM**, Wang Y, Mancini MC, Provenzale JM, Singhal S, Nie S. Intraoperative detection of fluorescent nanoparticles using a handheld spectroscopic pen device to guide tumor resection, AACR Special Conference on Nano in Cancer: Linking Chemistry, Biology, and Clinical Applications In Vivo; Miami, FL, January 2011. *Poster*.
67. **Mohs AM**, Singhal S, Nie S. Nanotechnology for minimally invasive cancer detection and resection, Kick-off Meeting - NCI Alliance for Nanotechnology in Cancer; Bethesda, MD, November 2010. *Poster*.
68. **Mohs AM**, Smith AM, Mancini MC, Provenzale JM, Nie S. The unusual chemistry and cellular toxicity of cadmium-free quantum dots, Fitzpatrick Institute for Photonics Annual Meeting; Duke University, Durham, NC, October 2010. *Poster*.
69. **Mohs AM**, Smith AM, Mancini MC, Wen MM, Nie S. Evaluating the Role of Chemical Composition and Colloidal Stability on Quantum Dot Cytotoxicity, NCI Alliance for Nanotechnology in Cancer Investigators Meeting; Chicago, IL, September 2008. *Poster*.
70. **Mohs AM**, Smith AM, Mancini MC, Nie S. Investigation into the toxicology of strain-tunable quantum dots, NCI Alliance for Nanotechnology in Cancer Investigators Meeting; Chapel Hill, NC, October 2007. *Poster*.
71. Smith AM, **Mohs AM**, Nie S. Strain-tunable, near infrared quantum dots for in vivo molecular imaging, Society for Molecular Imaging; Providence, RI, September 2007. *Poster*.
72. **Mohs AM**, Zong Y, Parker DL, Lu ZR. PEG-*g*-poly(GdDTPA-co-L-cystine): effect of PEG chain length on in vivo contrast enhancement in MRI. MR Angio Club - The 17th Annual International Conference on Magnetic Resonance Angiography; Beijing, China, September 2005. *Poster*.
73. **Mohs AM**, Zong Y, Feng Y, Guo J, Parker DL, Lu ZR. PEG-*g*-(GdDTPA-co-L-cystine): novel biodegradable macromolecular contrast agents for MRI, Controlled Release Society Annual Meeting, 32nd Annual Meeting & Exposition of the Controlled Release Society; Miami, FL, June 2005. *Poster*.
74. Zong Y, Guo J, Feng H, Sun Y, **Mohs AM**, Parker DL, Lu ZR. (Gd-DTPA)-cystine diethylester copolymers (GDCEP) as a biodegradable contrast agent for MR imaging, Controlled Release Society Symposium; Salt Lake City, UT, February 2005. *Poster*.
75. Zong Y, Wang X, **Mohs AM**, Goodrich KC, Lu ZR. MR imaging of a biodegradable polymeric contrast agent, cystine-DTPA-Gd complex. Controlled Release Society; Honolulu, HI, June 2004. *Poster*.
76. **Mohs AM**, Wang X, Zong Y, Goodrich KC, Parker DL, Lu ZR. Gd(III)DTPA-L-cystine-PEG copolymers: a biodegradable macromolecular agent for blood pool MR imaging, International Society of

Magnetic Resonance in Medicine - 12th Scientific Meeting and Exposition; Kyoto, Japan, May 2004. *Poster*.

77. Zong Y, **Mohs AM**, Goodrich KC, Wang X, Parker DL, Lu ZR. Synthesis of Gd(III) DTPA-cystine a Gd(III) DTPA-cystine ethyl ester copolymers for MRI, Imaging in 2020; Jackson Hole, WY, September 2003. *Poster*.
78. Tekavek TN, Brueske CJ, **Mohs AM**, Westman AL, Schaller CP. Synthesis of molybdenum complexes of DACO' and pzpy'. 223rd ACS National Meeting; Orlando, FL, April 2002. *Poster*.

E) Published Continuing Education Materials

None.

TEACHING ACTIVITIES

A. Didactic Coursework

University of Nebraska Medical Center and UN Omaha (Sept. 2015 – Current)

Course (Role):	Essentials of Drug Discovery and Development (UNO-UNMC Joint BS Pharm. Sci.) PHSI 3210/PHSC 802 (Instructor)
Duties:	Prepared and presented a lecture that introduces students to the concepts of drug formulation.
Lectures Given:	1 annually since 2023
Course (Role):	Introduction to Foundations and Career Paths in Pharmaceutical Sciences (UNO-UNMC Joint BS Pharm. Sci.), PHSI 1010 (Instructor & Coordinator)
Duties:	Organized lectures that introduces the pharmaceutical sciences and discusses career paths in research, practice, and administration. This is the introductory course of the new BS in Pharmaceutical Sciences at UNO.
Lectures Given:	2 annually since 2022
Course (Role):	Pharmaceutical Sciences I, PHSC 570 (Instructor)
Duties:	Prepared and presented lectures related to interfaces, colloids, dispersions, micromeritics, and oral delivery formulations
Lectures Given:	9-14 annually since 2017
Course (Role):	Pharmaceutical Sciences II, PHSC 670 (Instructor & Coordinator)
Duties:	Prepared and presented lectures related to zero and first-order rate equations, compartment modeling, and physiologically-based pharmacokinetics.
Lectures Given:	9 annually since 2015
Course (Role):	Pharmaceutical Sciences III, PHSC 672 (Instructor & Coordinator (2018))
Duties:	Prepared and presented lectures related to the concepts and modeling of pharmacokinetic-pharmacodynamic relationships, modified release pharmacokinetics, nonlinear pharmacokinetics, drug-drug interaction pharmacokinetic.
Lectures Given:	9 annually since 2016

Course (Role):	Pharmaceutical Science Applications in Pharmacy, PHSC 691 (Instructor)
Duties:	Prepared lecture on how pharmaceutical sciences is used in fluorescence-guided surgery
Lectures Given:	1 annually since 2015
Course (Role):	Nanoimaging and Bioimaging, PHSC 848 (Instructor)
Duties:	Prepared and gave lectures related fundamentals contrast agents, clinical and research applications of imaging, and key considerations in experiment design
Lectures Given	3 annually since 2022
Course (Role):	Deliv. and Biocompat. of Prot. and Nucl. Acid Drugs, PHSC 904 (Instructor)
Duties:	Prepared and gave lectures on the techniques and applications of preclinical imaging modalities and their use in drug development
Lectures Given:	1 per semester since 2018
Course (Role):	PK and Biopharmaceutics, PHSC 910 (Instructor, Coordinator)
Duties:	Coordinate lectures, exams, project, lecture on compartment and non-compartment PK models and PK-toxicity relationships
Lectures Given:	11 every other year since 2018
Course (Role):	Principles and Methodologies in Cancer Research, CRGP 880 (Instructor)
Duties:	Educate about biomarkers and how they can be used for diagnostic and imaging applications
Lectures given:	1 annually since 2019
Course (Role):	Intensive Training in Translation Cancer Research, CRGP 910 (Instructor)
Duties:	Educate on the concept of image-guided surgery
Lectures given:	1 annually since 2018
Course (Role)	US Healthcare System: An Overview, HSRA 810 (Instructor)
Duties:	Describe the role of pharmacy in healthcare and research
Lectures given:	1 annually since 2023
Course (Role):	Pharmaceuticals Sciences Graduate Program Seminar, PHSC 970 (Co-Coordinator; until Fall 2018)
Duties:	Scheduled seminars and organized the itinerary of invited speakers; maintained student attendance
Non-lecture hours:	80

Wake Forest University Health Sciences (Sept. 2011 – March 2015)

Course (Role):	Quantitate Organ Systems Physiology, BMES 606 (Course Director, Instructor)
Duties:	Arranged schedules to integrate mathematical modeling, simulation, quantitative description of organ physiology and control, and supervise semester project.
Lectures Given:	27 total
Non-lecture hours:	90 total

Course (Role):	Medical Imaging II, BMES 751 (Instructor)
Duties:	Prepared and gave lectures on the chemistry of contrast agents and principles of contrast enhanced magnetic resonance imaging and computed tomography.
Lectures Given:	4 total
Course (Role):	Drug Discovery, Design and Development, CHM 740 (Instructor)
Duties:	Prepared and gave lectures to introduce pharmaceutical sciences to chemistry undergraduate and graduate students, including adsorption, distribution, metabolism, excretion, and controlled release.
Lectures Given:	4 total
Course (Role):	Introduction to Regenerative Medicine, BMES 631 (Instructor)
Duties:	Prepared and gave lecture on drug delivery in tissue engineering and regenerative medicine.
Lectures Given:	1 total
Course (Role):	Engineering Approaches to Treating Cancer, BMES 5984 (Instructor)
Duties:	Prepared and gave a lecture on using nanotechnology for detecting, diagnosing, and treating cancer
Lectures Given:	1 total
Course (Role):	Topics in Cancer Biology, MCB 723 (Instructor)
Duties:	Prepared and gave lecture on cancer imaging.
Lectures Given:	1 total

B. Teaching Related to Undergraduate/Graduate/Postdoctoral/Faculty Scholars

Current Graduate Scholars

Student:	Sumbal Talib – Graduate Student
Program:	Pharmaceutical Sciences (UNMC) Fulbright Scholar
Student:	Ashruti Pant – Graduate Student
Program:	Pharmaceutical Sciences (UNMC)
Student:	Evie Ehrhorn – Graduate Student
Program:	IGPBS (UNMC)

Current/Past Faculty Mentorship

Scholar:	Jingjing Sun, PhD – Tenure Track Assistant Professor
Program:	Pharmaceutical Sciences (UNMC) – NIH COBRE Faculty Mentor
Scholar:	Denis Svehkarev, PhD – Research Assistant Professor
Program:	Pharmaceutical Sciences (UNMC) – Faculty Mentor; current position is tenure-track assistant professor of chemistry at University of Nebraska – Omaha.
Scholar:	Martin Conda-Sheridan, PhD – Tenure Track Assistant Professor

Program: Pharmaceutical Sciences (UNMC) – NIH COBRE Faculty Mentor

Scholar: **Barrett Eichler, PhD – Tenured Professor**
Chemistry (Augustana University (Sioux Falls, SD)) – Mentor, BRIN Faculty Fellow Program

Former Doctoral Students

Student: **Kathryn Muilenburg – Graduate Student**

Program: Pharmaceutical Sciences (UNMC)
2024 COP Research Day, Best Poster

Current: iCURE Postdoctoral Fellow, Dr. Xin Wei Wang, National Cancer Institute, Center for Cancer Research

Student: **Aayushi Laliwala – Graduate Student**

Program: Pharmaceutical Sciences (UNMC)
2021-2022 UNMC Bukey Fellowship
2022 52nd PGSRM 2nd place podium presentation
2022 Pfizer Internship – mRNA nanoparticle development (Boston, MA)

Current: Postdoctoral Fellow, Dr. Agata Exner, Case Western Reserve University (Cleveland, OH)

Student: **Paul Lovell – Graduate Student**

Program: Pharmaceutical Sciences (UNMC)
Current: Associate Scientist, ATCC

Student: **Aishwarya Bapat – Graduate Student**

2020-2021 UNMC Bukey Fellowship
2021 Boehringer Ingelheim Co-op Internship (Ridgefield, CT)
2021 American Association of Indian Pharm. Scientists Award

Program: Pharmaceutical Sciences (UNMC)
Current: Analytical Development Scientist, Ring Therapeutics

Student: **Madeline Olson – Graduate Student**

2018-2020 Cancer Biology Training Grant; Eppley Institute Cancer Biology Training Grant from the National Cancer Institute (T32CA009476)
2021 UNMC Harris Award
2019-2021 UNMC Graduate Studies Assistantship Recipient (1st year declined)
2020 International Student Research Forum
2020 Merck Internship – Imaging Biomarkers (South San Francisco, CA; Remote due to COVID-19)
2020 University of Nebraska Presidential Graduate Fellowship
2021 UNMC Jessen Award

Program: Cancer Research (UNMC)
Current: Clinical Scientist; OncoNano Medicine (Southlake, TX)

Student: **William Payne – Graduate Student**

2018-2020 PhRMA Foundation Graduate Research Fellowship
2018 DAAD German Studies Research Grant

2017-2018 Blue Waters Graduate Fellowship (6 awarded nationally)
2017 UNMC graduate student of distinction
 Program: Pharmaceutical Sciences (UNMC); MS Biomedical Engineering (WFUHS)
 Current: Co-Founder; Simple Ag Solutions (Omaha, NE)

Student: Deep S. Bhattacharya – Graduate Student
2017-2019 Program of Excellence Assistantship Recipient
2019 GlaxoSmithKline Co-op Internship (Rockville, MD)
 Program: Pharmaceutical Sciences (UNMC)
 Current: Senior Scientist; Pfizer (Chesterfield, MO)

Student: Bowen Qi – Graduate Student
2016-2019 Chinese Scholarship Counsel Fellowship
2018-2020 UNMC Graduate Studies Assistantship Recipient
 Program: Pharmaceutical Sciences (UNMC)
 Current: Postdoctoral Associate; Dr. Don Nguyen at Yale University (New Haven, CT)

Student: Nicholas Wojtynek – Graduate Student
2018-2020 John Borrlson Memorial Scholarship and a Dean for Graduate Studies Stipend Recipient
2019 Takeda Oncology Internship (Boston, MA)
2020 Finalist UNMC Thomas Jefferson Award
 Program: Cancer Research (UNMC)
 Current: Medical Affairs Liaison; Karyopharm Therapeutics (Chicago, IL)

Student: Tanner Hill – Graduate Student, Postdoctoral Fellow
2014-2015 Mike and Lucy Robbins Fellowship Award (Wake Forest) for academic, research, and leadership excellence
 Program: Biomedical Engineering (WFUHS as graduate student); Pharmaceutical Sciences (UNMC as postdoctoral fellow)
 Current: Radiology residency program at University of Colorado and University of Miami

Former Masters Students

Student: Shweta Wani – Graduate Student
 Program: Pharmaceutical Sciences (UNMC)
2023 GSK Internship – PLGA microsphere
 Current: Doctoral Graduate Student, University of Iowa College of Pharmacy

Current Postdoctoral Fellows

Scholar: Ritika Gupta, PhD
 Program: Pharmaceutical Sciences (UNMC)

Former Postdoctoral Fellows

Scholar: Denis Svehkarev, PhD – Postdoctoral Fellow, Research Instructor
 Program: Pharmaceutical Sciences (UNMC), completed 2022 (currently a tenure-track Assistant Professor of Chemistry at the University of Nebraska at Omaha)

Scholar: Xiang Liu, PhD – Postdoctoral Fellow, Research Instructor
 Program: Pharmaceutical Sciences (UNMC)

Scholar: Joshua Soucek, PhD – Postdoctoral Fellow, Research Instructor
Program: Pharmaceutical Sciences (UNMC), completed 2019 (currently Scientific Officer at Sanguine Diagnostics & Therapeutics, Omaha, NE)

Scholar: Joe Gerald Jesu Raj, PhD – Postdoctoral Fellow
Program: Pharmaceutical Sciences (UNMC), completed 2017 (currently Postdoctoral Fellow at Icahn School of Medicine, Mount Sinai, NY, NY)

Scholar: Sneha Kelkar, PhD – Postdoctoral Fellow
Program: Biomedical Engineering (WFU), completed 2015 (currently Polymer Scientist at Dentsply Sirona, York, PA)

Former Pharmacy Student Scholars

Student: Ngan Hoang
Program: P3 Research for Credit

Student: Melissa Malone
Program: P3 Research for Credit

Student: Xiaoxiao Qi
Program: P3 Research for Credit

Student: Quyen Vu
Program: P3 Research for Credit

Former Medical Student Scholars

Student: Freshta Baher – Medical Student
Program: Enhanced Medical Education Track: Innovation (UNMC)

Student: Mitchell Matis – Medical Student
Program: Enhanced Medical Education Track: Innovation (UNMC)

Former Undergraduate Scholars

Student: Carly Isder – Undergraduate Student
Program: UNO/UNMC Undergraduate Research Opportunities

Student: Denzel Cruz – Undergraduate Student
Program: UNMC MD-PhD SURP Section (attends University of Illinois at Urbana-Champaign, Major: Bioengineering)

Student: Anna Vu – Undergraduate Student
Program: UNO/UNMC Undergraduate Research Opportunities

Student: Noah Reed – Undergraduate Student
Program: UNMC Summer Undergraduate Research Program (attends University of Nebraska at Lincoln)

Student: Lucas Hauser – Undergraduate Student
Program: UNO/UNMC Undergraduate Research Opportunities

Student: **Chaojun Wang – Undergraduate Student**
Program: Asia Pacific Rim Development Program (attended Xi'an Jiaotong University Health Science Center, China)

Student: **Erica Freund – Undergraduate Student**
Program: Physics Honors Thesis Advisor (attended Wake Forest University)

Student: **Gillian Lloyd – Undergraduate Student**
Program: Undergraduate Trainee (attended Wake Forest University, Major: Biology)

Student: **Joshua Copus – Undergraduate Student**
Program: Wake Forest Institute for Regenerative Medicine Summer Scholar (attended Clemson University, Major: Biomedical Engineering)

Student: **Xiangxi Gao – Undergraduate Student**
Program: Wake Forest – Virginia Tech Biomedical Engineering Summer Scholar (attended Emory University, Major: Math, Biology)

Student: **Kindell Schmitt – Undergraduate Student**
Program: Wake Forest – Virginia Tech Biomedical Engineering Summer Scholar (attended Virginia Tech, Major: Biological Systems Engineering)

Student: **Martha Kahlson – Undergraduate Student**
Program: Wake Forest Institute for Regenerative Medicine Summer Scholar (attended Mount Holyoke College, Major: Biochemistry)

Student: **Robert Johnson, II – Undergraduate Student**
Program: NHLBI Excellence in Cardiovascular Sciences Program (attended Johnson C. Smith University, Major: Biology)

Student: **Florence McCarty – Undergraduate Student**
Program: NHLBI Excellence in Cardiovascular Sciences Program (attended Johnson C. Smith University, Major: Biology)

High School Scholars

Student: **McKenna Carroll – Millard West High School (Omaha, NE)**
Program: UNMC High School Alliance